**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**WASHINGTON, D.C. 20460**

**OFFICE OF CHEMICAL SAFETY**
**AND POLLUTION PREVENTION**

# MEMORANDUM

**DATE:** 10-APR-2023

**SUBJECT:** **Malathion:** Acute and Steady State (Food and Drinking Water) Dietary Exposure and Risk Assessments to Support Registration Review.

**PC Code:** 057701
**Decision No.:** 577131
**Petition No.:** NA
**Risk Assessment Type:** Dietary
**TXR No.:** NA
**MRID No.:** NA

**DP Barcode:** D467079
**Registration No.:** NA
**Regulatory Action:** Registration Review
**Case No.:** 0248
**CAS No.:** 121-75-5
**40 CFR:** §180.111

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The conclusions conveyed in this assessment were developed in full compliance with *EPA Scientific Integrity Policy for Transparent and Objective Science*, and EPA Scientific Integrity Program's *Approaches for Expressing and Resolving Differing Scientific Opinions.* The full text of *EPA Scientific Integrity Policy for Transparent and Objective Science*, as updated and approved by the Scientific Integrity Committee and EPA Science Advisor can be found here: https://www.epa.gov/sites/default/files/2014-02/documents/scientific_integrity_policy_2012.pdf. The full text of the EPA Scientific Integrity Program's *Approaches for Expressing and Resolving Differing Scientific Opinions* can be found here: https://www.epa.gov/scientific-integrity/approaches-expressing-and-resolving-differing-scientific-opinions

**Executive Summary**

Malathion is an organophosphate (OP) insecticide that is used in a wide variety of food/feed crops to control insects in agricultural settings and around homes. Malathion has also been used in public health mosquito control and fruit fly eradication programs. Highly refined acute and steady-state (two-day average) dietary (food only, drinking water only, and food and drinking water) exposure and risk assessments for malathion and its metabolite malaoxon were conducted using the Dietary Exposure Evaluation Model software with the Food Commodity Intake Database (DEEM-FCID) Version 4.02. This software uses 2005-2010 food consumption data from the U.S. Department of Agriculture's (USDA's) National Health and Nutrition Examination Survey/What We Eat in America (NHANES/WWEIA). These analyses were performed to support the registration review of malathion using new toxicological endpoints derived from physiologically based pharmacokinetic-pharmacodynamic (PBPK-PD) modeling. This memorandum was reviewed by peer reviewers of the DESAC, per DESAC Standard Operating Procedure (SOP, 09-JUN-2021).

Since the last risk assessment (S. Shelat *et al.*, D414107, 09-JUN-2016), a human life-stage PBPK-PD model for malathion and malaoxon has been developed to refine the malathion assessment by deriving new acute and steady-state points of departure (PODs). The acute and steady-state analyses were highly refined through incorporation of monitoring data from the USDA Pesticide Data Program (PDP), field trial residues and percent crop treated (PCT) estimates (Biological and Economics Analysis Division (BEAD) Screening Level Usage Analysis (SLUA) dated February 2, 2021). Estimated drinking water concentrations (EDWCs) used in this assessment were provided by the Environmental Fate and Effects Division (EFED)and were based on the Pesticides in Water Calculator (PWS; ver 2.001) model. HED's default processing factors were used for processed commodities when applicable.

Acute Aggregate Dietary Exposure and Risk Results and Characterization

The acute food-only risk estimates for malathion were less than HED's level of concern (LOC) at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates at <1% of the acute population-adjusted dose (aPAD). The acute food-only risk estimates for malaoxon were less than HED's LOC of 100% of the PAD at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates at <1% of the aPAD. Malathion exposed to chlorine in drinking water treatment facilities is expected to be rapidly and completely converted to malaoxon; therefore, only malaoxon in drinking water was analyzed. The acute water-only risk estimates for malaoxon were less than HED's LOC at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates at 2.5-6% of the aPAD. All infants (<1 year old) was the population subgroup

with the highest risk estimate. Food- and water-only risk estimates were used to calculate margins of exposure (MOEs) for each population subgroup.

A margin of exposure (MOE) approach was used to determine the acute (food + water) dietary risk due to separate age-specific PODs for food and water derived from the PBPK-PD model. The LOC for this approach includes all the relevant uncertainty/safety factors = 1X (interspecies extrapolation) x 10X (intraspecies variability) x 1X Food Quality Protection Act (FQPA) Safety Factor. Food-only MOEs for the various population subgroups were calculated by dividing the PBPK-PD model derived food-only POD by acute food-only exposures determined by DEEM. The resulting MOEs for food only range from 11,000-58,000 for malathion and 2,400-9,600 for malaoxon, which are all well above the LOC (<10) and are not of concern. The water-only MOEs for all population subgroups were calculated by dividing the PBPK-PD model derived water-only PODs by the water-only exposure resulting from the maximum EDWC derived by EFED (93 ppb). All residues in water were assumed to be converted to malaoxon, so MOEs for water only were only calculated for malaoxon exclusively. The resulting malaoxon MOEs for water only range from 170-400. The combined MOEs calculated for malathion food, malaoxon food, and malaoxon water were added together to determine acute combined exposure for each population subgroup. The resulting aggregate MOEs for food plus water range from 170-340, which are all above the LOC (MOE of 10) and therefore are not of concern. All infants (<1 year old) and children 1-2 years old were the population subgroups with the highest risk estimate.

Steady-State (Two-Day) Aggregate Dietary Exposure and Risk Results and Characterization

OPs may exhibit a phenomenon known as steady state acetylcholinesterase (AChE) inhibition which is the most sensitive endpoint for all lifestages. After repeated dosing at the same dose, the amount of AChE inhibition in a given dose remains consistent across duration. For this reason, a steady-state POD was selected for oral exposure to malathion and malaoxon. The steady state assessments were conducted in the DEEM acute module using the steady-state POD, refined estimates of food exposure, and 21-day forward-rolling water averages to provide the 21-day ("steady-state") exposures and risk estimates. For drinking water alone, the steady-state assessments, using a 21-day forward-rolling average, provide an accurate overall estimate of the 21-day ("steady-state") average daily exposures at the per-capita 95$^{th}$ or 99.9$^{th}$ percentile for drinking water, to the extent that predicted drinking water concentrations for any 21-day duration is known for any given year. For food alone, the steady-state assessments reflect a two-day average exposure for a steady-state exposure duration rather than a 21-day exposure duration. Since the DEEM steady-state assessment does not capture day-to-day variation in food residues, it will generally result in higher food-only exposure estimates than a model that calculates 21-day rolling averages for food. Although the DEEM steady-state assessments may result in higher exposure estimates for food, the assessments provide an acceptable estimate of 21-day ("steady-state") average daily exposure for food + drinking water for use in risk assessment.

The steady-state food-only risk estimates for malathion and malaoxon were less than HED's LOC of the PAD at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates $\leq$ 1% of the steady-state population-adjusted dose (ssPAD). The steady-state water-only risk estimates for malaoxon were less than HED's LOC at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates at 1-3% of the ssPAD. All infants (<1 year

old) was the population subgroup with the highest risk estimate. Food and drinking water only risk estimates were used to calculate MOEs for each population subgroup.

Similar to the acute dietary, an MOE approach was used to determine steady-state dietary risk because separate age-specific PODs for food and water were derived from the PBPK-PD model. The LOC for this approach includes all of the relevant uncertainty/safety factors = 1X (interspecies extrapolation) x 10X (intraspecies variability) x 1X (FQPA Safety Factor). Food-only MOEs for the various population subgroups were calculated by dividing the PBPK-PD model derived food-only POD by the steady-state food-only exposures determined by DEEM.

The resulting MOEs for food only range from 2,700-13,000 for malathion and 900-3,800 for malaoxon, which are all well above the LOC (<10) and are not of concern. The water-only MOEs for all population subgroups and population subgroups were calculated by dividing the PBPK-PD model derived water-only PODs by the water-only exposure resulting from the maximum EDWC derived by EFED (15 ppb). All residues in water were assumed to be converted to malaoxon, so MOEs for water only were only calculated for malaoxon. The resulting malaoxon MOEs for water only range from 370-960, which are above the LOC and are thus not of concern. The MOEs calculated for malathion food, malaoxon food, and malaoxon water were added together to determine steady-state aggregate exposure for each population subgroup. The resulting steady-state aggregate MOEs for food plus water range from 300-560, which are all above the LOC (MOE of 10) and therefore are not of concern. Children 1-2 years old was the population subgroup with the highest risk estimate.

Cancer Aggregate Dietary Exposure Results and Characterization

Malathion is classified as "suggestive evidence of carcinogenicity but not sufficient to assess human carcinogenic potential" by all routes of exposure. Also, the metabolite malaoxon was not found to be carcinogenic in mice. Therefore, the Agency has determined that quantification of risk using a non-linear approach will adequately protect for all chronic toxicity, including potential carcinogenicity, resulting from exposure to malathion and malaoxon.

## I. Introduction

Dietary risk assessment incorporates both exposure and toxicity of a given pesticide. For acute steady-state assessments, the risk is expressed as a percentage of a maximum acceptable dose (i.e., the dose that HED has concluded will result in no unreasonable adverse health effects). This dose is referred to as the PAD. The PAD is equivalent to the point of departure (POD, NOAEL, LOAEL, e.g.) divided by the required uncertainty and/or safety factors. For acute, steady-state, and non-cancer chronic exposures, HED is concerned when estimated dietary risk exceeds 100% of the PAD. References that discuss the acute and chronic risk assessments in more detail are available on the EPA/pesticides web site: "Available Information on Assessing Exposure from Pesticides, A User's Guide," 21-JUN-2000, web link https://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2007-0780-0001; or see SOP 99.6 (20-AUG-1999).

The most recent dietary risk assessment for malathion was conducted by S. Piper to support registration review (D428996, 07-JUN-2016).

## II. Residue Information

*Residue of Concern*
The residues of concern in plants for both risk assessment and tolerance enforcement were determined to be malathion (diethyl 2-[(dimethoxyphosphinothioyl)thio]butanedioate) and malaoxon, its oxygen analog butanedioic acid, 2-[(dimethoxyphosphinyl)thio]-,1,4-diethyl ester. For livestock, ruminant and poultry metabolism studies have been submitted for determining the nature of the residue.

The qualitative nature of the residue resulting from oral dosing of ruminants and poultry is adequately understood and neither malathion nor malaoxon were detected in any tissue and HED determined there is no need for tolerances in livestock commodities based on dietary exposure to malathion residues in livestock feeds. HED concluded the residues of malathion in livestock commodities represented a Category 3 situation under 40 CFR 180.6(a), i.e., there is no reasonable expectation of finite residues (R. Perfetti, D190598, 27-JUL-1993).

**Table 1. Summary of Malathion Metabolites and Degradates to be Included in the Risk Assessment and Tolerance Expression.**

| Matrix | | Residues Included in Risk Assessment | Residues Included in Tolerance Expression |
|---|---|---|---|
| Plants | Primary Crop | malathion and malaoxon | malathion and malaoxon |
| | Rotational Crop | malathion and malaoxon | malathion and malaoxon |
| Livestock | Ruminant | 180.6(a)(3) | 180.6(a)(3) |
| | Poultry | 180.6(a)(3) | 180.6(a)(3) |
| Drinking Water | | malathion and malaoxon | Not Applicable |

*HED Recommended Tolerances*
Tolerances for residues of malathion are established under 40 CFR §180.111 in/on a wide variety of crops at levels ranging from 0.1 to 270 ppm. There are tolerances expressed in terms of the parent only for various commodities including livestock commodities in 40 CFR §180.111(1) and (3). For livestock feed commodities the tolerances are expressed in terms of the parent and malaoxon (40 CFR §180.111(2)). HED is recommending for the tolerance expression to be updated to include parent and its metabolite, malaoxon for plant commodities, and to revise the tolerance expression to include coverage and compliance statements.

For livestock commodities, direct uses on livestock commodities are no longer on any labels. The registrant has submitted the residue data on livestock feed items and tolerances are currently established on the following: alfalfa forage and hay, sweet corn stover, cotton gin-by products, grass forage and hay, sorghum forage and fodder (including stover), and wheat forage and hay. An updated dietary burden for ruminant was calculated. Although the dose level performed in the ruminant metabolism study (115 ppm) is lower than that current maximum reasonably balanced dietary burden (348 ppm), HED concludes that a new metabolism study is unnecessary since the available study demonstrated rapid metabolism/excretion of residues and incorporation of residues into natural products. Based on the recalculated dietary burdens, the previous

180.6(a)(3) designation for livestock commodities is still supported (S. Piper, D467080, 28-MAR-2023, Malathion: Re-Evaluation of Residue Transfer to Meat, Milk, Poultry and Eggs. Abbreviated Residue Chemistry Review).

Also, HED is recommending for commodity definitions revisions, correction of tolerance values to be consistent with HED rounding class practices and updating recommended tolerances for livestock feed commodities as a result of data call-in (DCIs) as shown in Tables 2.

**Table 2. Tolerance Summary for Malathion (40 CFR §180.111)**

| Commodity/Correct Commodity Definition | Established Tolerance (ppm) | HED-Recommended Tolerance (ppm) | Comments |
|---|---|---|---|
| *1(a) General- Malathion + Malaoxon* | | | |
| **Alfalfa, forage** | 135 | 135 | |
| **Alfalfa, hay** | 135 | 135 | |
| **Almond, hulls** | 50 | 50 | |
| **Almond** | -- | 8 | Commodity definition revision |
| Almond, postharvest | 8 | remove | |
| **Apple** | 8 | 8 | |
| **Apricot** | 8 | 8 | |
| **Grain, aspirated fractions**[2] | -- | 2700 | |
| **Avocado** | 8 | 8 | |
| **Barley, grain** | -- | 15 | Commodity definition revision |
| Barley, grain, postharvest | 8 | remove | |
| **Barley, hay**[2] | -- | 30 | |
| **Barley, straw** | 50 | 50 | |
| **Beet, garden, roots** | 8 | 8 | |
| **Beet, garden, leaves** | -- | 8 | |
| Beet garden, top | 8 | remove | |
| **Beet, sugar, roots** | 1 | 1 | |
| **Beet, sugar, tops** | 8 | remove | *Is no longer considered a significant food or feed item but noting to PRD to check with the registrant to see if they wish to retain this RAC tolerance because some use and seizures of sugar beet tops have occurred in California. If this tolerance is retained, then the correct commodity definition "Beet, sugar, leaves" should be specified.* |
| **Blackberry** | 8 | 8 | |
| **Blueberry** | 8 | 8 | |
| **Boysenberry** | 8 | remove | Covered by blackberry. |
| **Carrot, roots** | 8 | 8 | |
| **Chayote, fruit** | 8 | 8 | |
| **Chayote, tuberous roots** | -- | 8 | Commodity definition revision |
| Chayote, roots | 8 | remove | |
| **Cherry, sweet** | -- | 8 | Commodity definition revision |
| **Cherry, tart** | -- | 8 | |
| Cherry | 8 | remove | |
| **Chestnut** | 1 | 1 | |
| **Clover, forage** | 135 | 135 | |
| **Clover, hay** | 135 | 135 | |

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|---|---|---|---|
| **Commodity/Correct Commodity Definition** | **Established Tolerance (ppm)** | **HED-Recommended Tolerance (ppm)** | **Comments** |
| **Corn, field, forage** | 8 | 8 | |
| **Corn, field, grain** | -- | 8 | Commodity definition revision |
| Corn, field, grain, postharvest | 8 | remove | |
| **Corn, field, stover** | 30.0 | 30 | Corrected value to be consistent with HED Rounding Class Practice. |
| **Corn, pop, grain** | -- | 8 | Commodity definition revision |
| Corn, pop, grain, postharvest | 8 | remove | |
| **Corn, sweet, forage** | 8 | 8 | |
| **Corn, sweet, kernel plus cob with husks removed** | 2 | 2 | |
| **Cotton, gin byproducts**[2] | -- | 2000 | |
| **Cotton, undelinted seed** | 20.0 | 20 | Corrected value to be consistent with HED Rounding Class Practice. |
| **Cowpea, forage** | 135 | 135 | |
| **Cowpea, hay** | 135 | 135 | |
| **Cranberry** | 8 | 8 | |
| **Cucumber** | 8 | 8 | |
| **Currant** | 8 | 8 | |
| **Date** | -- | 8 | Commodity definition revision |
| Date, dried fruit | 8 | remove | |
| **Dewberry** | 8 | remove | Covered by blackberry. |
| **Fungi, edible, group 21**[3] | - | 8 | Commodity definition revision |
| Mushroom | 8 | remove | |
| **Eggplant** | 8 | 8 | |
| **Fig** | 8 | 8 | |
| **Flax, seed** | 0.1 | 0.1 | |
| **Garlic, bulb** | 8 | 8 | |
| **Gooseberry** | 8 | 8 | |
| **Grape** | 8 | 8 | |
| **Grass, forage, fodder and hay, group 17, forage** | -- | 200 | |
| Grass, forage | 200 | remove | |
| **Grass, forage, fodder and hay, group 17, hay** | -- | 270 | |
| Grass, hay | 270 | remove | |
| **Grapefruit** | 8 | 8 | |
| **Guava** | 8 | 8 | |
| **Hazelnut** | 1 | 1 | |
| **Hop, dried cones** | 1 | 1 | |
| **Horseradish** | 8 | 8 | |
| **Kumquat** | 8 | 8 | |
| **Leek** | 8 | 8 | |
| **Lemon** | 8 | 8 | |
| **Lentil, dry seed** | -- | 8 | |
| Lentil, seed | 8 | remove | |
| **Lespedeza, forage** | 135 | 135 | |
| **Lespedeza, hay** | 135 | 135 | |

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|---|---|---|---|
| **Commodity/Correct Commodity Definition** | **Established Tolerance (ppm)** | **HED-Recommended Tolerance (ppm)** | **Comments** |
| **Lime** | 8 | 8 | |
| **Loganberry** | 8 | 8 | |
| **Lupin, seed** | 8 | remove | Covered by Vegetable, legume, pulse, bean, dried shelled, except soybean, subgroup 6-22E and Vegetable, legume, bean, succulent shelled, subgroup 6-22C |
| **Mango** | 8 | 8 | |
| **Melon subgroup 9A** | -- | 8 | |
| Melon | 8 | remove | |
| **Nectarine** | 8 | 8 | |
| **Nut, macadamia** | 1 | 1 | |
| **Oat, forage** | 4.0 | 4 | Corrected value to be consistent with HED Rounding Class Practice |
| **Oat, grain** | -- | 15 | |
| Oat, grain, postharvest | 8 | remove | Commodity definition revision |
| **Oat, hay[2]** | -- | 30 | |
| **Oat, straw** | 50 | 50 | |
| **Okra** | 8 | 8 | |
| **Onion, bulb** | 8 | 8 | |
| **Onion, green** | 8 | 8 | |
| **Orange** | 8 | 8 | |
| **Papaya** | 1 | 1 | |
| **Parsnip, roots** | -- | 8 | Commodity definition revision |
| Parsnip | 8 | remove | |
| **Passionfruit** | 8 | 8 | |
| **Pea, field, hay** | 8 | 8 | |
| **Pea, field, forage** | -- | 8 | Commodity definition revision |
| Pea, field, vines | 8 | remove | |
| **Peach** | 8 | 8 | |
| **Peanut, hay** | 8 | 8 | |
| **Peanut** | -- | 8 | Commodity definition revision |
| Peanut, postharvest | 8 | remove | |
| **Pear** | 8 | 8 | |
| **Pecan** | 8 | 8 | |
| **Pepper, bell** | -- | 8 | Commodity definition revision |
| **Pepper, nonbell** | -- | 8 | |
| Pepper | 8 | remove | |
| **Peppermint, fresh leaves** | -- | 8 | Commodity definition revision |
| Peppermint, tops | 8 | remove | |
| **Pineapple** | 8 | 8 | |
| **Plum** | 8 | 8 | |
| **Plum, prune, dried** | -- | 8 | |
| Plum, prune | 8 | remove | |
| **Potato** | 8 | 8 | |
| **Pumpkin** | 8 | 8 | |
| **Quince** | 8 | 8 | |
| **Radish, roots** | -- | 8 | Commodity definition revision |

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|---|---|---|---|
| **Commodity/Correct Commodity Definition** | **Established Tolerance (ppm)** | **HED-Recommended Tolerance (ppm)** | **Comments** |
| Radish | 8 | remove | |
| **Raspberry** | 8 | 8 | |
| **Rice, grain** | -- | 30 | Commodity definition revision |
| Rice, grain, postharvest | 8 | remove | |
| **Rice, wild, grain** | -- | 8 | |
| Rice, wild | 8 | remove | |
| **Rutabaga, roots** | -- | 8 | Commodity definition revision |
| Rutabaga | 8 | remove | |
| **Rye, forage** | 4.0 | 4 | Corrected value to be consistent with HED Rounding Class Practice |
| **Rye, grain** | -- | 8 | Commodity definition revision |
| Rye, grain, postharvest | 8 | remove | |
| **Rye, straw** | 50 | 50 | |
| **Safflower, seed** | 0.2 | 0.2 | |
| **Salsify, roots** | 8 | 8 | |
| **Salsify, black, leaves** | -- | 8 | Commodity definition revision |
| Salsify, tops | 8 | remove | |
| **Shallot, bulb** | 8 | 8 | |
| **Sorghum, grain, forage[2]** | 8 | 40 | |
| **Sorghum, grain, grain** | -- | 8 | Commodity definition revision |
| Sorghum, grain, grain, postharvest | 8 | remove | |
| **Sorghum, grain, stover[2]** | -- | 40 | Commodity definition revision |
| **Soybean, forage** | 135 | 135 | |
| **Soybean, hay** | 135 | 135 | |
| **Soybean, seed** | 8 | 8 | |
| **Soybean, vegetable, edible podded** | -- | 8 | Commodity definition revision |
| **Soybean, vegetable, succulent shelled** | -- | 8 | |
| Soybean, vegetable, succulent | 8 | remove | |
| **Spearmint, fresh leaves** | -- | 8 | Commodity definition revision |
| Spearmint, tops | 8 | remove | |
| **Squash, summer** | 8 | 8 | |
| **Squash, winter** | 8 | 8 | |
| **Strawberry** | 8 | 8 | |
| **Sunflower, seed** | -- | 8 | Commodity definition revision |
| Sunflower, seed, postharvest | 8 | remove | |
| **Sweet potato, tuber** | -- | 1 | Commodity definition revision |
| Sweet, potato, roots | 1 | remove | |
| **Tangerine** | 8 | 8 | |
| **Tomato** | 8 | 8 | |
| **Trefoil, forage** | 135 | 135 | |
| **Trefoil, hay** | 135 | 135 | |
| **Turnip, roots** | 8 | 8 | |
| **Vegetable, brassica, head and stem, group 5-16** | -- | 8 | Crop group conversion/revision |
| Vegetable, brassica, leafy, group 5 | 8 | remove | |

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|---|---|---|---|
| **Commodity/Correct Commodity Definition** | **Established Tolerance (ppm)** | **HED-Recommended Tolerance (ppm)** | **Comments** |
| **Vegetable, leafy, group 4-16** | -- | 8 | Crop group conversion/revision |
| Vegetable, leafy, except brassica, group 4 | 8 | remove | |
| Turnip, greens | 8 | remove | |
| **Vegetable, legume, pea, edible podded, subgroup 6-22B** | -- | 8 | Commodity definition revision based on 180.1(g) |
| **Vegetable, legume, pea, succulent shelled, subgroup 6-22D** | | | Commodity definition revision based on 180.1(g) |
| Pea | 8 | remove | |
| **Vegetable, legume, bean, succulent shelled, subgroup 6-22C** | -- | 8 | Commodity definition revision based on 180.1(g) |
| Bean, succulent shelled | 8 | remove | |
| **Vegetable, legume, pulse, bean, dried shelled, except soybean, subgroup 6-22E** | -- | 8 | Commodity definition revision based on 180.1(g) |
| Bean, dry, seed | 8 | remove | |
| **Vegetable, stalk, stem, and leaf petiole group 22** | -- | 8 | Crop group conversion/revision *Celtuce, Florence fennel and kohlrabi can be listed on the label under the use directions for asparagus. There are also data for celery (subgroup 22B) at the same tolerance level as 22A so the group 22 tolerance can be established.* |
| Asparagus | 8 | remove | |
| **Vetch, forage** | 135 | 135 | |
| **Vetch, hay** | 135 | 135 | |
| **Walnut, black** | -- | 8 | Crop group conversion/revision |
| **Walnut, English** | -- | 8 | |
| Walnut | 8 | remove | |
| **Watercress** | 0.2 | 0.2 | |
| **Wheat, forage** | 4.0 | 4 | Corrected value to be consistent with HED Rounding Class Practice |
| **Wheat, grain** | 8 | 8 | |
| **Wheat, hay**[2] | 50 | 30 | |
| **Wheat, straw** | 50 | 50 | |

[1] *Note:* This table supersedes the Tolerance Summary for Malathion from the last risk assessment (S. Shelat *et al.*, D414107, 09-JUN-2016) as commodity definitions have been revised and tolerance values have been corrected to be consistent with HED rounding class practice and crop group conversion/revision.

[2] 2016 RED (S. Shelat, D414107, 09-JUN-2016) recommended tolerances for these commodities based on data call-ins (DCIs) and Response to Deficiency: Magnitude of Residues in grain sorghum and stover; Magnitude of Residues on Wheat Hay; Magnitude of Residues on Cotton Gin-Byproducts, M. Sahafeyan, D406369, 15-JUL-2014).

[3] Fungi, edible group 21 only consists of mushroom; therefore, we are granting the crop group use.

Residues used in the Analyses: Extensive PDP monitoring data for residues of malathion and malaoxon in numerous commodities are available. The PDP was specifically designed for risk assessment; analysts prepare samples in a manner similar to typical consumer practices, such as washing, coring/pitting, and/or peeling. The PDP samples are collected at large-scale distribution centers, just prior to sale in grocery stores, and are more likely to reflect "dinner plate" residues.

HED default processing factors were used for the commodities that do not have empirical processing data, as needed. Only a mint processing data was needed for mint oil (13 ppm).

Both the acute and steady-state (two-day average) assessments were refined using distributions and point estimates derived from PDP monitoring data, PCT data, and HED default processing factors. If monitoring data were not available for a particular commodity (i.e., mung beans), but were available for a similar commodity (i.e., black beans), then the available data were translated to the similar crop. HED's guidance document for translating monitoring data (15-MAR-2018) was used as guidance for translations. When data were translated, the residue-distribution file (RDF) was adjusted to account for differences in PCT. Tolerance-level values were used for hops and field trial values were used for cotton, dates, figs, guava, peppermint, passionfruit, and spearmint.

PDP monitoring data found several detectable residues of malathion in celery (162 detects), cherry frozen (39 detects), corn grain (469 detects), collard (2 detects), eggplant (3 detects), kale (18 detects), mango (15 detects), onion green (5 detects), raspberry (43 detects), soybean grain (11 detects), snap pea (107 detects), pepper non bell (5 detects), strawberry fresh (124 detect), strawberry frozen (216 detects), tomato (2 detects), wheat grain (884 detects), and wheat flour (186 detects). Also, PDP found one malathion detect each in apple, lettuce, peach, pear, and sweet potato. Malaoxon residues were in general undetectable in most crops except barley grain (1 detect), blueberry (3 detects), celery (162 detects), corn grain (1 detect), strawberry fresh (28 detects), strawberry frozen (31 detects), and wheat flour (1 detect).

PDP monitored pesticide residues in catfish in 2008, 2009, and 2010 and in salmon in 2013 and 2014. In general, pesticide residues would not be expected to be found in fish unless the pesticide bioaccumulates or has an aquatic use. To determine whether or not residues are present in fish, HED now routinely checks PDP monitoring data regardless of the pesticide's uses and physicochemical properties. PDP monitored for residues of malathion in catfish; however, no detects were found out of the 1479 samples. Also, PDP monitored salmon for malathion in 2013 and 2014 and no detects were found out of the 677 samples. PDP did not analyze samples of catfish for residues of malaoxon; no residues of malaoxon were found in 647 samples of salmon. As a result, residues in fish were not included in the assessment.

As mentioned above, no livestock commodities were included in these dietary assessments since a 180.6(a)(3) determination was recently confirmed. In support of this approach, PDP monitoring data show no detects in any MMPE samples for malathion or malaoxon. This includes 5539 milk samples analyzed for malathion and 3912 milk samples analyzed for malaoxon; and 1036 egg samples analyzed for both malathion and malaoxon.

Malathion is also used in the Cotton Boll Weevil Eradication Program, Fruit Fly (Medfly) Control Program, and for mosquito-borne disease control. The Re-registration Eligibility Decision (RED) document was last revised in May 2009 (EPA-HQ-OPP-2004-0348) and cited all malathion registered uses including adulticide use. New tolerances, such as the request for expanded malathion adulticide use, are not recommended for establishment as part of Registration Review. Should the registrant petition to expand the malathion adulticide use, this request should appropriately proceed as a Pesticide Registration Improvement Act (PRIA) action. Field trial residue data are necessary to support the establishment of any additional tolerances for malathion. These data allow EPA to determine the appropriate tolerance level to be established.

Attachments 1 and 2 summarize the residue inputs (RDFs used, point estimates, processing factors, PCT, etc.) for the malathion and malaoxon acute and steady state assessments. Attachments 3 and 4 summarize all the RDF files used for the acute and steady-state assessments for malathion and malaoxon. Note that for blended commodities, the available monitoring data consider PCT, so 100 PCT was used in the RDF instead of the maximum PCT estimate.

## III. Percent Crop Treated Information

BEAD has provided an updated SLUA for malathion (R. Fovargue, 02-FEB-2021).

The acute and steady state analyses incorporated maximum percent crop treated data for the following crops: alfalfa: 2.5%; apple: 2.5%; asparagus: 25%; bean, snap, bush, pole or string: 2.5%; blueberries: 50%; cabbage: 2.5%; caneberries: 70%; cantaloupes: 5%; carrots: 2.5%; cauliflower: 10%; celery: 25%; cherries: 25%; corn: 2.5%; cotton: 2.5%; cucumbers: 10%; dry bean/peas: 2.5%; grapefruit: 15%; lettuce: 15%; onions 15%; oranges: 30%; peaches: 2.5%; peanuts: 2.5%; pears: 20%; pecans: 2.5%; peppers: 10%; potatoes: 2.5%; pumpkins: 15%; rice: 5%; sorghum: 2.5%; soybeans: 2.5%; spinach: 5%; squash 5%: strawberries: 45%; sweet corn: 10%; tangerines: 25%; tomatoes: 5%; walnuts: 10%; watermelons: 2.5%; and wheat: 2.5%. 100 PCT was used for the remaining commodities. See Attachment 16.

## IV. Drinking Water Data

The residues of concern in drinking water for the purpose of risk assessment are malathion and malaoxon. The daily concentrations used in this assessment are presented as malathion concentrations; however, malathion exposed to chlorine in drinking water treatment facilities is assumed to be rapidly and completely converted to malaoxon. Even though the levels of oxon conversion can be less than complete for some organophosphates, 100% conversion from malathion to malaoxon is assumed to account for residues of malathion that had not already been converted to malaoxon in the environment. Also, a molecular weight conversion was used for malaoxon. The drinking water residues used in the dietary risk assessment were provided by the EFED in the following drinking water memorandum: “Malathion-Addendum to the Registration Review Drinking Water Assessment (DWA)” (A. Shelby, D466609, 24-OCT-2022). This addendum updates the 2015 assessment (A. Shelby, D420234, 13-AUG-2015) and 2016 addendum (A. Shelby, D435082, 16-AUG-2016) to incorporate mitigations introduced since the last assessment and new methods for assessing the potential for drinking water exposure. Malathion is registered for the same uses assessed in the 2015 drinking water assessment, but

restrictions have been placed on some uses per consultation with the Fish and Wildlife Service (FWS). Eight of the 15 agricultural uses have reductions in the maximum number of reapplications or a prohibition against applying during bloom. The 2015 drinking water assessment found the ultra-low volume (ULV) use of malathion on cherries in Washington to have the highest 1-in-10-day 21-day average exposure values of the assessed uses. The only generalized mitigation associated with malathion use on cherries from the FWS consultation is prohibition against applying during bloom. This mitigation would not have changed model parameterization as modeled application dates did not overlap with bloom.

Further, new scenarios for use in the Pesticide in Water Calculator (PWC v2.001) have been implemented since the completion of the 2015 DWA. For the purpose of this addendum, the use of new scenarios did not significantly change malathion EDWCs from those previously reported in the 2015 DWA. PWC modeling runs producing the highest recommended EDWCs for each exposure duration are presented in the 2015 DWA and reproduced below (note scenario with highest EDWC varies by exposure duration). 1-in-10-year 1-day, annual average and simulation average were previously reported. Newly reported below is the 1-in-10-year 21-day average resulting from the Washington Cherry (ULV) scenario:

**93 µg/L** for the 1-in-10-year 1-day average (FL Citrus)
**15 µg/L** for the 1-in-10-year 21-day average (WA Cherry [ULV])
**1.5 µg/L** for the 1-in-10-year annual average (WA Cherry [ULV])
**1.3 µg/L** for the simulation average (WA Cherry [ULV])

Based on prior ground water modeling results, the maximum estimated groundwater exposure concentration from six vulnerable scenarios for malathion is 0.324 µg/L for acute exposure based on highest daily value. Since the predicted concentrations in ground water are well below those calculated for surface water, surface water exposures are the driver for malathion drinking water exposure.

Both the acute and steady-state dietary assessments, the point estimates were incorporated in the DEEM-FCID into the food categories "water, direct, all sources" and "water, indirect, all sources." The model and its description are available at the EPA internet site: http://www.epa.gov/oppefed1/models/water/.

## V. DEEM-FCID Program and Consumption Information

Malathion and malaoxon acute and steady state (two-day average) dietary exposure assessments were conducted using the DEEM-FCID, Version 4.02. This software uses 2005-2010 food consumption data from the USDA's NHANES/WWEIA. The data are based on the reported consumption of more than 20,000 individuals over two non-consecutive survey days. Foods "as consumed" (e.g., apple pie) are linked to EPA-defined food commodities (e.g., apples, peeled fruit - cooked; fresh or N/S; baked; or wheat flour - cooked; fresh or N/S, baked) using publicly available recipe translation files developed jointly by USDA/ARS and EPA. Based on analysis of the 2005-2010 WWEIA consumption data, which considered dietary patterns and survey respondents, HED concluded that it is most appropriate to report risk for the following population subgroups: the general U.S. population, all infants (<1 year old), children 1-2,

children 3-5, children 6-12, youth 13-19, adults 20-49, females 13-49, and adults 50-99 years old.

For an acute exposure assessment, individual one-day food consumption data are used on an individual-by-individual basis. The reported consumption amounts of each food item can be multiplied by a residue point estimate and summed to obtain a total daily pesticide exposure for a deterministic exposure assessment, or "matched" in multiple random pairings with residue values and then summed in a probabilistic assessment. The resulting distribution of exposures is expressed as a percentage of the aPAD on both a user (i.e., only those who reported eating relevant commodities/food forms) and a per-capita (i.e., those who reported eating the relevant commodities as well as those who did not) basis. In accordance with HED policy, per capita exposure and risk are reported for analyses performed at all levels of refinement. However, for deterministic assessments, any significant differences in user vs. per capita exposure and risk are specifically identified and noted in the risk assessment.

For steady-state assessment, food consumptions are calculated on an individual-by-individual basis. The reported consumption amounts of each food item for each day are added together and then divided by two days. For example, if an individual reports eating 100 grams of apple on the first day and 0 grams of apple on the second day, the two-day average consumption amount would be 50 grams/day of apple [(100 grams + 0 grams)/2 days = 50 grams/day]. The resulting two-day average consumption amount can then be multiplied by a residue point estimate and summed to obtain a total daily pesticide exposure for a deterministic exposure assessment, or "matched" in multiple random pairings with residue values and then summed in a probabilistic assessment. The resulting distribution of exposures is expressed as a percentage of the ssPAD on both a user (i.e., only those who reported eating relevant commodities/food forms) and a per-capita (i.e., those who reported eating the relevant commodities as well as those who did not) basis. In accordance with HED policy, per capita exposure and risk are reported for analyses performed at all levels of refinement. However, for deterministic assessments, any significant differences in user vs. per capita exposure and risk are specifically identified and noted in the risk assessment.

## VI. Toxicological Information

A human life-stage PBPK-PD model has been developed for malathion/malaoxon (Malathion PBPK-PD White Paper; MRID 51538101) since the last risk assessment. The human PBPK-PD model, parameterized with human physiological and biochemical values, was used to derive human PODs based on a maximum of 10% AChE inhibition. This modeling approach reduces the uncertainty inherent in a traditional risk assessment that relies on an animal POD and the application of a default uncertainty factor (UF) for interspecies extrapolation. More specifically, the model simulated the absorption, distribution, metabolism, & elimination (ADME) of malathion and malaoxon, and the subsequent inhibition of AChE by malaoxon in brain after oral, inhalation, and dermal exposure to malathion and malaoxon from birth to adulthood. Values of human parameters were either obtained from the literature (such as tissue volumes and blood flows to tissue) or measured using human cells in an *in vitro* system (such as metabolism rates and AChE inhibition rate).

The PBPK-PD model for malathion can predict the degree of AChE inhibition for different age groups under different exposure scenarios. Two scenarios of particular interest are (1) a high-end dietary exposure event, which is likely to be a once daily oral exposure reflecting consumption of a food with a higher-than-average residue level and (2) a more average exposure scenario, which is likely to occur as multiple oral exposure events each day, for example as may occur with drinking water. These scenarios were evaluated by the PBPK-PD model to determine the exposure levels that result in a peak AChE inhibition of 10%, resulting in age-group-specific, separate PODs for food and for drinking water. Those PODs were then compared against dietary exposure estimates to derive a food MOE and a drinking water MOE for each age group in the dietary exposure model. A total dietary MOE was then estimated by combining the food MOE and drinking water MOE, using the 1/MOE method.

Acute dietary scenarios were estimated assuming a single day exposure duration. For drinking water exposure, infants, and children (infants <1 year old, children between 1-2 years old, children between 3-5 years old, and children between 6-12 years old) were assumed to consume water 6 times per day, with a total consumption volume of 0.69 L/day[1]. For other age groups, drinking water consumption was assumed to be 4 times per day, with a total consumption volume of 1.71 L/day[2].

The malathion and malaoxon PBPK-PD modeled doses for acute and steady-state dietary exposure based on 10% brain AChE inhibition are included in Tables 3 and 4 and include separate food and drinking water PODs for malathion and malaoxon.

**Table 3. Malathion and Malaoxon PBPK-PD Modeled Doses (PODs) for Acute Dietary Scenarios Corresponding to 10% Brain AChE Inhibition.**

| Exposure Duration | Population Subgroup | Body Weight (kg) | Food POD (malathion) | Food POD (malaoxon) | Drinking Water POD (malaoxon) |
|---|---|---|---|---|---|
| **Acute** | All infants (<1 year old) | 4.8 | 35.7 | 4.76 | 5.49 |
| | Children (1-2 years) | 12.6 | 33.1 | 4.51 | 5.20 |
| | Children (3-5 years) | 18.7 | 31.5 | 4.33 | 5.00 |
| | Children (6-12 years) | 37.1 | 27.8 | 3.9 | 4.50 |
| | Youth (13-19 years) | 67.3 | 24.7 | 3.43 | 3.92 |
| | Adults (20-49 years) | 81.5 | 87.4 | 3.26 | 3.73 |
| | Adults (50-99 years) | 81.2 | 87.5 | 3.26 | 3.73 |
| | Female (13-49 years) | 72.9 | 24.3 | 3.36 | 3.84 |

[1] The daily volumes consumed and number of daily consumption events for all populations are mean values by age group based on USDA NHANES/WWEIA survey for dietary exposures. The mean daily water consumption values for children 1- 2 years old (0.35 L/day) and children 6-12 years old (0.58 L/day), were less than that for the infants (0.69 L/day); however, the infant daily water consumption volume was selected to be protective for PBPK-PD POD derivation for these age groups.

[2] For youths 13-19 years old, the mean daily water consumption (0.93 L/day), was less than that for the female adults (1.71 L/day); however, the adult daily water consumption was also selected to be protective.

| Table 4. Malathion and Malaoxon PBPK-PD Modeled Doses (PODs) for Steady-State Dietary Scenarios Corresponding to 10% Brain AChE Inhibition. | | | | | |
|---|---|---|---|---|---|
| Exposure Duration | Population Subgroup | Body Weight (kg) | Food POD (malathion) | Food POD (malaoxon) | Drinking Water POD (malaoxon) |
| **Steady State** | All infants (<1 year old) | 4.8 | 7.00 | 1.49 | 1.65 |
| | Children (1-2 years) | 12.6 | 6.63 | 1.41 | 1.57 |
| | Children (3-5 years) | 18.7 | 6.38 | 1.36 | 1.52 |
| | Children (6-12 years) | 37.1 | 5.76 | 1.24 | 1.29 |
| | Youth (13-19 years) | 67.3 | 5.05 | 1.09 | 1.21 |
| | Adults (20-49 years) | 81.5 | 16.97 | 1.04 | 1.15 |
| | Adults (50-99 years) | 81.2 | 16.98 | 1.04 | 1.15 |
| | Female (13-49 years) | 72.9 | 4.95 | 1.07 | 1.18 |

In accordance with the EPA *Proposed Guidelines for Carcinogen Risk Assessment* (July 1999), the CARC classified malathion as "suggestive evidence of carcinogenicity but not sufficient to assess human carcinogenic potential" by all routes of exposure (TXR 0014145, M. Copley, 28-APR-2000). This classification was based on the following factors: (i) liver tumors in male and female B6C3F1 mice and in female Fischer 344 rats were seen only at excessive doses; (ii) there are a few rare tumors (oral palate mucosa - female, and nasal respiratory epithelium - male and female) seen in Fischer 344 rats. With the exception of one nasal and one oral tumor in female rats, all other tumor types were determined to occur at excessive doses or were unrelated to treatment with malathion since these tumors cannot be distinguished as either treatment related or due to random occurrence; (iii) the evidence for mutagenicity is not supportive of a mutagenic concern in carcinogenicity; and (iv) malaoxon, a structurally related chemical, is not carcinogenic in male or female Fischer 344 rats and B6C3F1 mice. The tumors observed in the studies were seen at doses almost 100 times higher than the PODs selected for risk assessment. The Agency has determined that quantification of risk using a non-linear approach (i.e., the chronic reference dose) will adequately protect for all chronic toxicity, including carcinogenicity, likely to result from exposure to malathion.

**Appropriate Safety Factors for PODs Derived from the Malathion/Malaoxon PBPK-PD Model and *In Vitro* Developmental Neurotoxicity (DNT) Assays:** The purpose of the interspecies UF is to account for species differences between the test species and humans. Use of the human PBPK-PD model removes the need for interspecies extrapolation, and thus, allows for the elimination of the interspecies uncertainty factor. The intraspecies UF is applied to account for variations in susceptibility within the human population. At this time, a 10X default intraspecies uncertainty factor is being applied to the malathion risk assessment to account for potential variability within the human population. In the initial DRA, the 10X Food Quality Protection Act Safety Factor (FQPA SF) was retained for the population subgroups that include infants, children, youths, and women of childbearing age for all exposure. Since then, high quality mechanistic data have become available from the DNT new approach methodology

(NAM) battery, which is comprised of *in vitro* assays that evaluate critical processes of neurodevelopment. The results across OPs from the *in vitro* assays indicates that potential neurodevelopmental outcomes are not occurring via the same pathway(s). Therefore, DNT potential to inform the FQPA SF determination for each OP should be evaluated on a case-by-case basis using chemical-specific data. An evaluation of the DNT potential of malathion/malaoxon demonstrated that AChE inhibition is protective of any potential DNT effects (TXR 0058560, D467211, A. Britt, 10-APR-2023). Given this and the other considerations for the FQPA SF that were already discussed in the initial DRA, the Agency has concluded that the 10X FQPA SF is reduced to 1X.

In addition to the traditional dietary risk estimates presented as %PAD, a 1/MOE approach was used to determine acute and steady-state dietary risk estimates because separate age-specific PODs for food and water were derived from the PBPK-PD model[3]. For this approach, food-only MOEs for malathion and malaoxon and water-only MOEs for malaoxon were calculated. The LOC of 10 for this approach includes all the relevant uncertainty/safety factors (1X interspecies extrapolation, 10X intraspecies variability, and 1X FQPA SF).

## VII. Results/Discussion

As stated above, for acute and steady-state assessments, HED is concerned when dietary risk exceeds 100% of the PAD. The DEEM-FCID analyses estimate the dietary exposure of the U.S. population and various population subgroups. Malathion food only, malaoxon food only, and malathion drinking water only assessments were completed. The acute and steady-state (two-day average) exposure and risk estimates for food-only at the 99.9$^{th}$ percentile are summarized in Tables 5, 6, 8, and 9. The acute and steady-state (two-day average) exposure and risk estimates for drinking water only at the 99.9$^{th}$ percentile are summarized in Tables 7 and 10.

**Table 5. Summary of Acute Dietary (Food Only) Exposure and Risk for Malathion[1]**

| Population Subgroup | aPAD (mg/kg/day) | 95$^{th}$ Percentile | | 99$^{th}$ Percentile | | 99.9$^{th}$ Percentile | |
|---|---|---|---|---|---|---|---|
| | | Exposure (mg/kg/day) | % aPAD | Exposure (mg/kg/day) | % aPAD | Exposure (mg/kg/day) | % aPAD |
| All Infants (<1 year old) | 3.57 | 0.000119 | <1 | 0.000319 | <1 | 0.001415 | <1 |
| **Children 1-2 years old** | 3.31 | 0.000281 | <1 | 0.000774 | <1 | **0.003144** | **<1** |
| Children 3-5 years old | 3.15 | 0.000235 | <1 | 0.000570 | <1 | 0.002551 | <1 |
| Children 6-12 years old | 2.78 | 0.000149 | <1 | 0.000413 | <1 | 0.001614 | <1 |
| Youth 13-19 years old | 2.47 | 0.000098 | <1 | 0.000292 | <1 | 0.000877 | <1 |
| Adults 20-49 years old | 8.74 | 0.000171 | <1 | 0.000390 | <1 | 0.001604 | <1 |
| Adults 50-99 years old | 8.75 | 0.000126 | <1 | 0.000306 | <1 | 0.001125 | <1 |
| Females 13-49 years old | 2.43 | 0.000114 | <1 | 0.000288 | <1 | 0.001442 | <1 |

[1] Population with the highest risk estimate is in bold.

[3] In principle, the MOE approach may overestimate, and in some cases, underestimate aggregate risks. For this dietary risk assessment, the combined MOEs are likely to be conservative to the extent that DW provided larger contributions, and the DW concentration was an unrefined, conservative, point estimate (EDWC) value.

| Table 6. Summary of Acute Dietary (Food Only) Exposure and Risk for Malaoxon[1] | | | | | | | |
|---|---|---|---|---|---|---|---|
| Population Subgroup | aPAD (mg/kg/day) | 95th Percentile | | 99th Percentile | | 99.9th Percentile | |
| | | Exposure (mg/kg/day) | % aPAD | Exposure (mg/kg/day) | % aPAD | Exposure (mg/kg/day) | % aPAD |
| All Infants (<1 year old) | 0.476 | 0.000079 | <1 | 0.000168 | <1 | 0.000496 | <1 |
| **Children 1-2 years old** | 0.451 | 0.000356 | <1 | 0.000705 | <1 | **0.001502** | **<1** |
| Children 3-5 years old | 0.433 | 0.000346 | <1 | 0.000782 | <1 | 0.001289 | <1 |
| Children 6-12 years old | 0.390 | 0.000241 | <1 | 0.000553 | <1 | 0.001223 | <1 |
| Youth 13-19 years old | 0.343 | 0.000127 | <1 | 0.000362 | <1 | 0.001415 | <1 |
| Adults 20-49 years old | 0.326 | 0.000183 | <1 | 0.000367 | <1 | 0.000768 | <1 |
| Adults 50-99 years old | 0.326 | 0.000154 | <1 | 0.000351 | <1 | 0.000626 | <1 |
| Females 13-49 years old | 0.336 | 0.000134 | <1 | 0.000276 | <1 | 0.000550 | <1 |

[1] Population with the highest risk estimate is in bold.

| Table 7. Summary of Acute Dietary (Water Only) Exposure and Risk for Malaoxon[1] | | | | | | | |
|---|---|---|---|---|---|---|---|
| Population Subgroup | aPAD (mg/kg/day) | 95th Percentile | | 99th Percentile | | 99.9th Percentile | |
| | | Exposure (mg/kg/day) | % aPAD | Exposure (mg/kg/day) | % aPAD | Exposure (mg/kg/day) | % aPAD |
| **All Infants (<1 year old)** | 0.549 | 0.016977 | 3.1 | 0.023321 | 4.3 | **0.031656** | **5.8** |
| Children 1-2 years old | 0.520 | 0.007147 | 1.4 | 0.010803 | 2.1 | 0.027881 | 5.4 |
| Children 3-5 years old | 0.500 | 0.005627 | 1.1 | 0.008576 | 1.7 | 0.014560 | 2.9 |
| Children 6-12 years old | 0.450 | 0.004415 | <1 | 0.007327 | 1.6 | 0.012145 | 2.7 |
| Youth 13-19 years old | 0.392 | 0.004128 | 1.0 | 0.006400 | 1.6 | 0.009799 | 2.5 |
| Adults 20-49 years old | 0.373 | 0.004844 | 1.3 | 0.007325 | 2.0 | 0.010301 | 2.8 |
| Adults 50-99 years old | 0.373 | 0.004213 | <1 | 0.006683 | <1 | 0.010533 | 1.1 |
| Females 13-49 years old | 0.384 | 0.004889 | 1.3 | 0.007115 | 1.8 | 0.010736 | 2.8 |

[1] Population with the highest risk estimate is in bold.

| Table 8. Summary of Steady-State Dietary (Food Only) Exposure and Risk for Malathion[1] | | | | | | | |
|---|---|---|---|---|---|---|---|
| Population Subgroup | ssPAD (mg/kg/day) | 95th Percentile | | 99th Percentile | | 99.9th Percentile | |
| | | Exposure (mg/kg/day) | % ssPAD | Exposure (mg/kg/day) | % ssPAD | Exposure (mg/kg/day) | % ssPAD |
| All Infants (<1 year old) | 0.700 | 0.000116 | <1 | 0.000319 | <1 | 0.000923 | <1 |
| **Children 1-2 years old** | 0.663 | 0.000266 | <1 | 0.000677 | <1 | **0.002417** | **<1** |
| Children 3-5 years old | 0.638 | 0.000217 | <1 | 0.000485 | <1 | 0.001946 | <1 |
| Children 6-12 years old | 0.576 | 0.000139 | <1 | 0.000360 | <1 | 0.001233 | <1 |
| Youth 13-19 years old | 0.505 | 0.000092 | <1 | 0.000234 | <1 | 0.000741 | <1 |
| Adults 20-49 years old | 1.697 | 0.000161 | <1 | 0.000350 | <1 | 0.001327 | <1 |
| Adults 50-99 years old | 1.698 | 0.000119 | <1 | 0.000268 | <1 | 0.000838 | <1 |
| Females 13-49 years old | 0.495 | 0.000103 | <1 | 0.000259 | <1 | 0.001203 | <1 |

[1] Population with the highest risk estimate is in bold.

| Table9. Summary of Steady-State Dietary (Food Only) Exposure and Risk for Malaoxon[1] | | | | | | | |
|---|---|---|---|---|---|---|---|
| Population Subgroup | ssPAD (mg/kg/day) | 95th Percentile | | 99th Percentile | | 99.9th Percentile | |
| | | Exposure (mg/kg/day) | % ssPAD | Exposure (mg/kg/day) | % ssPAD | Exposure (mg/kg/day) | % ssPAD |
| All Infants (<1 year old) | 0.149 | 0.000075 | <1 | 0.000179 | <1 | 0.000389 | <1 |
| Children 1-2 years old | 0.141 | 0.000327 | <1 | 0.000636 | <1 | 0.001194 | <1 |
| **Children 3-5 years old** | 0.136 | 0.000284 | <1 | 0.000606 | <1 | **0.001509** | **1.1** |
| Children 6-12 years old | 0.124 | 0.000201 | <1 | 0.000381 | <1 | 0.000814 | <1 |
| Youth 13-19 years old | 0.109 | 0.000130 | <1 | 0.000325 | <1 | 0.000722 | <1 |
| Adults 20-49 years old | 0.104 | 0.000161 | <1 | 0.000303 | <1 | 0.000490 | <1 |
| Adults 50-99 years old | 0.104 | 0.000135 | <1 | 0.000278 | <1 | 0.000487 | <1 |
| Females 13-49 years old | 0.107 | 0.000122 | <1 | 0.000212 | <1 | 0.000423 | <1 |

[1] Population with the highest risk estimate is in bold.

| Table 10. Summary of Steady-State Dietary (Water Only) Exposure and Risk for Malaoxon[1] | | | | | | | |
|---|---|---|---|---|---|---|---|
| Population Subgroup | ssPAD (mg/kg/day) | 95th Percentile | | 99th Percentile | | 99.9th Percentile | |
| | | Exposure (mg/kg/day) | % ssPAD | Exposure (mg/kg/day) | % ssPAD | Exposure (mg/kg/day) | % ssPAD |
| **All Infants (<1 year old)** | 0.165 | 0.002740 | <1 | 0.003554 | 2.1 | **0.004451** | **2.7** |
| Children 1-2 years old | 0.157 | 0.001065 | <1 | 0.001430 | <1 | 0.003403 | 2.2 |
| Children 3-5 years old | 0.152 | 0.000807 | <1 | 0.001295 | <1 | 0.001879 | 1.2 |
| Children 6-12 years old | 0.129 | 0.000658 | <1 | 0.001041 | <1 | 0.001779 | 1.4 |
| Youth 13-19 years old | 0.121 | 0.000603 | <1 | 0.000925 | <1 | 0.001259 | 1.0 |
| Adults 20-49 years old | 0.115 | 0.000722 | <1 | 0.001013 | <1 | 0.001436 | 1.2 |
| Adults 50-99 years old | 0.115 | 0.000650 | <1 | 0.000983 | <1 | 0.001374 | 1.2 |
| Females 13-49 years old | 0.118 | 0.000727 | <1 | 0.001004 | <1 | 0.001417 | 1.2 |

[1] Population with the highest risk estimate is in bold.

Acute Dietary (Food and Drinking Water)

The acute food-only risk estimates for malathion and malaoxon were less than HED's LOC at the 99.9th percentile of exposure for all population subgroups, with all risk estimates at <1% of the aPAD. Children 1-2 years old for malathion was the population subgroup with the highest risk estimate. The acute water-only risk estimates for malaoxon are not of concern at the 99.9th percentile of exposure for all population subgroups, with all risk estimates at 2.5-6% of the aPAD. All infants (<1 year old) were the population subgroup with the highest risk estimate.

The MOE approach was used to determine the acute aggregate dietary risk estimates because separate age-specific PODs for food and water were derived from the PBPK-PD model. Separate MOEs were determined for the various population subgroups because the PODs were different for the various subgroups. As shown in Table 11, food-only MOEs for the various population subgroups were calculated by dividing the PBPK-PD model derived food-only POD by acute food-only exposures determined by DEEM. The resulting MOEs for food only range from 11,000-58,000 for malathion and 2,400-9,600 for malaoxon, which are above the LOC (<10) and are not of concern. The water-only MOEs for all population subgroups were calculated by dividing the PBPK-PD model derived water-only PODs by the water-only exposure resulting from the maximum EDWC derived by EFED (93 ppb). All residues in water were assumed to be converted to malaoxon; therefore, the MOEs for water only were only calculated for malaoxon. The resulting malaoxon MOEs for water only range from 170-400. The combined MOE

approach calculated for malathion food, malaoxon food, and malaoxon water were added together to determine acute aggregate exposure for each population subgroup. The resulting aggregate MOEs for food plus water range from 170-340, which are above the LOC (MOE of 10) and therefore are not of concern. All infants (<1 year old) and children 1-2 years old were the population subgroups with the highest risk estimate.

Steady-State Dietary (Food and Drinking Water)

The DEEM acute module was used to conduct highly refined steady-state assessments using the steady-state PODs and acute residue files. These steady-state (two-day average) assessments estimate 21-day ("steady-state") average daily food and drinking water exposures.

The steady-state food-only risk estimates for malathion were not of concern at the 99.9$^{th}$ percentile of exposure for all population subgroups, with children 1-2 years old was the highest risk estimates at ≤1% of the ssPAD. The steady state food-only risk estimates for malaoxon were less than HED's LOC of the PAD at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates at ≤ 1- 1% of the ssPAD. Children 3-5 years old was the population subgroup with the highest risk estimate for malaoxon. The steady-state water-only risk estimates for malaoxon were less than HED's LOC at the 99.9$^{th}$ percentile of exposure for all population subgroups, with all risk estimates at 1-3% of the ssPAD. All infants (<1 year old) was the population subgroup with the highest risk estimate. Food- and water-only risk estimates were used to calculate MOEs for each population subgroup.

The MOE approach was used to determine steady-state dietary risk estimates because separate age-specific PODs for food and water were derived from the PBPK-PD model (Table 12). Food-only MOEs for the various population subgroups were calculated by dividing the PBPK-PD model derived food-only POD by steady-state food-only exposures determined by DEEM. The resulting MOEs for food only range from 2,700-13,000 for malathion and 900-3,800 for malaoxon, which are above the LOC (<10) and are not of concern. The water-only MOEs for all population subgroups and population subgroups were calculated by dividing the PBPK-PD model derived water-only PODs by the water-only exposure resulting from the maximum EDWC derived by EFED (15 ppb). All residues in water were assumed to be converted to malaoxon, so MOEs for water only were only calculated for malaoxon. The resulting malaoxon MOEs for water only range from 370-960, which are above the LOC and are thus not of concern. Using the 1/MOE approach, the MOEs calculated for malathion food, malaoxon food, and malaoxon water were added together to determine steady-state aggregate exposure for each population subgroup. The resulting steady-state aggregate MOEs for food plus water range from 300-560, which are above the LOC (MOE of 10) and therefore are not of concern. Children 1-2 years old was the population subgroup with the highest risk estimate.

| Table 11. MOE Analysis of Aggregate Acute Dietary Risk | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Scenario | All Infants | Children 1-2 | Children 3-5 | Children 6-12 | Youth 13-19 | Adult 20-49 | Adult 50-99 | Female 13-49 |
| Malathion Food-only POD (mg/kg/day) | 35.7 | 33.1 | 31.5 | 27.8 | 24.7 | 87.4 | 87.5 | 24.3 |
| Malathion Food-only Exposure (mg/kg/day) | 0.001415 | 0.003144 | 0.002551 | 0.001614 | 0.000877 | 0.001604 | 0.001125 | 0.001442 |
| Malathion Food MOE[1] | 25,000 | 11,000 | 12,000 | 17,000 | 28,000 | 54,000 | 78,000 | 17,000 |
| | | | | | | | | |
| Malaoxon Food-only POD (mg/kg/day) | 4.76 | 4.51 | 4.33 | 3.90 | 3.43 | 3.26 | 3.26 | 3.36 |
| Malaoxon Food-only Exposure (mg/kg/day) | 0.000496 | 0.001502 | 0.001289 | 0.001223 | 0.001415 | 0.000768 | 0.000626 | 0.000550 |
| Malaoxon Food MOE[1] | 9,600 | 3,000 | 3,400 | 3,200 | 2,400 | 4,200 | 5,200 | 6,100 |
| | | | | | | | | |
| Malaoxon Water-only POD (mg/kg/day) | 5.49 | 5.20 | 5.00 | 4.50 | 3.92 | 3.73 | 3.73 | 3.84 |
| Malaoxon Water-only Exposure (mg/kg/day) | 0.031656 | 0.027881 | 0.014560 | 0.012145 | 0.009799 | 0.010301 | 0.010533 | 0.010736 |
| Malaoxon Water MOE[2] | 170 | 190 | 340 | 370 | 400 | 360 | 350 | 360 |
| | | | | | | | | |
| Combined MOE[3] | **170** | **170** | 300 | 330 | 340 | 330 | 330 | 330 |

Population with the highest risk estimate is in bold.

[1] Food MOE= Food POD/Food Exposure.

[2] Water MOE= Water POD/ Water Exposure.

[3] Aggregate MOE= $1/((1/\text{Food}_{\text{Malathion}}\ \text{MOE})+(1/\text{Food}_{\text{Malaoxon}}\ \text{MOE})+(1/\text{Water}_{\text{Malaoxon}}\ \text{MOE}))$.

| Table 12. MOE Analysis of Aggregate Steady-State Dietary Risk | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Scenario | All Infants | Children 1-2 | Children 3-5 | Children 6-12 | Youth 13-19 | Adult 20-49 | Adult 50-99 | Female 13-49 |
| Malathion Food-only POD (mg/kg/day) | 7.0 | 6.63 | 6.38 | 5.76 | 5.05 | 16.97 | 16.98 | 4.95 |
| Malathion Food-only Exposure (mg/kg/day) | 0.000923 | 0.002417 | 0.001946 | 0.001233 | 0.000741 | 0.001327 | 0.000838 | 0.001203 |
| Malathion Food MOE[1] | 7,600 | 2,700 | 3,300 | 4,700 | 6,800 | 13,000 | 20,000 | 4,100 |
| | | | | | | | | |
| Malaoxon Food-only POD (mg/kg/day) | 1.49 | 1.41 | 1.36 | 1.24 | 1.09 | 1.04 | 1.04 | 1.07 |
| Malaoxon Food-only Exposure (mg/kg/day) | 0.000389 | 0.001194 | 0.001509 | 0.000814 | 0.000722 | 0.000490 | 0.000487 | 0.000423 |
| Malaoxon Food MOE[1] | 3,800 | 1,200 | 900 | 1,500 | 1,500 | 2,100 | 2,100 | 2,500 |
| | | | | | | | | |
| Malaoxon Water-only POD (mg/kg/day) | 1.65 | 1.57 | 1.52 | 1.29 | 1.21 | 1.15 | 1.15 | 1.18 |
| Malaoxon Water-only Exposure (mg/kg/day) | 0.004451 | 0.003403 | 0.001879 | 0.001779 | 0.001259 | 0.001436 | 0.001374 | 0.001417 |
| Malaoxon Water MOE[2] | 370 | 460 | 810 | 730 | 960 | 800 | 800 | 830 |
| | | | | | | | | |
| Combined MOE[3] | 320 | **300** | 380 | 440 | 540 | 560 | 540 | 540 |

Population with the highest risk estimate is in bold.
[1] Food MOE= Food POD/Food Exposure
[2] Water MOE= Water POD/ Water Exposure.
[3] Aggregate MOE= $1/((1/\text{Food}_{\text{Malathion}}\ \text{MOE})+ (1/\text{Food}_{\text{Malaoxon}}\ \text{MOE})+(1/\text{Water}_{\text{Malaoxon}}\ \text{MOE}))$.

Cancer Dietary (Food and Drinking Water) Exposure Results and Characterization

Malathion is classified as "Suggestive evidence of carcinogenicity, but not sufficient to assess human carcinogenic potential." Quantification of risk using a non-linear approach (i.e., the chronic reference dose) will adequately protect for all chronic toxicity including carcinogenicity.

## VIII. Characterization of Inputs/Outputs

HED has conducted refined acute and steady-state (two-day average) dietary exposure and risk

assessments using DEEM version 4.02 for malathion and malaoxon. Although the DEEM two-day average assessments may result in higher exposure estimates for food, the assessments provide an acceptable estimate of 21-day ("steady-state") average daily exposure for food and drinking water for use in risk assessment. The acute and steady-state (two-day average) assessments are highly refined since they incorporate malathion and malaoxon PDP monitoring data and PCT data.

## IX. Conclusions

These refined analyses demonstrate that the registered uses of malathion and malaoxon result in acute and steady-state (two-day average) dietary (food and water) risk estimates that are not of concern. This assessment is not likely to underestimate risk.

## X. References

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## XI. List of Attachments

Attachment 1. Summary of Malathion Residues Used in Acute and Steady State Assessments
Attachment 2. Summary of Malaoxon Residues Used in Acute and Steady State Assessments
Attachment 3. Summary of Acute and Steady State Residue Distribution Files for Malathion
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Attachment 5. Malathion and Malaoxon Field trials for Cotton, Dates, Figs, Guava, Mints, and Passion fruit
Attachment 6. DEEM-FCID Acute and Steady State Residue Input File (Food Only) for Malathion
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Attachment 14. DEEM-FCID Steady State Drinking Water Only Input File for Malaoxon
Attachment 15. DEEM-FCID Steady State Drinking Water Only Output File for Malaoxon
Attachment 16. Malathion SLUA Report

## Attachment 1: Summary of Malathion Residues Used in Acute and Steady State Assessments

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| CG 1 Root and Tuber Vegetables | | | | | | | | |
| Beet garden, roots | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.003 | 8 | | 100 | RDF#1 |
| Beet sugar | B | Garden Beet PDP 2011 | 756/0 | 0.003 | 1 | | 100 | 0.003 |
| Beet, sugar/ molasses | B | Garden Beet PDP 2011 | 756/0 | 0.003 | 8 | | 100 | 0.003 |
| Carrot | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | 8 | 1.4 juice | 2.5 | RDF#2 |
| Carrot, babyfood | NB/PB | Carrot PDP 2012 | 792/0 | 0.001 | 8 | | 2.5 | RDF#3 |
| Horseradish | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | 8 | | 100 | RDF#2 |
| Parsnip | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | 8 | | 100 | RDF#2 |
| Potato | NB/PB | Potato w Peel PDP 2015, 2016 | 1415/0 | 0.0005 | 8 | | <2.5 | RDF#4 |
| Potato, babyfood | NB/PB | Potato w/out peel PDP 2006, 2007 | 1544/0 | 0.002 | 8 | | <2.5 | RDF#5 |
| Potato, dried/ flour | B | Potato PDP 2015, 2016 | 1415/0 | 0.0005 | 8 | 6.5 dried | <2.5 | 0.0001 |
| Potato, w/out peel frozen | NB/PB | Potato w/out peel PDP 2006, 2007 | 1544/0 | 0.002 | 8 | | <2.5 | RDF#5 |
| Radish root | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | -- | | 100 | 0.0005 |
| Rutabaga | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.003 | 8 | | 100 | RDF#1 |
| Salsify,root | NB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | 8 | | 100 | RDF#2 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Salsify,top | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.003 | 8 | | 100 | RDF#1 |
| Sweet Potato/Yam | NB/PB | Sweet Potato PDP 2017, 2017, 2018 | 1410/1 | 0.0025 | 1 (0.0051) | | 100 | RDF#6 |
| Sweet Potato, babyfood | NB/PB | Sweet Potato PDP 2010, 2011 | 776/0 | 0.001 | 1 | | 100 | RDF#7 |
| Turnip, root | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.003 | 8 | | 100 | RDF#1 |
| **CG 3-07 Bulb Vegetable** | | | | | | | | |
| Garlic, bulb | NB/PB/B | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | | 100 | 0.003 |
| Leek | NB/PB | Green Onion PDP 2018 | 707/5 | 0.005 | 8 | | 100 | RDF#115 |
| Onion, bulb | NB/PB | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | | 15 | RDF#11 |
| Onion, bulb, dried | B | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | 9.7 dried | 15 | 0.00045 |
| Onion, green | PB | Green Onion PDP 2018 | 707/5 | 0.005 | 8 | | 15 | RDF#12 |
| Shallot, fresh leaves | PB | Green Onion PDP 2018 | 707/5 | 0.005 | 8 | | 15 | RDF#12 |
| Shallot, bulb | NB | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | | 100 | 0.003 |
| **CG 4-16 Leafy Vegetable** | | | | | | | | |
| Amaranth, leafy | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Arugula | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |
| Broccoli raab | NB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Broccoli, Chinese | NB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |
| Cabbage, Chinese, bok choy | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |
| Chrysanthemum, garland | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Cilantro, leaves | B | Cilantro PDP 2018, 2019 | 314/6 | 0.002 | 8 (0.024) | | 100 | RDF#116 |
| Collards | PB | Collard PDP 2019 | 187/2 | 0.001 | 8 | | 100 | RDF#14 |
| Cress, garden | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |
| Cress, upland | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |
| Dandelion, leave | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Dillweed | B | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Endive | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Kale | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 | | 100 | RDF#10 |
| Lettuce, head | NB/PB | Lettuce head PDP 2015, 2016, 2017 | 1024/0 | 0.001 | 8 | | 15 | RDF#15 |
| Lettuce, leaf | PB | Lettuce leaf PDP 2015, 2016, 2017 | 442/1 | 0.001 | 8 (0.035) | | 15 | RDF#9 |
| Mustard green | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0025 | 8 (1.03) | | 100 | RDF#10 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Parsley, leaves | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Radicchio | NB | Lettuce head PDP 2015, 2016, 2017 | 1024/0 | 0.001 | 8 | | 100 | RDF#15 |
| Radish, tops | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0044 | 8 | | 100 | RDF#10 |
| Rape greens | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0044 | 8 | | 100 | RDF#10 |
| Spinach | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 5 | RDF#13 |
| Spinach, frozen | PB | Spinach frozen PDP 2018, 2019 | 377/0 | 0.003 | 8 | | 5 | RDF#17 |
| Spinach, canned | PB | Spinach canned PDP 2019 | 375/0 | 0.003 | 8 | | 5 | RDF#16 |
| Swiss chard | NB | Spinach PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | 100 | 0.0015 |
| Turnip greens | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0044 | 8 | | 100 | RDF#10 |
| Watercress | PB | Kale PDP 2017, 2018 | 1415/18 | 0.0044 | 8 | | 100 | RDF#10 |
| **CG 5-16 Brassica Head and Stem Vegetable** | | | | | | | | |
| Broccoli | NB/PB | Broccoli PDP 2013, 2014 | 1420/0 | 0.005 | 8 | | 100 | RDF#20 |
| Brussels sprouts | NB/PB | Cabbage PDP 2017, 2018, 2019 | 1361/0 | 0.005 | 8 | | 100 | 0.005 |
| Cabbage | NB/PB | Cabbage PDP 2017, 2018, 2019 | 1361/0 | 0.005 | 8 | | 2.5 | RDF#21 |
| Cabbage, Chinese, mustard | NB/PB | Broccoli PDP 2013, 2014 | 1420/0 | 0.005 | 8 | | 100 | RDF#20 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Cabbage, Chinese, napa | NB/PB | Cabbage PDP 2017, 2018, 2019 | 1361/0 | 0.005 | 8 | | 100 | 0.005 |
| Cauliflower | NB/PB | Cauliflower PDP 2019 | 176/0 | 0.0005 | 8 | | 10 | RDF#22 |
| **CG 6 Legume (Succulent or Dried) Vegetable** | | | | | | | | |
| Bean, dry seed-ALL | B | Black bean PDP 2010 | 367/0 | 0.001 | 8 | | <2.5 | 0.001 |
| Bean, broad, succl. | PB | Bean green PDP 2013, 2014, 2015, 2016 | 2456/1 | 0.001 | 8 (0.0058) | | <2.5 | RDF#26 |
| Bean, cowpea, succl. | PB | Bean Pinto PDP 2009 | 372/0 | 0.001 | 8 | | <2.5 | RDF#35 |
| Bean, lima, succl. | PB | Bean Kidney PDP 2008, 2009 | 372/0 | 0.001 | 8 | | <2.5 | RDF#34 |
| Bean, snap, succl. | PB | Bean green PDP 2013, 2014, 2015, 2016 | 2456/1 | 0.001 | 8 (0.0058) | | <2.5 | RDF#26 |
| Pea, edible podded, succl. | PB | Pea snap PDP 2011, 2012 | 1487/107 | 0.0012 | 8 | | <2.5 | RDF#29 |
| Pea, pigeon, succl. | PB | Pea snap PDP 2011, 2012 | 1487/107 | 0.0012 | 8 | | <2.5 | RDF#29 |
| Pea, succl. | PB | Pea snap PDP 2011, 2012 | 1487/107 | 0.0012 | 8 | | <2.5 | RDF#29 |
| Bean, snap, succulent, canned | PB | Bean green canned PDP 2014 | 378/0 | 0.0005 | 8 | | <2.5 | RDF#25 |
| Bean, snap, succulent, BF | PB | Bean green canned PDP 2010, 2011 | 776/0 | 0.0014 | 8 | | <2.5 | RDF#28 |
| Bean, snap, succulent, frozen | PB | Bean green canned PDP 2014 | 378/0 | 0.0006 | 8 | | <2.5 | RDF#27 |
| Pea, sweet canned | PB | Pea snap canned PDP 2019 | 379/0 | 0.005 | 8 | | <2.5 | RDF#30 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Pea, sweet frozen | PB | Pea snap canned PDP 2018, 2019 | 315/0 | 0.005 | 8 | | <2.5 | RDF#31 |
| Pea, babyfood | PB | Pea snap canned PDP 2012, 2013 | 773/0 | 0.005 | 8 | | <2.5 | RDF#32 |
| Soybean seed | B | Soybean grain PDP 2011 | 300/11 | 0.003 | 8 (0.203) | 2.2 flour | <2.5 | RDF#23 |
| Soybean infant formula, soy | B | Soybean infant formula soy PDP 2013, 2014 | 706/0 | 0.0025 | 8 | | <2.5 | RDF#24 |
| Soybean vegetable | B | Soybean grain PDP 2011 | 300/11 | 0.003 | 8 (0.203) | 2.2 flour | <2.5 | RDF#23 |
| **CG 8-10 Fruiting Vegetable** | | | | | | | | |
| Eggplant | NB/PB | Eggplant PDP 2005, 2006 | 1476/3 | 0.004 | 8 (0.041) | | 100 | RDF#41 |
| Okra | NB/PB | Eggplant PDP 2005, 2006 | 1476/3 | 0.004 | 8 (0.041) | | 100 | RDF#41 |
| Pepper bell | NB/PB | Pepper bell PDP 2019 | 354/2 | 0.005 | 8 (0.06) | | 10 | RDF#43 |
| Pepper bell, dried | B | Pepper bell PDP 2019 | 354/2 | 0.005 | 8 (0.06) | 13.5 dried | 10 | 0.00077 |
| Pepper non-bell | NB/PB | Pepper non-bell PDP 2019 | 651/5 | 0.0025 | 8 (0.0486) | | 10 | RDF#42 |
| Pepper non-bell, dried | B | Pepper non-bell PDP 2019 | 651/5 | 0.0025 | 8 (0.0486) | 12.8 dried | 10 | 0.0026 |
| Tomato/ Tomatillo | NB/PB | Tomato PDP 2014, 2015, 2016 | 1413/2 | 0.001 | 8 (0.0065) | | 5 | 38 |
| Tomato, dried | B | Tomato PDP 2014, 2015, 2016 | 1413/2 | 0.001 | 8 (0.0065) | 14.3 dried | 5 | 0.00006 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Tomato, paste | B | Tomato paste PDP 2019 | 189/0 | 0.0035 | 8 | | 5 | RDF#40 |
| Tomato, puree | B | Tomato paste PDP 2019 | 189/0 | 0.0035 | 8 | 3.3 puree | 5 | 0.0035 |
| Tomato, canned | PB | Tomato canned PDP 2016, 2017 | 755/0 | 0.0005 | 8 | | 5 | RDF#39 |
| Tomato juice | NB/PB | Tomato PDP 2014, 2015, 2016 | 1413/2 | 0.001 | 8 (0.0065) | 1.4 juice | 5 | RDF#39 |
| **CG 9 Cucurbit Vegetable** | | | | | | | | |
| Balsam pear | NB/PB | Summer Squash PDP 2012, 2013, 2014 | 1426/0 | 0.004 | 8 | | 5 | 0.004 |
| Cantaloupe | NB/PB | Cantaloupe PDP 2019 | 354/0 | 0.001 | 8 (melon) | | 5 | RDF#44 |
| Chayote fruit | NB/PB | Summer Squash PDP 2012, 2013, 2014 | 1426/0 | 0.004 | 8 | | 100 | 0.004 |
| Cucumber | NB/PB | Cucumber PDP 2015, 2016, 2017 | 1510/0 | 0.005 | 8 | | 10 | RDF#46 |
| Honeydew melon | NB/PB | Cantaloupe PDP 2019 | 354/0 | 0.001 | 8 | | 100 | RDF#44 |
| Pumpkin | NB/PB | Winter Squash PDP 2011, 2012, 2013 | 1115/0 | 0.0015 | 8 | | 15 | RDF#111 |
| Pumpkin seed | B | Winter Squash PDP 2011, 2012, 2013 | 1115/0 | 0.0015 | -- | | 15 | RDF#111 |
| Squash, summer | NB/PB | Summer Squash PDP 2012, 2013, 2014 | 1426/0 | 0.004 | 8 | | 5 | RDF#47 |
| Squash, winter | NB/PB | Winter Squash PDP 2011, 2012, 2013 | 1115/0 | 0.0015 | 8 | | 5 | RDF#48 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Squash, winter frozen | PB | Winter Squash frozen PDP 1997, 1998, 1999 | 470/0 | 0.004 | 8 | | 5 | RDF#49 |
| Watermelon | NB | Watermelon PDP 2014,2015 | 760/0 | 0.001 | 8 (melon) | | <2.5 | RDF#45 |
| **CG 10-10 Citrus** | | | | | | | | |
| Grapefruit | NB/PB | Grapefruit PDP 2015, 2016, 2017 | 1407/0 | 0.002 | 8 | | 15 | RDF#53 |
| Grapefruit juice | PB | OJ PDP 2019 | 191/0 | 0.00125 | 8 | | 15 | RDF#118 |
| Kumquat | NB | Orange PDP 2015, 2016 | 1488/0 | 0.0089 | 8 | | 100 | 0.005 |
| Lemon/Lime | NB/PB | Orange PDP 2015, 2016 | 1488/0 | 0.0089 | 8 | 3.3 peel | 100 | 0.005 |
| Lemon/Lime juice | PB | OJ PDP 2019 | 191/0 | 0.00125 | 8 | | 100 | 0.00125 |
| Orange | NB/PB | Orange PDP 2015, 2016 | 1415/0 | 0.005 | 8 | 3.3 peel | 30 | RDF#50 |
| Orange juice | PB | OJ PDP 2019 | 191/0 | 0.00125 | 8 | | 30 | RDF#51 |
| Tangerine | NB | Tangerine PDP 2019 | 180/0 | 0.005 | 8 | | 25 | RDF#52 |
| Tangerine juice | PB | OJ PDP 2019 | 191/0 | 0.00125 | 8 | | 25 | RDF#119 |
| **CG 11-10 Pome Fruit** | | | | | | | | |
| Apple | NB/PB | Apple PDP 2014, 2015, 2016 | 1356/1 | 0.001 | 8 (0.004) | 8.0 dried | <2.5 | RDF#55 |
| Apple, dried | B | Apple PDP 2014, 2015, 2016 | 1356/1 | 0.001 | 8 (0.004) | 8.0 dried | <2.5 | 0.00003 |
| Apple juice | PB | Apple juice PDP 2012,2013 | 775/0 | 0.001 | 8 | | <2.5 | RDF#54 |
| Apple sauce | PB | Apple sauce PDP 2016, 2017 | 760/0 | 0.001 | 8 | | <2.5 | RDF#56 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Apple sauce, babyfood | PB | Apple sauce BF PDP 2016, 2017 | 760/0 | 0.001 | 8 | | <2.5 | RDF#57 |
| Pear | NB/PB | Pear PDP 2015, 2016 | 1412/1 | 0.001 | 8 (0.0033) | | 20 | RDF#58 |
| Pear, dried | B | Pear PDP 2015, 2016 | 1412/1 | 0.001 | 8 (0.0033) | 6.25 dried | 20 | 0.0002 |
| Pear, babyfood | PB | Pear BF PDP 2010, 2011 | 776/0 | 0.002 | 8 | | 20 | RDF#59 |
| Pear, juice | PB | Pear canned PDP 1999, 2000 | 737/0 | 0.004 | 8 | 1.3 juice | 20 | RDF#60 |
| Quince | NB | Apple PDP 2014, 2015, 2016 | 1356/1 | 0.001 | 8 (0.004) | | 100 | RDF#18 |
| **CG 12-12 Stone Fruit** | | | | | | | | |
| Apricot | NB/PB | Peach PDP 2007, 2008, 2012 | 1191/6 | 0.003 | 8 (0.192) | 6.0 dried 1.3 juice | 100 | 0.003 |
| Apricot, dried | B | Peach PDP 2007, 2008, 2012 | 1191/6 | 0.003 | 8 (0.192) | 6.0 dried | 100 | 0.005 |
| Cherry | PB | Cherry frozen PDP 2014, 2015, 2016 | 879/39 | 0.002 | 8 (0.036) | 1.5 juice | 25 | RDF#61 |
| Nectarine | NB | Nectarine PDP 2013, 2014, 2015 | 1802/0 | 0.001 | 8 | | 100 | RDF#64 |
| Peach | NB/PB | Peach canned PDP 2013, 2014, 2015 | 1354/1 | 0.005 | 8 (0.012) | 1.3 juice | <2.5 | RDF#62 |
| Peach, babyfood | NB/PB | Peach BF PDP 2012 | 777/0 | 0.003 | 8 | | <2.5 | RDF#65 |
| Peach, dried | B | Peach canned PDP 2013, 2014, 2015 | 1354/1 | 0.005 | 8 (0.012) | 7.0 dried | <2.5 | 0.0001 |
| Peach, juice | NB/PB | Peach canned PDP 2018 | 755/0 | 0.001 | 8 | | <2.5 | RDF#66 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Plum | NB/PB | Plum PDP 2011, 2012, 2013 | 1347/0 | 0.002 | 8 | 5.0 dried | 100 | RDF#63 |
| Plum, prune | PB | Plum PDP 2017, 2018 | 726/0 | 0.001 | 8 | 1.4 juice | 100 | RDF#109 |
| **CG 13-07 Berry and Small Fruit** | | | | | | | | |
| Blackberry | PB | Raspberry PDP 2013 | 705/43 | 0.004 | 8 (0.16) | 1.2 juice | 70 | RDF#67 |
| Blueberry | PB | Blueberry PDP 2014 | 707/104 | 0.002 | 8 (0.67) | | 50 | RDF#68 |
| Boysenberry | PB | Raspberry PDP 2013 | 705/43 | 0.004 | 8 (0.16) | | 70 | RDF#67 |
| Cranberry | PB | Cranberry PDP 2016, 2017 | 467/0 | 0.005 | 8 | 7.9 dried 1.2 juice | 100 | RDF#71 |
| Currant | PB | Blueberry PDP 2014 | 707/104 | 0.002 | 8 | 6.5 dried | 100 | RDF#68 |
| Gooseberry | PB | Blueberry PDP 2014 | 707/104 | 0.002 | 8 (0.67) | | 50 | RDF#68 |
| Grape | PB | Grape PDP 2015, 2016 | 1416/2 | 0.001 | 8 (0.0033) | | 100 | RDF#69 |
| Grape juice/ wine | PB | Grape juice PDP 2013, 2014 | 677/0 | 0.001 | 8 | 1.2 wine | 100 | RDF#70 |
| Grape raisin | PB | Grape raisin PDP 2018 | 756/0 | 0.001 | -- | | 100 | RDF#100 |
| Loganberry | PB | Raspberry PDP 2013 | 705/43 | 0.004 | 8 (0.16) | | 70 | RDF#67 |
| Raspberry | PB | Raspberry PDP 2013 | 705/43 | 0.004 | 8 (0.16) | 1.2 juice | 70 | RDF#67 |
| Strawberry | PB | Strawberry PDP 2014, 2015, 2016 | 1412/124 | 0.002 | 8 (0.33) | 1.2 juice | 45 | RDF#72 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Strawberry, frozen | PB | Strawberry frozen PDP 2018, 2019 | 753/216 | 0.001 | 8 (0.091) | | 45 | RDF#73 |
| **CG 14-12 Tree Nut** | | | | | | | | |
| Almond | PB | Almond PDP 2007, 2008 | 547/0 | 0.001 | 8 | | 100 | RDF#74 |
| Almond, oil | B | Almond PDP 2007, 2008 | 547/0 | 0.001 | 8 | 2.8 oil | | 0.001 |
| Chestnut | PB | Almond PDP 2007, 2008 | 547/0 | 0.001 | 1 | | 100 | RDF#74 |
| Hazelnut | PB | Almond PDP 2007, 2008 | 547/0 | 0.001 | 1 | | 100 | RDF#74 |
| Hazelnut, oil | B | Almond PDP 2007, 2008 | 547/0 | 0.001 | 8 | 1.8 oil | | 0.001 |
| Macadamia nut | PB | Almond PDP 2007, 2008 | 547/0 | 0.001 | 1 | | 100 | RDF#74 |
| Pecan | PB | Almond PDP 2007, 2008 | 547/0 | 0.001 | 8 | | <2.5 | RDF#112 |
| Walnut | PB | Almond PDP 2007, 2008 | 547/0 | 0.001 | 8 | | 10 | RDF#113 |
| **CG-15 Cereal Grains** | | | | | | | | |
| Barley, bran/pearled | B | Barley Grain PDP 2002, 2003 | 746/12 | 0.0025 | 8 (0.644) | | 100 | RDF#75 |
| Barley, flour | B | Wheat Flour PDP 2018 | 758/186 | 0.001 | 8 (0.081 | | 100 | RDF#85 |
| Corn, field | B | Corn Grain PDP 2007, 2008 | 1309/469 | 0.001 | 8 (4.74) | 21.4 bran | <2.5 | RDF#76 |
| Corn pop | B | Corn Grain PDP 2007, 2008 | 1309/469 | 0.001 | 8 (4.74) | | <2.5 | RDF#76 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Corn syrup | B | Corn Syrup PDP1998, 1999 | 454/0 | 0.001 | 8 | | <2.5 | RDF#77 |
| Corn sweet | NB/PB | Corn Sweet PDP 2014, 2015 | 574/0 | 0.0025 | 2 | | 10 | RDF#79 |
| Corn sweet canned | PB | Corn Sweet canned PDP 2001, 2002 | 723/0 | 0.003 | 2 | | 10 | RDF#78 |
| Corn sweet frozen | NB/PB | Corn Sweet frozen PDP 2014, 2015 | 105/0 | 0.0025 | 2 | | 10 | RDF#80 |
| Oat grain/groat | B | Oat grain PDP 2019 | 681/10 | 0.001 | 8 (0.043) | | 100 | RDF#82 |
| Oat bran | B | Oat bran PDP 2019 | 14/1 | 0.00125 | 8 (0.027) | | 100 | RDF#81 |
| Oat flour | B | Wheat Flour PDP 2018 | 758/186 | 0.001 | 8 (0.081) | | 100 | RDF#85 |
| Rice | B | Rice PDP 2018, 2019 | 754/19 | 0.00125 | 8 (0.35) | 1.25 flour/ Brown rice | 5 | RDF#83 |
| Rye grain | B | Wheat Grain PDP 2005, 2006 | 1361/884 | 0.0015 | 8 (2.58) | | <2.5 | RDF#84 |
| Rye flour | B | Wheat Flour PDP 2018 | 758/186 | 0.001 | 8 (0.081) | | 100 | RDF#85 |
| Sorghum grain | B | Wheat Grain PDP 2005, 2006 | 1361/884 | 0.0015 | 8 (2.58) | | <2.5 | RDF#84 |
| Triticale flour | B | Wheat Flour PDP 2018 | 758/186 | 0.001 | -- (0.081) | | 100 | RDF#85 |
| Wheat, grain bran/germ | B | Wheat Grain PDP 2005, 2006 | 1361/884 | 0.0015 | 8 (2.577) | | <2.5 | RDF#84 |
| Wheat Flour | B | Wheat Flour PDP 2018 | 758/186 | 0.001 | 8 (0.081) | | <2.5 | RDF#85 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Wild rice | B | Rice PDP 2018, 2019 | 754/19 | 0.00125 | 8 (0.35) | | 5 | RDF#83 |
| **CG-20 Oilseed** | | | | | | | | |
| Cottonseed oil | B | Cottonseed FT (MRID 43585301) | 19/19 | 0.01 | 20 | | <2.5 | 0.025 |
| Flaxseed oil | B | Sunflower FT (MRID 43585301) | 19/19 | 0.01 | 0.1 | 2.2 oil | 100 | 0.025 |
| Flaxseed/Safflower /Sunflower Seed Oil | B | Sunflower FT (MRID 43585301) | 19/19 | 0.01 | 0.1 | 1 | | 0.025 |
| Flax/Sunflower Seed | B | Sunflower FT (MRID 43585301) | 19/19 | 0.01 | 0.1 | | | 0.025 |
| **CG-21 Edible Fungi** | | | | | | | | |
| Mushroom | PB | Mushroom PDP 2011, 2012, 2013 | 1462/0 | 0.001 | 8 | | 100 | RDF#114 |
| **CG-22A Stalk, Stem, and Leaf Petiole Vegetable** | | | | | | | | |
| Agave | NB | Asparagus PDP 2017, 2018, 2019 | 1361/0 | 0.001 | 8 | | 100 | 0.001 |
| Asparagus | NB/PB | Asparagus PDP 2017, 2018, 2019 | 1361/0 | 0.001 | 8 | | 25 | RDF#19 |
| Bamboo shoots | PB | Asparagus PDP 2017, 2018, 2019 | 1361/0 | 0.001 | 8 | | 100 | 0.001 |
| Cactus | NB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | 0.001 | 8 | | 100 | 0.001 |
| Cardoon | NB | Celery PDP 2013, 2014 | 1416/162 | 0.015 | 8 (0.17) | | 100 | RDF#117 |
| Celery/juice | NB/PB | Celery PDP 2013, 2014 | 1416/162 | 0.0015 | 8 (0.17) | 1.4 juice | 25 | RDF#37 |
| Celtuce | NB | Asparagus PDP 2017, 2018, 2019 | 1361/0 | 0.001 | 8 | | 100 | 0.001 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Fennel Florence | NB | Asparagus PDP 2017, 2018, 2019 | 1361/0 | 0.001 | 8 | | 100 | 0.001 |
| Kohlrabi | NB | Asparagus PDP 2017, 2018, 2019 | 1361/0 | 0.001 | 8 | | 100 | 0.001 |
| Palm heart | PB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | 0.001 | 8 | | 100 | 0.001 |
| Rhubarb | NB | Celery PDP 2013, 2014 | 1416/162 | 0.015 | 8 (0.17) | | 100 | RDF#117 |
| **CG-23 Tropical and Subtropical Fruit Edible Peel** | | | | | | | | |
| Date | PB | Date FT | 3/3 | 0.05 | 8 (3.26) | | 100 | RDF#107 |
| Fig | NB | Fig FT | 12/12 | 0.05 | 8 (0.954) | | 100 | RDF#97 |
| Fig, dried | NB | Fig FT | 12/12 | 0.05 | 8 (0.954) | | 100 | 0.1 |
| Guava | NB/PB | Guava FT | 20/20 | 0.05 | 8 (0.24) | | 100 | RDF#106 |
| **CG-24 Tropical and Subtropical Fruit Inedible Peel** | | | | | | | | |
| Avocado | PB | Avocado PDP 2012 | 372/0 | 0.0045 | 8 | | 100 | RDF#99 |
| Mango | NB/PB | Mango PDP 2017, 2018 | 709/15 | 0.003 | 8 (0.013) | 2 juice 5.9 dried | 100 | RDF#101 |
| Papaya | NB/PB | Papaya PDP 2011, 2012 | 750/0 | 0.004 | 1 | 2 juice | 100 | RDF#102 |
| Papaya, dried | B | Papaya PDP 2011, 2012 | 750/0 | 0.004 | 1 | 8 dried | 100 | 0.004 |
| Passionfruit | NB | Passionfruit FT | 12/2 | 0.05 | 8 (0.071) | 2 juice | 100 | RDF#108 |

| MALATHION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residue Acute/Steady State (Tol., AR, RDF) ppm |
| Pineapple | NB/PB | Pineapple PDP 2000, 2001, 2002 | 1454/0 | 0.007 | 8 | 1.7 juice | 100 | RDF#104 |
| Pineapple, dried | B | Pineapple PDP 200, 2001, 2002 | 1454/0 | 0.0174 | 8 | 7.3 dried | 100 | 0.007 |
| Pineapple, canned | NB/PB | Pineapple canned PDP 2017 | 756/0 | 0.004 | 8 | | 100 | RDF#105 |
| **Other** | | | | | | | | |
| Grape, leaves | PB/NB | Grape PDP 2015, 2016 | 1416/2 | 0.001 | 8 (0.0033) | | 100 | RDF#69 |
| Hop | B | Hop Tolerance | -- | -- | 1 | | 100 | 1 |
| Peanut | B | Peanut butter PDP 2015 | 315/0 | 0.05 | 8 (0.022) | | <2.5 | RDF#103 |
| Peanut Butter | B | Peanut butter PDP 2015 | 315/0 | 0.05 | 8 (0.022) | | <2.5 | RDF#103 |
| Peanut, oil | B | Cottonseed FT (MRID 43585301) | -- | 0.05 | 8 (0.022) | | <2.5 | 0.025 |
| Peppermint | B | Mint FT (MRID 44124801) | 5/5 | 0.05 | 8 | | 100 | 0.09 |
| Peppermint oil | B | Mint FT (MRID 43585301) | -- | 0.05 | -- | 13 oil | 100 | 0.025 |
| Spearmint | B | Mint FT (MRID 44124801) | 5/5 | 0.05 | 8 | | 100 | 0.09 |
| Spearmint oil | B | Mint FT (MRID 43585301) | -- | 0.05 | -- | 13 oil | 100 | 0.025 |

[1] Classification: blended (B), partially blended (PB), not blended (NB)

* Note that for blended commodities, the available monitoring data take into account PCT, so 100 PCT was used in the RDF instead of the max PCT.

## Attachment 2: Summary of Malaoxon Residues Used in Acute and Steady State Assessments

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| CG 1 Root and Tuber Vegetables | | | | | | | | |
| Beet garden, roots | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.001 | 8 | | 100 | RDF#1 |
| Beet sugar | B | Garden Beet PDP 2011 | 756/0 | 0.001 | 1 | | 100 | 0.001 |
| Beet, sugar/molasses | B | Garden Beet PDP 2011 | 756/0 | 0.0003 | 8 | | 100 | 0.001 |
| Carrot | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0007 | 8 | 1.4 juice | 2.5 | RDF#2 |
| Carrot, babyfood | NB/PB | Carrot babyfood PDP 2012 | 792/0 | 0.003 | 8 | | 2.5 | RDF#3 |
| Horseradish | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0007 | 8 | | 100 | RDF#2 |
| Parsnip | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0007 | 8 | | 100 | RDF#2 |
| Potato | NB/PB | Potato PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | | <2.5 | RDF#4 |
| Potato, babyfood | NB/PB | Potato w/o peel PDP 2006, 2007 | 1544/0 | 0.001 | 8 | | <2.5 | RDF#5 |
| Potato, dried/ flour | B | Potato PDP 2015, 2016 | 1415/0 | 0.0015 | 8 | 6.5 dried | <2.5 | 0.0015 |
| Potato, w/out peel frozen | NB/PB | Potato PDP 2006, 2007 | 1544/0 | 0.001 | 8 | | <2.5 | RDF#5 |
| Radish root | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.001 | 8 | | 100 | RDF#2 |
| Rutabaga | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.001 | 8 | | 100 | RDF#1 |
| Salisfy, root | NB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | 8 | | 100 | 0.0007 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Salisfy, top | NB/PB | Garden Beet PDP 2011 | 756/0 | 0.001 | 8 | | 100 | RDF#2 |
| Sweet Potato/Yam | NB/PB | Sweet Potato PDP 2016, 2017, 2018 | 1410/0 | 0.0025 | 1 | | 100 | RDF#6 |
| Sweet Potato, babyfood | NB/PB | Sweet Potato PDP 2010, 2011 | 776/0 | 0.001 | 1 | | 100 | RDF#7 |
| Turnip, root | NB/PB | Carrot PDP 2013, 2014 | 1420/0 | 0.0005 | 8 | | 100 | RDF#2 |
| **CG 3-07 Bulb Vegetable** | | | | | | | | |
| Garlic, bulb | NB/PB/B | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | | 100 | RDF#11 |
| Leek | NB/PB | Green Onion PDP 2018 | 707/0 | 0.005 | 8 (0.032) | | 100 | 0.005 |
| Onion, bulb | NB/PB | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | | 15 | RDF#11 |
| Onion, bulb, dried | B | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | 9.7 dried | 15 | 0.0004 |
| Onion, green | PB | Green Onion PDP 2018 | 707/0 | 0.005 | 8 (0.032) | | 15 | RDF#12 |
| Shallot, fresh leaves | PB | Green Onion PDP 2018 | 707/0 | 0.005 | 8 (0.032) | | 100 | RDF#12 |
| Shallot, bulb | NB | Onion Bulb PDP 2017 | 708/0 | 0.003 | 8 | | 100 | RDF#11 |
| **CG 4-16 Leafy Vegetable** | | | | | | | | |
| Amaranth, leafy | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0.0028 |
| Arugula | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 | | 100 | 0.0075 |
| Broccoli raab | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 | | 100 | 0.0075 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Broccoli, Chinese | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 | | 100 | 0.0075 |
| Cabbage, Chinese, bok choy | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 | | 100 | 0.0075 |
| Chrysanthemum, garland | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0028 |
| Cilantro, leaves | PB | Cilantro PDP 2009, 2010 | 739/0 | 0.0015 | 8 | | 100 | RDF#101 |
| Collards | PB | Collards PDP 2019 | 187/0 | 0.001 | 8 | | 100 | RDF#14 |
| Cress, garden | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 | | 100 | 0.0075 |
| Cress, upland | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 | | 100 | 0.0075 |
| Dandelion, leave | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0028 |
| Dillweed | B | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0028 |
| Endive | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0028 |
| Kale | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 (1.03) | | 100 | RDF#10 |
| Lettuce, head | NB/PB | Lettuce head PDP 2015, 2016, 2017 | 1024/0 | 0.001 | 8 | | 15 | RDF#15 |
| Lettuce, leaf | /PB | Lettuce leaf PDP 2015, 2016, 2017 | 442/0 | 0.001 | 8 (0.035) | | 15 | RDF#9 |
| Mustard green | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 (1.03) | | 100 | 0.0075 |
| Parsley, leaves | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0028 |
| Radicchio | NB | Lettuce head PDP 2015, 2016, 2017 | 1024/0 | 0.001 | 8 | | 100 | 0.001 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Radish tops | NB/PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 (1.03) | | 100 | 0.0075 |
| Rape greens | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 (1.03) | | 100 | 0.0075 |
| Spinach | PB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 5100 | RDF#13 |
| Spinach, frozen | PB | Spinach frozen PDP 2018, 2019 | 377/0 | 0.0008 | 8 | | 5100 | RDF#17 |
| Spinach, canned | PB | Spinach canned PDP 2019 | 375/0 | 0.0008 | 8 | | 5100 | RDF#16 |
| Swiss chard | NB | Spinach PDP 2015, 2016 | 1415/0 | 0.0028 | 8 | | 100 | 0.0028 |
| Turnip greens | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 (1.03) | | 100 | 0.0075 |
| Watercress | PB | Kale PDP 2017, 2018 | 1415/0 | 0.0075 | 8 (1.03) | | 100 | 0.0075 |
| **CG 5-16 Brassica Head and Stem Vegetable** | | | | | | | | |
| Broccoli | NB/PB | Broccoli PDP 2013, 2014 | 1420/0 | 0.005 | 8 | | 100 | RDF#20 |
| Brussels sprouts | NB/PB | Cabbage PDP 2017, 2018, 2019 | 1361/0 | 0.005 | 8 | | 100 | 0.005 |
| Cabbage | NB/PB | Cabbage PDP 2017, 2018, 2019 | 1361/0 | 0.005 | 8 | | 2.5 | RDF#21 |
| Cabbage, Chinese, mustard | NB/PB | Broccoli PDP 2013, 2014 | 1420/0 | 0.005 | 8 | | 100 | 0.005 |
| Cabbage, Chinese, napa | NB/PB | Cabbage PDP 2017, 2018, 2019 | 1361/0 | 0.005 | 8 | | 100 | 0.005 |
| Cauliflower | NB/PB | Cauliflower PDP 2019 | 176/0 | 0.00075 | 8 | | 10 | RDF#22 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| CG 6 Legume (Succulent or Dried) Vegetable | | | | | | | | |
| Bean, seed-ALL | B | Black Bean PDP 2010 | 367/0 | 0.001 | 8 | | <2.5 | 0.001 |
| Bean, broad, succl. | B | Bean green PDP 2013, 2014, 2015, 2016 | 2456/0 | 0.0005 | 8 (0.0058) | | <2.5 | RDF#26 |
| Bean, cowpea, succl. | B | Bean Pinto PDP 2009 | 372/0 | 0.001 | 8 | | <2.5 | RDF#35 |
| Bean, lima, succl. | B | Bean Kidney PDP 2008, 2009 | 372/0 | 0.001 | 8 | | <2.5 | RDF#34 |
| Bean, snap, succl. | PB | Bean green PDP 2013, 2014, 2015, 2016 | 2456/0 | 0.0005 | 8 (0.0058) | | <2.5 | RDF#26 |
| Pea, snap | PB | Pea snap PDP 2011, 2012 | 1487/0 | 0.001 | 8 (0.087) | | <2.5 | RDF#29 |
| Pea, snap babyfood | PB | Pea snap canned PDP 2012, 2013 | 773/0 | 0.0025 | 8 | | <2.5 | RDF#32 |
| Pea, snap, seed/dry | B | Pea snap PDP 2011, 2012 | 1487/0 | 0.001 | 8 (0.087) | | <2.5 | 0.001 |
| Pea, snap frozen | PB | Pea snap frozen PDP 2018, 2019 | 315/0 | 0.001 | 8 | | <2.5 | RDF#31 |
| Pea, snap canned | PB | Pea snap canned PDP 2019 | 379/0 | 0.001 | 8 | | <2.5 | RDF#30 |
| Bean, snap succulent, babyfood | PB | Bean green babyfood PDP 2010, 2011 | 776/0 | 0.001 | 8 | | <2.5 | RDF#28 |
| Bean, snap succulent, frozen | PB | Bean green frozen PDP 2014 | 378/0 | 0.005 | 8 | | <2.5 | RDF#28 |
| Bean, snap succulent, canned | PB | Bean green canned PDP 2014 | 378/0 | 0.0005 | 8 | | <2.5 | RDF#25 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Soybean seed | B | Soybean grain PDP 2011 | 300/0 | 0.001 | 8 (0.203) | 2.2 flour | <2.5 | RDF#23 |
| Soybean infant formula, soy | B | Soybean infant formula soy PDP 2013, 2014 | 706/0 | 0.001 | -- | | <2.5 | RDF#24 |
| Soybean vegetable | B | Soybean grain PDP 2011 | 300/0 | 0.001 | 8 (0.203) | | <2.5 | RDF#23 |
| CG 8-10 Fruiting Vegetable | | | | | | | | |
| Eggplant | NB/PB | Eggplant PDP 2005, 2006 | 1476/0 | 0.0094 | 8 (0.041) | | 100 | RDF#41 |
| Okra | NB/PB | Pepper bell PDP 2019 | 354/0 | 0.005 | 8 (0.06) | | 100 | 0.005 |
| Pepper bell | NB/PB | Pepper bell PDP 2019 | 354/0 | 0.005 | 8 (0.06) | | 10 | RDF#43 |
| Pepper bell, dried | B | Pepper bell PDP 2019 | 354/0 | 0.005 | 8 (0.06) | 13.5 dried | 10 | 0.0005 |
| Pepper non-bell | NB/PB | Pepper non-bell PDP 2019 | 651/0 | 0.005 | 8 (0.0486) | | 10 | RDF#42 |
| Pepper non-bell, dried | B | Pepper non-bell PDP 2019 | 651/0 | 0.005 | 8 (0.0486) | 12.8 dried | 10 | 0.0005 |
| Tomato/Tomatillo | NB/PB | Tomato PDP 2014, 2015, 2016 | 1413/0 | 0.0015 | 8 (0.0065) | | 5 | RDF#38 |
| Tomato, dried | B | Tomato PDP 2014, 2015, 2016 | 1413/0 | 0.0015 | 8 (0.0065) | 14.3 dried | 5 | 0.0001 |
| Tomato, paste | B | Tomato paste PDP 2019 | 189/0 | 0.0009 | 8 | | 5 | RDF#40 |
| Tomato, puree | B | Tomato paste PDP 2019 | 189/0 | 0.0009 | 8 | 3.3 puree | 5 | 0.0009 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Tomato, canned | PB | Tomato canned PDP 2016, 2017 | 755/0 | 0.0009 | 8 (0.01) | | 5 | RDF#39 |
| Tomato juice | NB/PB | Tomato PDP 2014, 2015, 2016 | 1413/0 | 0.0015 | 8 (0.0065) | 1.5 juice | 5 | RDF#39 |
| **CG 9 Cucurbit Vegetable** | | | | | | | | |
| Balsam pear | NB/PB | Summer Squash PDP 2012, 2013, 2014 | 1426/0 | 0.002 | 8 | | 5 | RDF#47 |
| Cantaloupe | NB/PB | Cantaloupe PDP 2019 | 354/0 | 0.001 | -- | | 5 | RDF#44 |
| Chayote fruit | NB | Cucumber PDP 2015, 2016, 2017 | 151/0 | 0.005 | -- | 8 | 100 | 0.005 |
| Cucumber | NB/PB | Cucumber PDP 2015, 2016, 2017 | 151/0 | 0.005 | 8 | 8 | 10 | RDF#46 |
| Honeydew melon | NB/PB | Cantaloupe PDP 2019 | 354/0 | 0.001 | 8 | | 5 | RDF#44 |
| Pumpkin | NB/PB | Winter Squash PDP 2011, 2012, 2013 | 1115/0 | 0.00075 | 8 | | 15 | RDF#97 |
| Pumpkin seed | B | Winter Squash PDP 2011, 2012, 2013 | 1115/0 | 0.00075 | 8 | | 15 | RDF#97 |
| Squash, summer | NB/PB | Summer Squash PDP 2012, 2013, 2014 | 1426/0 | 0.002 | 8 | | 5 | RDF#47 |
| Squash, winter | NB/PB | Winter Squash PDP 2011, 2012, 2013 | 1115/0 | 0.0018 | 8 | | 5 | RDF#48 |
| Watermelon | NB | Watermelon PDP 2014,2015 | 760/0 | 0.001 | 8 | | <2.5 | RDF#45 |
| **CG 10-10 Citrus** | | | | | | | | |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Grapefruit | NB/PB | Grapefruit PDP 2015, 2016, 2017 | 1407/0 | 0.00055 | 8 | 8 | 15 | RDF#52 |
| Grapefruit juice | PB | OJ PDP 2019 | 191/0 | 0.00065 | 8 | 8 | 15 | RDF#102 |
| Kumquat | NB | Orange PDP 2015, 2016 | 1415/0 | 0.005 | 8 | 8 | 100 | 0.005 |
| Lemon/Lime | NB/PB | Orange PDP 2015, 2016 | 1415/0 | 0.005 | 8 | 3.3 peel | 100 | 0.005 |
| Lemon/Lime juice | PB | OJ PDP 2019 | 191/0 | 0.00065 | 8 | | 100 | 0.00065 |
| Orange | NB/PB | Orange PDP 2015, 2016 | 1415/0 | 0.005 | 8 | 3.3 peel | 30 | RDF#49 |
| Orange juice | PB | OJ PDP 2019 | 191/0 | 0.00065 | 8 | | 30 | RDF#50 |
| Tangerine | NB | Tangerine PDP 2019 | 180/0 | 0.001 | 8 | | 25 | RDF#51 |
| Tangerine juice | PB | OJ PDP 2019 | 191/0 | 0.00065 | 8 | | 25 | RDF#103 |
| **CG 11-10 Pome Fruit** | | | | | | | | |
| Apple | NB/PB | Apple PDP 2014, 2015, 2016 | 1387/0 | 0.001 | 8 (0.004) | 8 | <2.5 | RDF#53 |
| Apple, dried | B | Apple PDP 2014, 2015, 2016 | 1387/0 | 0.001 | 8 (0.004) | dried | <2.5 | 0.000025 |
| Apple juice | PB | Apple juice PDP 2012,2013 | 775/0 | 0.001 | 8 | | <2.5 | RDF#54 |
| Apple sauce | PB | Apple sauce PDP 2016, 2017 | 760/0 | 0.001 | 8 | | <2.5 | RDF#55 |
| Apple sauce, babyfood | PB | Apple sauce PDP 2012, 2013 | 775/0 | 0.005 | 8 | | <2.5 | RDF#56 |
| Pear | NB/PB | Pear PDP 2015, 2016 | 1412/0 | 0.003 | 8 (0.0033) | | 20 | RDF#57 |
| Pear, dried | B | Pear PDP 2015, 2016 | 1412/0 | 0.003 | 8 (0.0033) | 6.25 dried | 20 | 0.0005 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Pear, babyfood | PB | Pear BF PDP 2010, 2011 | 776/0 | 0.002 | 8 | | 20 | RDF#58 |
| Pear, juice | PB | Pear canned PDP 2000 | 106/0 | 0.004 | 8 | 1.3 juice | 20 | RDF#59 |
| Quince | NB | Apple PDP 2014, 2015, 2016 | 1387/0 | 0.001 | 8 (0.004) | | 100 | 0.001 |
| **CG 12-12 Stone Fruit** | | | | | | | | |
| Apricot | NB/PB | Peach PDP 2013, 2014, 2015 | 1354/0 | 0.005 | 8 (0.012) | 1.3 juice | 100 | 0.005 |
| Apricot, dried | B | Peach PDP 2013, 2014, 2015 | 1354/0 | 0.005 | 8 (0.192) | 6.0 dried | 100 | 0.005 |
| Cherry/Cherry juice | PB | Cherry frozen PDP 2014, 2015, 2016 | 879/0 | 0.002 | 8 (0.036) | 1.5 juice | 25 | RDF#60 |
| Nectarine | NB | Nectarine PDP, 2013, 2014, 2015 | 1802/0 | 0.001 | 8 | | 100 | RDF#63 |
| Peach | NB/PB | Peach canned PDP 2013, 2014, 2015 | 1354/0 | 0.005 | 8 (0.012) | 1.3 juice | <2.5 | RDF#61 |
| Peach, dried | B | Peach canned PDP 2013, 2014, 2015 | 1354/0 | 0.005 | 8 (0.012) | 7.0 dried | <2.5 | 0.005 |
| Peach, juice | NB/PB | Peach canned PDP 2018 | 755/0 | 0.0015 | 8 | | <2.5 | RDF#65 |
| Peach, babyfood | PB | Peach BFPDP 2012 | 777/0 | 0.0009 | 8 | | <2.5 | RDF#64 |
| Plum | NB/PB | Plum PDP 2011, 2012, 2013 | 1347/0 | 0.0009 | 8 | 5.0 dried | 100 | RDF#62 |
| Plum, prune, dried | PB | Plum PDP 2017, 2018 | 726/0 | 0.001 | 8 | 1.4 juice | 100 | RDF#96 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| CG 13-07 Berry and Small Fruit | | | | | | | | |
| Blackberry | PB | Raspberry PDP 2013 | 705/1 | 0.001 | 8 (0.0029) | 1.2 juice | 70 | RDF#66 |
| Blueberry | PB | Blueberry PDP 2014 | 707/31 | 0.002 | 8 (0.67) | | 50 | RDF#67 |
| Boysenberry | PB | Raspberry PDP 2013 | 705/1 | 0.0029 | 8 (0.0029) | | 70 | RDF#67 |
| Cranberry | PB | Cranberry PDP 2016, 2017 | 467/0 | 0.001 | 8 | 7.9 dried 1.2 juice | 100 | RDF#70 |
| Currant | PB | Blueberry PDP 2014 | 707/31 | 0.002 | 8 (0.67) | 6.5 dried | 70 | RDF#67 |
| Gooseberry | PB | Blueberry PDP 2014 | 707/31 | 0.002 | 8 (0.67) | | 70 | RDF#66 |
| Grape | PB | Grape PDP 2015, 2016 | 1416/0 | 0.0025 | 8 (0.0025) | | 100 | RDF#68 |
| Grape juice | PB | Grape juice PDP 2013, 2014 | 677/0 | 0.001 | 8 | 1.2 wine | 100 | RDF#69 |
| Grape raisin | PB | Grape raisin PDP 2018 | 756/0 | 0.00075 | -- | | 100 | RDF#87 |
| Loganberry | PB | Raspberry PDP 2013 | 705/1 | 0.0029 | 8 (0.16) | | 70 | RDF#66 |
| Raspberry | PB | Raspberry PDP 2013 | 705/1 | 0.0029 | 8 (0.16) | 1.2 juice | 70 | RDF#66 |
| Strawberry | PB | Strawberry PDP 2014, 2015, 2016 | 1412/28 | 0.001 | 8 (0.0072) | 1.2 juice | 45 | RDF#71 |
| Strawberry, frozen | PB | Strawberry frozen PDP 2018, 2019 | 753/31 | 0.001 | 8 (0.034) | | 45 | RDF#72 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| **CG 14-12 Tree Nut** | | | | | | | | |
| Almond | PB | Almond PDP 2007, 2008 | 547/0 | 0.002 | 8 | | 100 | RDF#73 |
| Almond, oil | B | Almond PDP 2007, 2008 | 547/0 | 0.002 | 8 | 2.8 oil | 100 | 0.002 |
| Chestnut | PB | Almond PDP 2007, 2008 | 547/0 | 0.002 | 1 | | 100 | 0.002 |
| Hazelnut | PB | Almond PDP 2007, 2008 | 547/0 | 0.002 | 1 | | 100 | 0.002 |
| Hazelnut, oil | PB | Almond PDP 2007, 2008 | 547/0 | 0.002 | 1 | 1.8 oil | 100 | 0.002 |
| Macadamia nut | PB | Almond PDP 2007, 2008 | 547/0 | 0.002 | 1 | | 100 | 0.002 |
| Pecan | PB | Pecan PDP 2007, 2008 | 547/0 | 0.002 | 8 | | <2.5 | RDF#98 |
| Walnut | PB | Walnut PDP 2007, 2008 | 547/0 | 0.002 | 8 | | 10 | RDF#99 |
| **CG-15 Cereal Grains** | | | | | | | | |
| Barley, grain, bran//pearled | B | Barley Grain PDP 2002, 2003 | 1047/1 | 0.005 | 8 (0.644) | | 100 | RDF#74 |
| Barley, grain flour | B | Wheat_Flour PDP 2018 | 758/4 | 0.002 | 8 (0.0028) | | 100 | RDF#83 |
| Corn, field | B | Corn Grain PDP 2007, 2008 | 1290/1 | 0.024 | 8 (4.74) | 21.4 bran | <2.5 | RDF#75 |
| Corn pop | B | Corn Grain PDP 2007, 2008 | 1290/1 | 0.024 | 8 (4.74) | | <2.5 | RDF#75 |
| Corn sweet | NB/PB | Corn Sweet PDP 2014, 2015 | 602/0 | 0.001 | 2 | | <2.5 | RDF#77 |
| Corn sweet canned | NB/PB | Corn Sweet canned PDP 2001, 2002 | 723/0 | 0.003 | 2 | | <2.5 | RDF#76 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Corn sweet frozen | NB/PB | Corn Sweet frozen PDP 2014, 2015 | 106/0 | 0.001 | 2 | | <2.5 | RDF#78 |
| Oat grain/groat | B | Oat grain PDP 2019 | 681/0 | 0.001 | 8 (0.043) | | 100 | RDF#80 |
| Oat bran flour | B | Oat bran PDP 2019 | 14/0 | 0.001 | 8 (0.027) | | 100 | RDF#79 |
| Rice | B | Rice PDP 2018, 2019 | 754/0 | 0.001 | 8 (0.35) | 1.25 flour/ Brown rice | 100 | RDF#81 |
| Rye flour/grain | B | Wheat Flour PDP 2018 | 758/4 | 0.002 | 8 (0.688) | | 100 | RDF#83 |
| Sorghum grain | B | Wheat Grain PDP 2005, 2006 | 1361/0 | 0.0025 | 8 | | 100 | RDF#82 |
| Triticale flour | B | Wheat Flour PDP 2018 | 758/4 | 0.001 | 8 (0.688) | | 100 | RDF#83 |
| Wheat, grain bran/germ | B | Wheat Grain PDP 2005, 2006 | 1361/0 | 0.0025 | 8 | | 100 | RDF#82 |
| Wheat Flour | B | Wheat Flour PDP 2018 | 758/4 | 0.001 | 8 (0.688) | | 100 | RDF#83 |
| Wild rice | B | Rice PDP 2018, 2019 | 754/0 | 0.008 | 8 (0.35) | | 100 | RDF#81 |
| CG-20 Oilseed | | | | | | | | |
| Cottonseed oil | B | Cottonseed FT (MRID 43585301) | 5/5 | 0.01 | | 1 | 2.5 | 0.01 |
| Flax/Safflower/ Sesame/Sunflower Seed, Oil | B | Sunflower FT (MRID 43585301) | 5/5 | 0.05 | 8 | 1 oil | 100 | 0.01 |
| Flax/Safflower/ Sesame/Sunflower Seed | B | Sunflower FT (MRID 43585301) | 5/5 | 0.05 | 8 | | 100 | 0.01 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| **CG-21 Edible Fungi** | | | | | | | | |
| Mushroom | PB | Mushroom PDP 2011, 2012, 2013 | 1462/0 | 0.001 | 8 | | 100 | RDF#100 |
| **CG-22A Stalk, Stem, and Leaf Petiole Vegetable** | | | | | | | | |
| Agave | NB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | 0.001 | | | 100 | 0.001 |
| Asparagus | NB/PB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | 0.001 | 8 | | 25 | RDF#19 |
| Bamboo shoots | PB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | | | | 100 | 0.001 |
| Cactus | NB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | 0.001 | | | 100 | 0.001 |
| Cardoon | NB | Celery PDP 2013, 2014 | 1416/0 | 0.005 | (0.17) | | 100 | 0.005 |
| Celery | NB/PB | Celery PDP 2013, 2014 | 1416/0 | 0.005 | (0.17) | 1.4 juice | 30 | RDF#18 |
| Fennel Florence | NB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | | | | 100 | 0.001 |
| Kohlrabi | NB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | | | | 100 | 0.001 |
| Palm heart | PB | Asparagus PDP 2017, 2018, 2019 | 1330/0 | 0.001 | | | 100 | 0.001 |
| Rhubarb | NB | Celery PDP 2013, 2014 | 1416/0 | 0.005 | | | 100 | 0.005 |
| **CG-23 Tropical and Subtropical Fruit Edible Peel** | | | | | | | | |
| Date | PB | Date FT | 3/3 | 0.05 | 8 (3.26) | | 100 | RDF#95 |
| Fig | NB | Fig FT | 12/12 | 0.025 | 8 (0.954) | | 100 | RDF#84 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Fig, dried | NB | Fig FT | 12/12 | 0.025 | 8 (0.954) | | 100 | 0.025 |
| Guava | NB/PB | Guava FT | 20/20 | 0.025 | 8 (0.24) | | 100 | RDF#93 |
| **CG-24 Tropical and Subtropical Fruit Inedible Peel** | | | | | | | | |
| Avocado | PB | Avocado PDP 2012 | 352/0 | 0.0075 | 8 | | 100 | RDF#86 |
| Mango | NB/PB | Mango PDP 2017, 2018 | 709/0 | 0.0008 | 8 (0.013) | 2 juice 5.9 dried | 100 | RDF#88 |
| Papaya | NB/PB | Papaya PDP 2011, 2012 | 750/0 | 0.001 | 1 | 2 juice | 100 | RDF#89 |
| Papaya, dried | B | Papaya PDP 2011, 2012 | 750/0 | 0.004 | 1 | 8 dried | 100 | 0.001 |
| Passionfruit | NB | Passionfruit FT | 13/0 | 0.025 | 8 (0.071) | 2 juice | 100 | RDF#94 |
| Pineapple | NB/PB | Pineapple PDP 2000, 2001, 2002 | 1454/0 | 0.01 | 8 | 1.7 juice | 100 | RDF#91 |
| Pineapple, dried | B | Pineapple PDP 200, 2001, 2002 | 750/0 1454/0 | 0.0174 | 8 | 7.3 dried | 100 | 0.0104 |
| Pineapple, canned | NB/PB | Pineapple canned PDP 2017 | 756/0 | 0.004 | 8 | | 100 | RDF#92 |
| **Other** | | | | | | | | |
| Grape, leaves | PB | Grape PDP 2015, 2016 | 1416/0 | 0.0025 | 8 (0.0025) | | 100 | 0.0025 |
| Hop | B | Hop Tolerance | -- | -- | 1 | | 100 | 1 |
| Peanut | B | Peanut butter PDP 2015 | 315/0 | 0.25 | 8 (0.022) | | 100 | RDF#90 |
| Peanut Butter | B | Peanut butter PDP 2015 | 315/0 | 0.25 | 8 (0.022) | | 100 | RDF#90 |

| MALAOXON | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Food | DEEM Food Form/ (Classification[1]) | Data Source | No. of Samples/ No. of Detectable Residues | ½ LOQ/LOD (ppm) | Tolerance (Highest detectable residue) ppm | Processing Factors | % CT Max. | Anticipated Residues Acute (Tol., AR, RDF) ppm |
| Peanut, oil | B | Cottonseed oil FT (MRID 43585301) | 315/0 | 0.05 | 8 (0.022) | 1 | 100 | 0.01 |
| Peppermint | B | Mint FT (MRID 44124801) | 5/5 | 0.05 | 8 | | 100 | 0.03 |
| Peppermint oil | B | Mint oil FT (MRID 43585301) | -- | 0.05 | | 1 | 100 | 0.01 |
| Spearmint | B | Mint FT (MRID 44124801) | 5/5 | 0.05 | 8 | | 100 | 0.03 |
| Spearmint oil | B | Mint oil FT (MRID 43585301) | -- | 0.05 | | 1 | 100 | 0.01 |

[1] Classification: blended (B), partially blended (PB), not blended (NB)

* Note that for blended commodities, the available monitoring data take into account PCT, so 100 PCT was used in the RDF instead of the max PCT.

## Attachment 3: Summary of Acute and Steady State Residue Distribution Files for Malathion

| MALATHION ONLY | |
|---|---|
| RDF#1 Beet_garden.rdf<br>'PDP Data: BTCA (2011), Total Samples=756, Total Detects=0, Total LODs=756, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0032, Avg Residue (PCT=100)=0.003222, LODRES (NonDetects)=0.003222<br>TOTALZ=0<br>TOTALLOD=756<br>LODRES=0.003222 | RDF#2 Carrot rdf<br>'PDP Data: CRFR (2013,2014), Total Samples=1420, Total Detects=0, Total LODs=36, Total Zeros=1384<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000500, LODRES (NonDetects)=0.000500<br>TOTALZ=1384<br>TOTALLOD=36<br>LODRES=0.000500 |
| RDF#3 Carrot_BF.rdf<br>'PDP Data: ICPU (2012), Total Samples=792, Total Detects=0, Total LODs=20, Total Zeros=772<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=772<br>TOTALLOD=20<br>LODRES=0.001000 | RDF#4 Potato_wPeel_Uncooked.rdf<br>'PDP Data: POFR (2015,2016), Total Samples=1415, Total Detects=0, Total LODs=35, Total Zeros=1380<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000500, LODRES (NonDetects)=0.000500<br>TOTALZ=1380<br>TOTALLOD=35<br>LODRES=0.000500 |
| RDF#5 Potato_wopeel_Frozen.rdf<br>'PDP Data: PZFZ (2006,2007), Total Samples=1544, Total Detects=0, Total LODs=39, Total Zeros=1505<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001913, LODRES (NonDetects)=0.001913<br>TOTALZ=1505<br>TOTALLOD=39<br>LODRES=0.001913 | RDF#6 Potato_Sweet.rdf<br>'PDP Data: SWFR (2016,2017,2018), Total Samples=1410, Total Detects=1, Total LODs=1409, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.005100, Avg Residue (MaxPCT)=0.0025, Avg Residue (PCT=100)=0.002502, LODRES (NonDetects)=0.002500<br>TOTALZ=0<br>TOTALLOD=1409<br>LODRES=0.002500<br>0.0051 |
| RDF#7 Potato_Sweet_BF.rdf<br>'PDP Data: ISGJ,ISPC,ISSE (2010,2011), Total Samples=776, Total Detects=0, Total LODs=776, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0014, Avg Residue (PCT=100)=0.001389, LODRES (NonDetects)=0.001389<br>TOTALZ=0<br>TOTALLOD=776<br>LODRES=0.001389 | RDF#8 Lettuce_Fresh.rdf<br>'PDP Data: LTFR,LTHD,LTLF,LTOT (2015,2016,2017), Total Samples=1512, Total Detects=1, Total LODs=226, Total Zeros=1285<br>'MaxPCT=0.150, Avg Residue (Detects Only)=0.035000, Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001029, LODRES (NonDetects)=0.001007<br>TOTALZ=1285<br>TOTALLOD=226<br>LODRES=0.001007<br>0.035 |

| MALATHION ONLY | |
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| RDF#9 Lettuce_Fresh_Leaf.rdf<br>'PDP Data: LTLF (2015,2016,2017), Total Samples=442, Total Detects=1, Total LODs=65, Total Zeros=376<br>'MaxPCT=0.150, Avg Residue (Detects Only)=0.035000, Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001088, LODRES (NonDetects)=0.001011<br>TOTALZ=376<br>TOTALLOD=65<br>LODRES=0.001011<br>0.035 | RDF#10 Kale.rdf<br>'PDP Data: GKFR (2017,2018), Total Samples=1415, Total Detects=18, Total LODs=1397, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.078489, Avg Residue (MaxPCT)=0.0035, Avg Residue (PCT=100)=0.003467, LODRES (NonDetects)=0.002500<br>TOTALZ=0<br>TOTALLOD=1397<br>LODRES=0.002500<br>1.0324, 0.081, 0.0683, 0.0455, 0.0391, 0.0291<br>0.0175, 0.0169, 0.0083, 0.0083, 0.0083, 0.0083<br>0.0083, 0.0083, 0.0083, 0.0083, 0.0083, 0.0083 |
| RDF#11 Onion_Bulb.rdf<br>'PDP Data: ONFR (2017), Total Samples=708, Total Detects=0, Total LODs=106, Total Zeros=602<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.003220, LODRES (NonDetects)=0.003220<br>TOTALZ=602<br>TOTALLOD=106<br>LODRES=0.003220 | RDF#12 Onion_Green.rdf<br>'PDP Data: GOFR (2018), Total Samples=707, Total Detects=5, Total LODs=702, Total Zeros=0<br>'MaxPCT=0.150, Avg Residue (Detects Only)=0.018400, Avg Residue (MaxPCT)=0.001, Avg Residue (PCT=100)=0.005095, LODRES (NonDetects)=0.005000<br>TOTALZ=601<br>TOTALLOD=101<br>LODRES=0.005000<br>0.032, 0.023, 0.014, 0.012, 0.011 |
| RDF#13 Spinach_Fresh.rdf<br>'PDP Data: SPFR (2015,2016), Total Samples=1415, Total Detects=0, Total LODs=71, Total Zeros=1344<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001488, LODRES (NonDetects)=0.001488<br>TOTALZ=1344<br>TOTALLOD=71<br>LODRES=0.001488 | RDF#14 Collards.rdf<br>'PDP Data: GLFR (2019), Total Samples=187, Total Detects=2, Total LODs=185, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.004400, Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001036, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=185<br>LODRES=0.001000<br>0.0054, 0.0034 |
| RDF#15 Lettuce_Fresh_Head.rdf<br>'PDP Data: LTHD (2015,2016,2017), Total Samples=1024, Total Detects=0, Total LODs=154, Total Zeros=870<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001004, LODRES (NonDetects)=0.001004<br>TOTALZ=870<br>TOTALLOD=154<br>LODRES=0.001004 | RDF#16 Spinach_Canned.rdf<br>'PDP Data: SCCA (2019), Total Samples=375, Total Detects=0, Total LODs=19, Total Zeros=356<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.002960, LODRES (NonDetects)=0.002960<br>TOTALZ=356<br>TOTALLOD=19<br>LODRES=0.002960 |
| RDF#17 Spinach_Frozen.rdf<br>'PDP Data: SFFZ (2018,2019), Total Samples=377, Total Detects=0, Total LODs=19, Total Zeros=358<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.002971, LODRES (NonDetects)=0.002971 | RDF#18 Apple Fresh 100%CT<br>'MalathionP, Created by SAS Program:<br>'PDP Data: APFR (2014,2015,2016), Total Samples=1356, Total Detects=1, Total LODs=33, Total Zeros=1322 |

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| TOTALZ=358<br>TOTALLOD=19<br>LODRES=0.002971 | 'MaxPCT=1.000, Avg Residue (Detects Only)=0.004000, Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001002, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=1355<br>LODRES=0.001000<br>0.004 |
| RDF#19 Asparagus.rdf<br>'PDP Data: AACA,ASFR (2017,2018,2019), Total Samples=1361, Total Detects=0, Total LODs=340, Total Zeros=1021<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=1021<br>TOTALLOD=340<br>LODRES=0.001000 | RDF#20 Broccoli.rdf<br>'PDP Data: BRFR (2013,2014), Total Samples=1420, Total Detects=0, Total LODs=1420, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=0<br>TOTALLOD=1420<br>LODRES=0.005000 |
| RDF#21 Cabbage.rdf<br>'PDP Data: CGFR (2017,2018,2019), Total Samples=1361, Total Detects=0, Total LODs=34, Total Zeros=1326<br>'MaxPCT=0.0250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.00012, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=1326<br>TOTALLOD=34<br>LODRES=0.005000 | RDF#22 Cauliflower.rdf<br>'PDP Data: CFFR (2019), Total Samples=176, Total Detects=0, Total LODs=18, Total Zeros=158<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.000500, LODRES (NonDetects)=0.000500<br>TOTALZ=158<br>TOTALLOD=18<br>LODRES=0.000500 |
| RDF#23 Soybean_Grain.rdf<br>'PDP Data: SYGR (2011), Total Samples=300, Total Detects=11, Total LODs=289, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.026318, Avg Residue (MaxPCT)=0.0038, Avg Residue (PCT=100)=0.003759, LODRES (NonDetects)=0.002900<br>TOTALZ=0<br>TOTALLOD=289<br>LODRES=0.002900<br>0.203, 0.012, 0.0107, 0.0099, 0.0098, 0.0089<br>0.0084, 0.0072, 0.0069, 0.0065, 0.0062 | RDF#24 InfantFormula_Soy.rdf<br>'PDP Data: YFCO,YFPD,YFRE (2013,2014), Total Samples=706, Total Detects=0, Total LODs=706, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0025, Avg Residue (PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=0<br>TOTALLOD=706<br>LODRES=0.002500 |
| RDF#25 Bean_Green_Canned.rdf<br>'PDP Data: GCCA (2014), Total Samples=378, Total Detects=0, Total LODs=9, Total Zeros=369<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000500, LODRES (NonDetects)=0.000500<br>TOTALZ=369<br>TOTALLOD=9<br>LODRES=0.000500 | RDF#26 Bean_Green_Fresh.rdf<br>'PDP Data: GBFR (2013,2014,2015,2016), Total Samples=2456, Total Detects=1, Total LODs=60, Total Zeros=2395<br>'MaxPCT=0.025, Avg Residue (Detects Only)=0.005800, Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001002, LODRES (NonDetects)=0.001000<br>TOTALZ=2395<br>TOTALLOD=60<br>LODRES=0.001000 |

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| | 0.0058 |
| RDF#27 Bean_Green_Frozen.rdf<br>'PDP Data: GZFZ (2014), Total Samples=378, Total Detects=0, Total LODs=9, Total Zeros=369<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000556, LODRES (NonDetects)=0.000556<br>TOTALZ=369<br>TOTALLOD=9<br>LODRES=0.000556 | RDF#28 Bean_Green_BF.rdf<br>'PDP Data: IGGJ,IGPC (2010,2011), Total Samples=776, Total Detects=0, Total LODs=19, Total Zeros=757<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001389, LODRES (NonDetects)=0.001389<br>TOTALZ=757<br>TOTALLOD=19<br>LODRES=0.001389 |
| RDF#29 Pea_Snap.rdf<br>'PDP Data: SNFR (2011,2012), Total Samples=1487, Total Detects=107, Total LODs=1380, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=0.010787, Avg Residue (MaxPCT)=0.0019, Avg Residue (PCT=100)=0.001891, LODRES (NonDetects)=0.001201<br>TOTALZ=1380<br>TOTALLOD=0<br>LODRES=0.001201<br>0.087, 0.082, 0.062, 0.041, 0.039, 0.038, 0.036<br>0.036, 0.034, 0.034, 0.028, 0.026, 0.024, 0.022<br>0.021, 0.018, 0.018, 0.017, 0.017, 0.016, 0.016<br>0.014, 0.013, 0.013, 0.013, 0.013, 0.013, 0.013<br>0.012, 0.011, 0.0098, 0.0079, 0.0076, 0.0068<br>0.0065, 0.0062, 0.0052, 0.0052, 0.0051, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005 0.005, 0.005, 0.005<br>0.005, 0.005, 0.0049, 0.0042, 0.0039, 0.0037, 0.0037<br>0.0036, 0.0035, 0.0032, 0.0031, 0.0031, 0.002, 0.002<br>0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002 | RDF#30 Pea_Sweet_Canned.rdf<br>'PDP Data: SDCA (2019), Total Samples=379, Total Detects=0, Total LODs=379, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=370<br>TOTALLOD=9<br>LODRES=0.005000 |
| RDF#31 Pea_Sweet_Frozen.rdf<br>'PDP Data: PSFZ (2018,2019), Total Samples=315, Total Detects=0, Total LODs=315, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=307<br>TOTALLOD=8<br>LODRES=0.005000 | RDF#32 Pea_BF.rdf<br>'PDP Data: IEPU (2012,2013), Total Samples=773, Total Detects=0, Total LODs=773, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=754<br>TOTALLOD=19<br>LODRES=0.005000 |
| RDF#33 Bean_Black.rdf<br>'PDP Data: ABCA (2010), Total Samples=367, Total Detects=0, Total LODs=367, Total Zeros=0 | RDF#34 Bean_Kidney.rdf<br>'PDP Data: KBCA (2008,2009), Total Samples=372, Total Detects=0, Total LODs=372, Total Zeros=0 |

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| 'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=367<br>LODRES=0.001000 | 'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001007, LODRES (NonDetects)=0.001007<br>TOTALZ=0<br>TOTALLOD=372<br>LODRES=0.001007 |
| RDF#35 Bean_Pinto.rdf<br>'PDP Data: NBCA (2009), Total Samples=372, Total Detects=0, Total LODs=372, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001014, LODRES (NonDetects)=0.001014<br>TOTALZ=0<br>TOTALLOD=372<br>LODRES=0.001014 | RDF#36 Bean_Garbanzo rdf<br>'PDP Data: ZBCA (2017,2018), Total Samples=755, Total Detects=0, Total LODs=755, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.000528, LODRES (NonDetects)=0.000528<br>TOTALZ=0<br>TOTALLOD=755<br>LODRES=0.000528 |
| RDF#37 Celery.rdf<br>'PDP Data: CEFR (2013,2014), Total Samples=1416, Total Detects=162, Total LODs=192, Total Zeros=1062<br>'MaxPCT=0.250, Avg Residue (Detects Only)=0.027066, Avg Residue (MaxPCT)=0.0033, Avg Residue (PCT=100)=0.004413, LODRES (NonDetects)=0.001486<br>TOTALZ=1062<br>TOTALLOD=192<br>LODRES=0.001486<br>0.17, 0.16, 0.12, 0.12, 0.11, 0.11, 0.11, 0.11<br>0.11, 0.096, 0.093, 0.091, 0.09, 0.079, 0.078<br>0.073, 0.073, 0.068, 0.068, 0.064, 0.06, 0.055<br>0.053, 0.049, 0.046, 0.045, 0.043, 0.042, 0.042<br>0.042, 0.042, 0.04, 0.04, 0.04, 0.039, 0.038, 0.038<br>0.038, 0.036, 0.036, 0.035, 0.035, 0.034, 0.034<br>0.034, 0.033, 0.032, 0.032, 0.031, 0.028, 0.028<br>0.027, 0.026, 0.026, 0.025, 0.025, 0.024, 0.024<br>0.023, 0.022, 0.022, 0.022, 0.022, 0.022, 0.022<br>0.022, 0.022, 0.022, 0.021, 0.019, 0.018, 0.018<br>0.017, 0.017, 0.017, 0.016, 0.015, 0.015, 0.015<br>0.015, 0.015, 0.014, 0.014, 0.014, 0.014, 0.014<br>0.013, 0.013, 0.012, 0.012, 0.012, 0.012, 0.012<br>0.012, 0.011, 0.011, 0.011, 0.011, 0.011, 0.011<br>0.011, 0.01, 0.0098, 0.0098, 0.0097, 0.0096, 0.0093<br>0.0092, 0.009, 0.0083, 0.0083, 0.0078, 0.0077, 0.0077<br>0.0074, 0.0074, 0.0074, 0.0073, 0.0072, 0.0069<br>0.0067, 0.0066, 0.0065, 0.0063, 0.0061, 0.006<br>0.0059, 0.0059, 0.0057, 0.0055, 0.0053, 0.0051<br>0.0049, 0.0048, 0.0048, 0.0047, 0.0043, 0.0041<br>0.0039, 0.0038, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002 | RDF#38 Tomato_Fresh.rdf<br>'PDP Data: TOFR (2014,2015,2016), Total Samples=1413, Total Detects=2, Total LODs=69, Total Zeros=1342<br>'MaxPCT=0.050, Avg Residue (Detects Only)=0.006200, Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001147, LODRES (NonDetects)=0.001140<br>TOTALZ=1342<br>TOTALLOD=69<br>LODRES=0.001140<br>0.0065, 0.0059 |

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| RDF#39 Tomato_Canned.rdf<br>'PDP Data: TCCA (2016,2017), Total Samples=755, Total Detects=0, Total LODs=38, Total Zeros=717<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000500, LODRES (NonDetects)=0.000500<br>TOTALZ=717<br>TOTALLOD=38<br>LODRES=0.000500 | RDF#40 Tomato_Paste.rdf<br>'PDP Data: TPCA,TPGJ (2019), Total Samples=189, Total Detects=0, Total LODs=189, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0035, Avg Residue (PCT=100)=0.003532, LODRES (NonDetects)=0.003532<br>TOTALZ=0<br>TOTALLOD=189<br>LODRES=0.003532 |
| RDF#41 Eggplant.rdf<br>'PDP Data: EPFR (2005,2006), Total Samples=1476, Total Detects=3, Total LODs=1473, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.022333, Avg Residue (MaxPCT)=0.0040, Avg Residue (PCT=100)=0.004037, LODRES (NonDetects)=0.004000<br>TOTALZ=0<br>TOTALLOD=1473<br>LODRES=0.004000<br>0.041, 0.013, 0.013 | RDF#42 Pepper_Nonbell.rdf<br>'PDP Data: HPFR (2019), Total Samples=651, Total Detects=5, Total LODs=646, Total Zeros=0<br>'MaxPCT=0.100, Avg Residue (Detects Only)=0.018680, Avg Residue (MaxPCT)=0.0026, Avg Residue (PCT=100)=0.002624, LODRES (NonDetects)=0.002500<br>TOTALZ=586<br>TOTALLOD=60<br>LODRES=0.002500<br>0.0486, 0.0199, 0.0083, 0.0083, 0.0083 |
| RDF#43 Pepper_Bell.rdf<br>'PDP Data: PPFR (2019), Total Samples=354, Total Detects=2, Total LODs=33, Total Zeros=319<br>'MaxPCT=0.100, Avg Residue (Detects Only)=0.053500, Avg Residue (MaxPCT)=0.0008, Avg Residue (PCT=100)=0.005274, LODRES (NonDetects)=0.005000<br>TOTALZ=319<br>TOTALLOD=33<br>LODRES=0.005000<br>0.06, 0.047 | RDF#44 Cantaloupe.rdf<br>'PDP Data: CNFR (2019), Total Samples=354, Total Detects=0, Total LODs=18, Total Zeros=336<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=336<br>TOTALLOD=18<br>LODRES=0.001000 |
| RDF#45 Watermelon.rdf<br>'PDP Data: WMFR (2014,2015), Total Samples=760, Total Detects=0, Total LODs=19, Total Zeros=741<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=741<br>TOTALLOD=19<br>LODRES=0.001000 | RDF#46 Cucumber.rdf<br>'PDP Data: CUFR (2015,2016,2017), Total Samples=1510, Total Detects=0, Total LODs=151, Total Zeros=1359<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=1359<br>TOTALLOD=151<br>LODRES=0.005000 |
| RDF#47 Squash_Summer.rdf<br>'PDP Data: SSFR (2012,2013,2014), Total Samples=1426, Total Detects=0, Total LODs=71, Total Zeros=1355<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.003660, LODRES (NonDetects)=0.003660<br>TOTALZ=1355<br>TOTALLOD=71<br>LODRES=0.003660 | RDF#48 Squash_Winter_Fresh.rdf<br>'PDP Data: WSFR (2011,2012,2013), Total Samples=1115, Total Detects=0, Total LODs=56, Total Zeros=1059<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=1059<br>TOTALLOD=56<br>LODRES=0.001500 |

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| RDF#49 Squash_Winter_Frozen.rdf<br>'PDP Data: WZFZ (1997,1998,1999), Total Samples=470, Total Detects=0, Total LODs=24, Total Zeros=446<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.003846, LODRES (NonDetects)=0.003846<br>TOTALZ=446<br>TOTALLOD=24<br>LODRES=0.003846 | RDF#50 Orange.rdf<br>'PDP Data: OGFR (2015,2016), Total Samples=1415, Total Detects=0, Total LODs=425, Total Zeros=990<br>'MaxPCT=0.300, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0015, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=990<br>TOTALLOD=425<br>LODRES=0.005000 |
| RDF#51 Orange_Juice.rdf<br>'PDP Data: OJCO,OJFZ,OJRE (2019), Total Samples=191, Total Detects=0, Total LODs=57, Total Zeros=134<br>'MaxPCT=0.300, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0004, Avg Residue (PCT=100)=0.001250, LODRES (NonDetects)=0.001250<br>TOTALZ=134<br>TOTALLOD=57<br>LODRES=0.001250 | RDF#52 Tangerine.rdf<br>'PDP Data: TAFR (2019), Total Samples=180, Total Detects=0, Total LODs=45, Total Zeros=135<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0013, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=135<br>TOTALLOD=45<br>LODRES=0.005000 |
| RDF#53 Grapefruit.rdf<br>'PDP Data: GFFR (2015,2016,2017), Total Samples=1407, Total Detects=0, Total LODs=211, Total Zeros=1196<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.001861, LODRES (NonDetects)=0.001861<br>TOTALZ=1196<br>TOTALLOD=211<br>LODRES=0.001861 | RDF#54 Apple_Fresh.rdf<br>'PDP Data: APFR (2014,2015,2016), Total Samples=1356, Total Detects=1, Total LODs=33, Total Zeros=1322<br>'MaxPCT=0.025, Avg Residue (Detects Only)=0.004000, Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001002, LODRES (NonDetects)=0.001000<br>TOTALZ=1322<br>TOTALLOD=33<br>LODRES=0.001000<br>0.004 |
| RDF#55 , Apple_Juice.rdf<br>'PDP Data: AJCO,AJRE (2012,2013), Total Samples=775, Total Detects=0, Total LODs=19, Total Zeros=756<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=756<br>TOTALLOD=19<br>LODRES=0.001000 | RDF#56 Apple_Sauce.rdf<br>'PDP Data: ACCA,ACGJ,ACNP,ACOT,ACPC,ACPU (2016,2017), Total Samples=760, Total Detects=0, Total LODs=19, Total Zeros=741<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=741<br>TOTALLOD=19<br>LODRES=0.001000 |
| RDF#57 Apple_Sauce_BF.rdf<br>'PDP Data: ACCA,ACGJ,ACNP,ACOT,ACPC,ACPU (2016,2017), Total Samples=760, Total Detects=0, Total LODs=19, Total Zeros=741<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=741<br>TOTALLOD=19 | RDF#58 Pear.rdf<br>'PDP Data: PEFR (2015,2016), Total Samples=1412, Total Detects=1, Total LODs=281, Total Zeros=1130<br>'MaxPCT=0.200, Avg Residue (Detects Only)=0.003300, Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001002, LODRES (NonDetects)=0.001000<br>TOTALZ=1130<br>TOTALLOD=281 |

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| LODRES=0.001000 | LODRES=0.001000<br>0.0033 |
| RDF#59 Pear_BF.rdf<br>'PDP Data: IPGJ,IPPC,IPSE (2010,2011), Total Samples=776, Total Detects=0, Total LODs=155, Total Zeros=621<br>'MaxPCT=0.200, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=621<br>TOTALLOD=155<br>LODRES=0.001500 | RDF#60 Pear_Canned.rdf<br>'PDP Data: CPCA (1999,2000), Total Samples=737, Total Detects=0, Total LODs=147, Total Zeros=590<br>'MaxPCT=0.200, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0008, Avg Residue (PCT=100)=0.003849, LODRES (NonDetects)=0.003849<br>TOTALZ=590<br>TOTALLOD=147<br>LODRES=0.003849 |
| RDF#61 Cherries_Frozen.rdf<br>'PDP Data: CZFZ (2014,2015,2016), Total Samples=879, Total Detects=39, Total LODs=181, Total Zeros=659<br>'MaxPCT=0.250, Avg Residue (Detects Only)=0.010418, Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.002804, LODRES (NonDetects)=0.002450<br>TOTALZ=659<br>TOTALLOD=181<br>LODRES=0.002450<br>0.036, 0.035, 0.02, 0.016, 0.016, 0.016, 0.016<br>0.015, 0.013, 0.012, 0.011, 0.011, 0.011, 0.011<br>0.0094, 0.0094, 0.0093, 0.0087, 0.0086, 0.0079<br>0.007, 0.007, 0.007, 0.007, 0.0068, 0.0067, 0.0066<br>0.0064, 0.0064, 0.0061, 0.0057, 0.0057, 0.0054<br>0.0052, 0.0052, 0.0051, 0.0049, 0.0049, 0.0049 | RDF#62 Peach_Fresh.rdf<br>'PDP Data: PCFR (2013,2014,2015), Total Samples=1354, Total Detects=1, Total LODs=33, Total Zeros=1320<br>'MaxPCT=0.025, Avg Residue (Detects Only)=0.012000, Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.005005, LODRES (NonDetects)=0.005000<br>TOTALZ=1320<br>TOTALLOD=33<br>LODRES=0.005000<br>0.012 |
| RDF#63 Plum.rdf<br>'PDP Data: PUFR (2011,2012,2013), Total Samples=1347, Total Detects=0, Total LODs=1347, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0019, Avg Residue (PCT=100)=0.001876, LODRES (NonDetects)=0.001876<br>TOTALZ=0<br>TOTALLOD=1347<br>LODRES=0.001876 | RDF#64 Nectarine.rdf<br>'PDP Data: NEFR (2013,2014,2015), Total Samples=1802, Total Detects=0, Total LODs=1802, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0015, Avg Residue (PCT=100)=0.001474, LODRES (NonDetects)=0.001474<br>TOTALZ=0<br>TOTALLOD=1802<br>LODRES=0.001474 |
| RDF#65 Peach_BF.rdf<br>'PDP Data: IHPU (2012), Total Samples=777, Total Detects=0, Total LODs=19, Total Zeros=758<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.003100, LODRES (NonDetects)=0.003100<br>TOTALZ=758<br>TOTALLOD=19<br>LODRES=0.003100 | RDF#66 Peach_Canned.rdf<br>'PDP Data: CCCA (2018), Total Samples=755, Total Detects=0, Total LODs=19, Total Zeros=736<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001430, LODRES (NonDetects)=0.001430<br>TOTALZ=736<br>TOTALLOD=19<br>LODRES=0.001430 |

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| RDF#67 Raspberry_Fresh.rdf<br>'PDP Data: RSFR,RZFZ (2013), Total Samples=705, Total Detects=43, Total LODs=451, Total Zeros=211<br>'MaxPCT=0.700, Avg Residue (Detects Only)=0.028486, Avg Residue (MaxPCT)=0.0041, Avg Residue (PCT=100)=0.005188, LODRES (NonDetects)=0.003675<br>TOTALZ=211<br>TOTALLOD=451<br>LODRES=0.003675<br>0.16, 0.13, 0.095, 0.081, 0.073, 0.065, 0.047, 0.037<br>0.037, 0.037, 0.026, 0.024, 0.024, 0.022, 0.021, 0.019<br>0.019, 0.017, 0.017, 0.017, 0.017, 0.017, 0.015, 0.015<br>0.014, 0.013, 0.013, 0.013, 0.013, 0.012, 0.012, 0.012<br>0.011, 0.011, 0.01, 0.0099, 0.0099, 0.0098, 0.0065<br>0.0062, 0.0057, 0.0056, 0.0053 | RDF#68 Blueberry_Fresh.rdf<br>'PDP Data: BBFR,BZFZ (2014), Total Samples=707, Total Detects=104, Total LODs=250, Total Zeros=353<br>'MaxPCT=0.500, Avg Residue (Detects Only)=0.066682, Avg Residue (MaxPCT)=0.0107, Avg Residue (PCT=100)=0.011921, LODRES (NonDetects)=0.002476<br>TOTALZ=353<br>TOTALLOD=250<br>LODRES=0.002476<br>0.67, 0.41, 0.4, 0.34, 0.3, 0.29, 0.27, 0.25, 0.22, 0.21<br>0.18, 0.16, 0.14, 0.13, 0.13, 0.12, 0.12, 0.11, 0.11<br>0.11, 0.095, 0.088, 0.083, 0.071, 0.071, 0.065, 0.065<br>0.06, 0.06, 0.06, 0.057, 0.056, 0.054, 0.05, 0.045<br>0.045, 0.043, 0.042, 0.041, 0.039, 0.039, 0.038, 0.036<br>0.035, 0.035, 0.033, 0.032, 0.031, 0.029, 0.029, 0.026<br>0.024, 0.024, 0.023, 0.023, 0.022, 0.022, 0.021, 0.021<br>0.021, 0.021, 0.02, 0.019, 0.019, 0.019, 0.018, 0.018<br>0.016, 0.016, 0.016, 0.015, 0.015, 0.014, 0.014, 0.014<br>0.013, 0.013, 0.01, 0.01, 0.013, 0.012, 0.012, 0.011<br>0.011, 0.011, 0.011, 0.011, 0.0098, 0.0087, 0.0084<br>0.0081, 0.0075, 0.0069, 0.0067, 0.0066, 0.0063<br>0.0062, 0.0058, 0.0055, 0.0055, 0.0054, 0.0053<br>0.0052, 0.005 |
| RDF#69 Grape_Fresh.rdf<br>'PDP Data: GRFR (2015,2016), Total Samples=1416, Total Detects=2, Total LODs=33, Total Zeros=1381<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.003300, Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001003, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=1414<br>LODRES=0.001000<br>0.0033<br>0.0033 | RDF#70 Grape_Juice.rdf<br>'PDP Data: GJCO,GJFZ,GJRE (2013,2014), Total Samples=677, Total Detects=0, Total LODs=17, Total Zeros=660<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=677<br>LODRES=0.001000 |
| RDF#71 Cranberry.rdf<br>'PDP Data: CAFR (2016,2017), Total Samples=467, Total Detects=0, Total LODs=467, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=0<br>TOTALLOD=467<br>LODRES=0.005000 | RDF#72 Strawberry_Fresh.rdf<br>'PDP Data: STFR (2014,2015,2016), Total Samples=1412, Total Detects=124, Total LODs=511, Total Zeros=777<br>'MaxPCT=0.450, Avg Residue (Detects Only)=0.027040, Avg Residue (MaxPCT)=0.0031, Avg Residue (PCT=100)=0.004084, LODRES (NonDetects)=0.001874<br>TOTALZ=777<br>TOTALLOD=511<br>LODRES=0.001874<br>0.33, 0.15, 0.12, 0.094, 0.088, 0.084, 0.082, 0.081,<br>0.068, 0.067, 0.065, 0.064, 0.062, 0.062, 0.055, 0.048<br>0.046, 0.043, 0.042, 0.037, 0.037, 0.037, 0.035, 0.035<br>0.035, 0.035, 0.035, 0.032, 0.032, 0.03, 0.03, 0.029 |

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| | 0.029, 0.029, 0.028, 0.028, 0.027, 0.026, 0.026, 0.026<br>0.025, 0.025, 0.025, 0.025, 0.024, 0.024, 0.024, 0.023<br>0.023, 0.022, 0.022, 0.021, 0.02, 0.02, 0.019, 0.019<br>0.019, 0.019, 0.018, 0.017, 0.017, 0.017, 0.017, 0.017<br>0.016, 0.016, 0.015, 0.015, 0.015, 0.015, 0.014, 0.014,<br>0.014, 0.014, 0.014, 0.014, 0.013, 0.012, 0.012, 0.012<br>0.012, 0.011, 0.011, 0.011, 0.011, 0.01, 0.01, 0.01,<br>0.01, 0.0096, 0.0093, 0.0088, 0.0086, 0.0083, 0.0081<br>0.008, 0.008, 0.0076, 0.0074, 0.0074, 0.0071, 0.0068<br>0.0068, 0.0065, 0.0064, 0.0064, 0.0064, 0.0063<br>0.00610.0058, 0.0057, 0.0057, 0.0057, 0.0052, 0.0052<br>0.0051, 0.0051, 0.005, 0.0047, 0.0038 0.0038, 0.0036<br>0.0034, 0.0033 |
| RDF#73 Strawberry_Frozen.rdf<br>'PDP Data: SZFZ (2018,2019), Total Samples=753, Total Detects=216, Total LODs=123, Total Zeros=414<br>'MaxPCT=0.450, Avg Residue (Detects Only)=0.012569, Avg Residue (MaxPCT)=0.0038, Avg Residue (PCT=100)=0.004319, LODRES (NonDetects)=0.001000<br>TOTALZ=414<br>TOTALLOD=123<br>LODRES=0.001000<br>0.091, 0.062, 0.058, 0.056, 0.055, 0.053, 0.047<br>0.046, 0.044, 0.043, 0.042, 0.038, 0.037, 0.037<br>0.037, 0.036, 0.033, 0.033, 0.031, 0.03, 0.029<br>0.027, 0.026, 0.026, 0.025, 0.025, 0.024, 0.024<br>0.024, 0.024, 0.024, 0.024, 0.023, 0.023, 0.023<br>0.023, 0.023, 0.023, 0.023, 0.023, 0.022, 0.021<br>0.021, 0.021, 0.02, 0.019, 0.019, 0.019, 0.018<br>0.018, 0.018, 0.017, 0.017, 0.017, 0.016, 0.016<br>0.016, 0.016, 0.016, 0.016, 0.015, 0.015, 0.015<br>0.015, 0.015, 0.015, 0.014, 0.014, 0.014, 0.014<br>0.014, 0.014, 0.014, 0.013, 0.013, 0.013, 0.013<br>0.013, 0.012, 0.012, 0.012, 0.012, 0.011, 0.011<br>0.011, 0.011, 0.01, 0.01, 0.01, 0.0098, 0.0096<br>0.0089, 0.0088, 0.0088, 0.0085,0.0084, 0.0084<br>0.0084, 0.0083, 0.0082, 0.0081, 0.008, 0.0079<br>0.0073, 0.0073, 0.0072, 0.0072, 0.0071, 0.0069<br>0.0069, 0.0069, 0.0069, 0.0067, 0.0066, 0.0065<br>0.0065, 0.0064, 0.0063, 0.0062, 0.0061, 0.006<br>0.0058, 0.0057, 0.0056, 0.0056, 0.0053, 0.0052<br>0.0052, 0.0052, 0.0051, 0.005, 0.005, 0.005, 0.0049<br>0.0048, 0.0048, 0.0048, 0.0048, 0.0047, 0.0047<br>0.0047, 0.0047, 0.0046, 0.0046, 0.0045, 0.0045<br>0.0045, 0.0045, 0.0045, 0.0044, 0.0043, 0.0042<br>0.0042, 0.0042, 0.0041, 0.0041, 0.0041, 0.004<br>0.004, 0.0039, 0.0038, 0.0038, 0.0037, 0.0037<br>0.0036, 0.0036, 0.0036, 0.0035, 0.0035, 0.0035<br>0.0034, 0.0034, 0.0034, 0.0033, 0.0033, 0.0032<br>0.0032, 0.0032, 0.0032, 0.0031, 0.0031, 0.003 | RDF#74 Almond.rdf<br>'PDP Data: ALCA,ALFR,ALPC,ALSE (2007,2008), Total Samples=547, Total Detects=0, Total LODs=547, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=547<br>LODRES=0.001000 |

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| 0.0029, 0.0029, 0.0028, 0.0028, 0.0028, 0.0027<br>0.0027, 0.0027, 0.0026, 0.0026, 0.0026, 0.0026<br>0.0026, 0.0025, 0.0025, 0.0024, 0.0024, 0.0024<br>0.0023, 0.0023, 0.0023, 0.0023, 0.0022, 0.0022<br>0.0022, 0.0022, 0.0021, 0.0021, 0.0021, 0.0021<br>0.002, 0.002, 0.002, 0.002 | |
| RDF#75 Barley_Grain.rdf'PDP Data: BYGR (2002,2003), Total Samples=746, Total Detects=12, Total LODs=734, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.145583, Avg Residue (MaxPCT)=0.0048, Avg Residue (PCT=100)=0.004802, LODRES (NonDetects)=0.002500<br>TOTALZ=0<br>TOTALLOD=734<br>LODRES=0.002500<br>0.644, 0.378, 0.168, 0.121<br>0.12, 0.094, 0.076, 0.071<br>0.038, 0.019, 0.01, 0.008 | RDF#76 Corn_Grain.rdf<br>'PDP Data: COGR (2007,2008), Total Samples=1309, Total Detects=469, Total LODs=840, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.027215, Avg Residue (MaxPCT)=0.0104, Avg Residue (PCT=100)=0.010393, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=840<br>LODRES=0.001000<br>4.734, 0.695, 0.346, 0.341, 0.26, 0.2, 0.197, 0.147<br>0.131, 0.114, 0.107, 0.103, 0.1, 0.096, 0.092, 0.092<br>0.085, 0.082, 0.079, 0.077, 0.077, 0.076, 0.069, 0.069<br>0.066, 0.066, 0.065, 0.061, 0.058, 0.058, 0.056, 0.055<br>0.054, 0.053, 0.052, 0.045, 0.045, 0.044, 0.044, 0.043<br>0.043, 0.043, 0.043, 0.042, 0.042, 0.04, 0.038, 0.037<br>0.037, 0.037, 0.037, 0.037, 0.036, 0.036, 0.036, 0.036<br>0.035, 0.035, 0.034, 0.034, 0.034, 0.032, 0.031, 0.03<br>0.03, 0.028, 0.027, 0.027, 0.027, 0.026, 0.026, 0.026<br>0.026, 0.025, 0.025, 0.024, 0.024, 0.024, 0.023, 0.022<br>0.022, 0.022, 0.022, 0.021, 0.021, 0.021, 0.02, 0.019<br>0.019, 0.019, 0.019, 0.019, 0.019, 0.018, 0.018, 0.017<br>0.017, 0.017, 0.016, 0.016, 0.015, 0.015, 0.015, 0.015<br>0.015, 0.014, 0.014, 0.014, 0.014, 0.014, 0.014, 0.014<br>0.014, 0.013, 0.013, 0.013, 0.013, 0.013, 0.013, 0.013<br>0.013, 0.013, 0.013, 0.012, 0.012, 0.012, 0.012, 0.012<br>0.012, 0.012, 0.012, 0.012, 0.012, 0.012, 0.012, 0.011<br>0.011, 0.011, 0.011, 0.011, 0.011, 0.01, 0.01, 0.01<br>0.01, 0.01, 0.01, 0.01, 0.01, 0.009, 0.009, 0.009, 0.009<br>0.009, 0.009, 0.009, 0.009, 0.009, 0.009, 0.009, 0.009<br>0.009, 0.009, 0.009, 0.009, 0.009, 0.009, 0.009, 0.009<br>0.008, 0.008, 0.008, 0.008, 0.008, 0.008, 0.008, 0.008<br>0.008, 0.008, 0.008, 0.008, 0.008, 0.008, 0.008, 0.007<br>0.007, 0.007, 0.007, 0.007, 0.007, 0.007, 0.007, 0.007<br>0.007, 0.007, 0.007, 0.007, 0.007, 0.007, 0.007, 0.007<br>0.007, 0.007, 0.007, 0.006, 0.006, 0.006, 0.005, 0.003<br>0.003, 0.003 ,0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003 ,0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003 |

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| | 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003 ,0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003<br>0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003, 0.003 |
| RDF#77 Corn_Syrup.rdf<br>'PDP Data: CYOT (1998,1999), Total Samples=454, Total Detects=0, Total LODs=454, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0007, Avg Residue (PCT=100)=0.000672, LODRES (NonDetects)=0.000672<br>TOTALZ=0<br>TOTALLOD=454<br>LODRES=0.000672 | RDF#78 Corn_Sweet_Canned.rdf<br>'PDP Data: CSCA (2001,2002), Total Samples=723, Total Detects=0, Total LODs=72, Total Zeros=651<br>'MaxPCT=0.01, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.003073, LODRES (NonDetects)=0.003073<br>TOTALZ=70651<br>TOTALLOD=72<br>LODRES=0.003073 |
| RDF#79 Corn_Sweet_Fresh.rdf<br>'PDP Data: CBFR (2014,2015), Total Samples=574, Total Detects=0, Total LODs=57, Total Zeros=517<br>'MaxPCT=0.01, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=517<br>TOTALLOD=57<br>LODRES=0.002500 | RDF#80 Corn_Sweet_Frozen.rdf<br>'PDP Data: CSFZ (2014,2015), Total Samples=105, Total Detects=0, Total LODs=11, Total Zeros=94<br>'MaxPCT=0.01, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=95<br>TOTALLOD=11<br>LODRES=0.002500 |
| RDF#81 Oat_Bran.rdf<br>'PDP Data: OABR (2019), Total Samples=14, Total Detects=1, Total LODs=13, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.027000, Avg Residue (MaxPCT)=0.0031, Avg Residue (PCT=100)=0.003089, LODRES (NonDetects)=0.001250<br>TOTALZ=0<br>TOTALLOD=13<br>LODRES=0.001250<br>0.027 | RDF#82 Oat_Grain.rdf<br>'PDP Data: OAGR,OARO,OASC (2019), Total Samples=681, Total Detects=10, Total LODs=671, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.015530, Avg Residue (MaxPCT)=0.0015, Avg Residue (PCT=100)=0.001460, LODRES (NonDetects)=0.001250<br>TOTALZ=0<br>TOTALLOD=671<br>LODRES=0.001250<br>0.043, 0.032, 0.02, 0.014, 0.01, 0.009<br>0.0078, 0.0077, 0.0075, 0.0043 |
| RDF#83 Rice_White.rdf<br>'PDP Data: RIGR,RIOT (2018,2019), Total Samples=754, Total Detects=19, Total LODs=735, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.035568, Avg Residue (MaxPCT)=0.0021, Avg | RDF#84 Wheat_Grain.rdf<br>'PDP Data: WHGR (2005,2006), Total Samples=1361, Total Detects=884, Total LODs=477, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.089689, Avg Residue (MaxPCT)=0.0588, Avg |

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| Residue (PCT=100)=0.002115, LODRES (NonDetects)=0.001250<br>TOTALZ=0<br>TOTALLOD=735<br>LODRES=0.001250<br>0.35, 0.11, 0.054, 0.045, 0.026, 0.013, 0.013<br>0.011, 0.0089, 0.0077, 0.0068, 0.0056, 0.0043<br>0.004, 0.0038, 0.0035, 0.0032, 0.0032,0.0028 | Residue (PCT=100)=0.058781, LODRES (NonDetects)=0.001500<br>TOTALZ=0<br>TOTALLOD=477<br>LODRES=0.001500<br>2.577, 2.577, 1.833, 1.424, 1.328, 0.923, 0.798, 0.721<br>0.7, 0.645, 0.631, 0.531, 0.459, 0.445, 0.442, 0.363<br>0.359, 0.35, 0.343, 0.331, 0.324, 0.299, 0.299, 0.296<br>0.294, 0.285, 0.283, 0.283, 0.268, 0.262, 0.261, 0.257<br>0.243, 0.241, 0.24, 0.239, 0.233, 0.222, 0.212, 0.207<br>0.201, 0.201, 0.196, 0.193, 0.193, 0.188, 0.187, 0.183<br>0.174, 0.171, 0.164, 0.154, 0.151, 0.151, 0.149, 0.149<br>0.148, 0.143, 0.142, 0.14, 0.139, 0.139, 0.136, 0.131<br>0.125, 0.123, 0.119, 0.116, 0.115, 0.115, 0.115, 0.112<br>0.112, 0.111, 0.109, 0.109, 0.108, 0.107, 0.107, 0.105<br>0.104, 0.103, 0.103, 0.101,0.101, 0.101, 0.1, 0.099<br>0.099, 0.095, 0.093, 0.091, 0.091, 0.091, 0.09, 0.089<br>0.088, 0.083, 0.083, 0.082, 0.081, 0.08, 0.08, 0.079<br>0.078, 0.078, 0.077, 0.077, 0.077, 0.076, 0.075, 0.075<br>0.074, 0.073, 0.073, 0.072, 0.072, 0.071, 0.07, 0.069<br>0.069, 0.068, 0.068, 0.068, 0.068, 0.067, 0.066, 0.064<br>0.063, 0.063, 0.062, 0.062, 0.062, 0.06, 0.06, 0.06,<br>0.06, 0.059, 0.058, 0.058, 0.057, 0.056, 0.056, 0.056<br>0.055, 0.055, 0.055, 0.055, 0.054, 0.054, 0.053, 0.053<br>0.052, 0.05, 0.05, 0.049, 0.049, 0.048, 0.048, 0.047<br>0.047, 0.047, 0.046, 0.046, 0.046, 0.046, 0.046<br>0.045, 0.0450.045, 0.043, 0.042, 0.042, 0.042, 0.042<br>0.041, 0.041, 0.04, 0.04, 0.04, 0.04, 0.039, 0.039<br>0.039, 0.039, 0.039, 0.038, 0.038, 0.036, 0.035, 0.034<br>0.034, 0.034, 0.033, 0.033, 0.033, 0.032, 0.032, 0.032<br>0.032, 0.032, 0.031, 0.031, 0.031, 0.03, 0.03, 0.03<br>0.03, 0.03, 0.029, 0.029, 0.029, 0.029, 0.028, 0.028<br>0.028, 0.028, 0.027, 0.027, 0.026, 0.026, 0.026, 0.026<br>0.026, 0.025, 0.025, 0.025, 0.025, 0.025, 0.025, 0.024<br>0.024, 0.023, 0.023, 0.023, 0.023, 0.023, 0.022, 0.022<br>0.022, 0.022, 0.022, 0.022, 0.021, 0.021, 0.021, 0.021<br>0.02, 0.02, 0.02, 0.02, 0.02, 0.02. 0.02, 0.019, 0.019<br>0.019, 0.019, 0.019, 0.019, 0.018, 0.018, 0.018, 0.018<br>0.018, 0.018, 0.018, 0.018, 0.018, 0.018, 0.017, 0.017,<br>0.017, 0.017, 0.017, 0.017, 0.017, 0.016, 0.016, 0.016,<br>0.016, 0.016, 0.016, 0.015, 0.015, 0.015, 0.015, 0.015,<br>0.015, 0.015, 0.015, 0.015, 0.014, 0.014, 0.014, 0.014,<br>0.014, 0.013, 0.013, 0.013, 0.013, 0.013, 0.013, 0.013,<br>0.013, 0.013, 0.013, 0.012, 0.012, 0.012, 0.012, 0.012,<br>0.012, 0.012, 0.012, 0.012, 0.012, 0.012, 0.011, 0.011,<br>0.011, 0.011, 0.011, 0.011, 0.011, 0.011, 0.011, 0.011,<br>0.011, 0.011, 0.011, 0.011, 0.005, 0.005, 0.005, 0.005,<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005 |

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| | 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005, 0.005<br>0.005, |
| RDF#85 Wheat_Flour.rdf<br>'PDP Data: WFGR (2018), Total Samples=758, Total Detects=186, Total LODs=572, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.007605, Avg Residue (MaxPCT)=0.0028, Avg Residue (PCT=100)=0.002809, LODRES (NonDetects)=0.001250<br>TOTALZ=0<br>TOTALLOD=572<br>LODRES=0.001250<br>0.081, 0.054, 0.053, 0.038, 0.034, 0.034 0.032, 0.032<br>0.028, 0.025, 0.022, 0.017 0.017, 0.017, 0.017, 0.016<br>0.016, 0.016, 0.013, 0.013, 0.013, 0.012, 0.012, 0.011<br>0.011, 0.011, 0.01, 0.01, 0.0099, 0.0097, 0.0097<br>0.0095, 0.0092, 0.0091, 0.0086, 0.0086, 0.0082, 0.008<br>0.0079, 0.0079, 0.0078, 0.0078, 0.0078, 0.0078<br>0.0078 0.0074, 0.0073, 0.0073, 0.0072, 0.0072<br>0.0072, 0.0071, 0.007, 0.0069, 0.0068, 0.0068, 0.0068<br>0.0068, 0.0066, 0.0064, 0.0063, 0.0062, 0.0062<br>0.0062, 0.0061, 0.0061, 0.006, 0.0059, 0.0059, 0.0057<br>0.0056, 0.0056, 0.0054, 0.0054, 0.0054, 0.0054<br>0.0053, 0.0053, 0.0053, 0.0053, 0.0053, 0.0052<br>0.0052, 0.0052, 0.0051, 0.005, 0.005, 0.0049, 0.0047<br>0.0047, 0.0046, 0.0046, 0.0045, 0.0045, 0.0045<br>0.0045, 0.0045, 0.0044, 0.0044, 0.0044, 0.0043<br>0.0043, 0.0043, 0.0043, 0.0042, 0.0042, 0.0042<br>0.0042, 0.0041, 0.0041, 0.0041, 0.004, 0.004, 0.004<br>0.004, 0.0039, 0.0039, 0.0039, 0.0038, 0.0038<br>0.0038, 0.0038, 0.0038, 0.0037, 0.0037, 0.0037<br>0.0037, 0.0036, 0.0036, 0.0036, 0.0036, 0.0036<br>0.0036, 0.0035, 0.0035, 0.0035, 0.0035, 0.0034<br>0.0034, 0.0034, 0.0034, 0.0033, 0.0033, 0.0033<br>0.0033, 0.0033, 0.0032, 0.0032, 0.0032, 0.0032<br>0.0032, 0.0032, 0.0031, 0.0031, 0.0031, 0.0031<br>0.0031, 0.0031, 0.0031, 0.003, 0.003, 0.003, 0.003<br>0.0029, 0.0029, 0.0029, 0.0029, 0.0029, 0.0029<br>0.0029, 0.0028, 0.0027, 0.0027, 0.0027, 0.0027<br>0.0026, 0.0026, 0.0026, 0.0026, 0.0026, 0.0026<br>0.0026, 0.0026, 0.0026, 0.0025, 0.0025 | |

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| RDF#97 Fig FT data 100%CT<br>TOTALZ=0<br>TOTALNZ=12<br><br>0.954, 0.540, 0.367, 0.278<br>0.362, 0.317, 0.236, 0.19,<br>0.118, 0.089, 0.083, 0.025 | RDF#98 Asparagus_Canned.rdf<br>'PDP Data: AACA (2003), Total Samples=354, Total Detects=0, Total LODs=89, Total Zeros=265<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.001929, LODRES (NonDetects)=0.001929<br>TOTALZ=265<br>TOTALLOD=89<br>LODRES=0.001929 |
| RDF#99 Avocado.rdf<br>'PDP Data: AVFR (2012), Total Samples=372, Total Detects=0, Total LODs=37, Total Zeros=335<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0004, Avg Residue (PCT=100)=0.004500, LODRES (NonDetects)=0.004500<br>TOTALZ=335<br>TOTALLOD=37<br>LODRES=0.004500 | RDF#100 Grape_Raisin.rdf<br>'PDP Data: RAOT,RADR (2018), Total Samples=756, Total Detects=0, Total LODs=19, Total Zeros=737<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000556, LODRES (NonDetects)=0.000556<br>TOTALZ=0<br>TOTALLOD=756<br>LODRES=0.000556 |
| RDF#101 Mango.rdf<br>'PDP Data: MAFR (2017,2018), Total Samples=709, Total Detects=15, Total LODs=694, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.004973, Avg Residue (MaxPCT)=0.0032, Avg Residue (PCT=100)=0.003169, LODRES (NonDetects)=0.003130<br>TOTALZ=0<br>TOTALLOD=694<br>LODRES=0.003130<br>0.013, 0.0083, 0.0065, 0.0065, 0.0056, 0.0054,<br>0.0049, 0.0038, 0.0035, 0.0032, 0.003, 0.0028<br>0.0028, 0.0027, 0.0026 | RDF#102 Papaya.rdf<br>'PDP Data: YAFR (2011,2012), Total Samples=750, Total Detects=0, Total LODs=750, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0040, Avg Residue (PCT=100)=0.004000, LODRES (NonDetects)=0.004000<br>TOTALZ=0<br>TOTALLOD=750<br>LODRES=0.004000 |
| RDF#103 PeanutButter.rdf<br>'PDP Data: PBCA,PBGJ,PBNP,PBOT,PBPC (2015), Total Samples=315, Total Detects=0, Total LODs=315, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0500, Avg Residue (PCT=100)=0.050000, LODRES (NonDetects)=0.050000<br>TOTALZ=0<br>TOTALLOD=315<br>LODRES=0.050000 | RDF#104 Pineapple.rdf<br>'PDP Data: PNFR (2000,2001,2002), Total Samples=1454, Total Detects=0, Total LODs=1454, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0070, Avg Residue (PCT=100)=0.006964, LODRES (NonDetects)=0.006964<br>TOTALZ=0<br>TOTALLOD=1454<br>LODRES=0.006964 |
| RDF#105 Pineapple_Canned.rdf<br>'PDP Data: NCCA (2017), Total Samples=756, Total Detects=0, Total LODs=756, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0038, Avg Residue (PCT=100)=0.003813, LODRES (NonDetects)=0.003813<br>TOTALZ=0 | RDF#106 Guava FT 100%CT<br>TOTALZ=0<br>TOTALNZ=20<br><br>0.09, 0.10, 0.16, 0.24<br>0.06, 0.07, 0.10, 0.12<br>0.08, 0.10, 0.025, 0.025 |

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| TOTALLOD=756<br>LODRES=0.003813 | 0.09, 0.10, 0.13, 0.30<br>0.025, 0.07, 0.09, 0.13 |
| RDF#107 Date FT<br>'MaxPCT=1.000<br>TOTALZ=0<br>TOTALNZ=3<br>1.43<br>3.26<br>2.33 | RDF#108 Passionfruit FT 100%CT<br>TOTALZ=0<br>TOTALNZ=12<br><br>0.025, 0.025, 0.025, 0.025<br>0.025, 0.056, 0.071, 0.025<br>0.025, 0.025, 0.025, 0.025 |
| RDF#109 Plum_ prune.rdf<br>'PDP Data: PDDR,PDOT (2017,2018), Total Samples=726, Total Detects=0, Total LODs=726, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=726<br>LODRES=0.001000 | RDF#110 Banana.rdf<br>'PDP Data: BNFR (2012,2013,2014), Total Samples=1446, Total Detects=0, Total LODs=1446, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0049, Avg Residue (PCT=100)=0.004850, LODRES (NonDetects)=0.004850<br>TOTALZ=0<br>TOTALLOD=1446<br>LODRES=0.004850 |
| RDF#111 Pumpkin.rdf<br>'PDP Data: WSFR (2011,2012,2013) transfer winter squash, Total Samples=1115, Total Detects=0, Total LODs=167, Total Zeros=948<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=0.15)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=948<br>TOTALLOD=167<br>LODRES=0.0010 | RDF#112 Pecan.rdf<br>'RDF Filename=Almond.rdf transfer to Pecan<br>'Residue=Concen, RPF=RPF, Brigetable=BT_Recent, PFactor=PF1, PCT=PCT_Max, LOD Rule=LOD3<br>'PDP Data: ALCA,ALFR,ALPC,ALSE (2007,2008), Total Samples=547, Total Detects=0, Total LODs=547, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.025, Avg Residue (PCT=0.01)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=533<br>TOTALLOD=14<br>LODRES=0.001000 |
| RDF#113 Walnut.rdf<br>'PDP Data: ALCA,ALFR,ALPC,ALSE (2007,2008), Total Samples=547, Total Detects=0, Total LODs=547, Total Zeros=0<br>'MaxPCT=0.10, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.10, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=492<br>TOTALLOD=55<br>LODRES=0.001000 | RDF#114 Mushroom.rdf<br>'PDP Data: MUFR (2011,2012,2013), Total Samples=1462, Total Detects=0, Total LODs=1462, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=1462<br>LODRES=0.001000 |
| RDF# 115 Onion 100%CT<br>'PDP Data: GOFR (2018), Total Samples=707, Total Detects=5, Total LODs=702, Total Zeros=0<br>'MaxPCT=0.150, Avg Residue (Detects Only)=0.018400, Avg Residue (MaxPCT)=0.001, Avg Residue (PCT=100)=0.005095, LODRES (NonDetects)=0.005000 | RDF# 116 Cilantro<br>'PDP Data: CLFR (2018,2019), Total Samples=314, Total Detects=6, Total LODs=308, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.009517, Avg Residue (MaxPCT)=0.0013, Avg Residue (PCT=100)=0.001261, LODRES (NonDetects)=0.001101 |

| MALATHION ONLY | |
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| TOTALZ=0<br>TOTALLOD=702<br>LODRES=0.005000<br>0.032<br>0.023<br>0.014<br>0.012<br>0.011 | TOTALZ=0<br>TOTALLOD=308<br>LODRES=0.001101<br>0.024<br>0.016<br>0.012<br>0.0017<br>0.0017<br>0.0017 |
| RDF#117 Celery100PCT<br>'RDF Filename=Celery.rdf<br>'PDP Data: CEFR (2013,2014), Total Samples=1416, Total Detects=162, Total LODs=192, Total Zeros=1062<br>'MaxPCT=1.000, Avg Residue (Detects Only)=0.027066, Avg Residue (MaxPCT)=0.0033, Avg Residue (PCT=100)=0.004413, LODRES (NonDetects)=0.001486<br>TOTALZ=0<br>TOTALLOD=1254<br>LODRES=0.001486<br>(see detects under celery RDF#37) | |

## Attachment 4: Summary of Acute and Steady State Residue Distribution Files for Malaoxon

| MALAOXON ONLY | |
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| RDF#1 Beet_garden rdf<br>'PDP Data: BTCA (2011), Total Samples=756, Total Detects=0, Total LODs=756, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0012, Avg Residue (PCT=100)=0.001247, LODRES (NonDetects)=0.001247<br>TOTALZ=0<br>TOTALLOD=756<br>LODRES=0.001247 | RDF#2 Carrot rdf<br>'PDP Data: CRFR (2013,2014), Total Samples=1420, Total Detects=0, Total LODs=36, Total Zeros=1384<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000749, LODRES (NonDetects)=0.000749<br>TOTALZ=1384<br>TOTALLOD=36<br>LODRES=0.000749 |
| RDF#3 Carrot_BF.rdf<br>'PDP Data: ICPU (2012), Total Samples=792, Total Detects=0, Total LODs=20, Total Zeros=772<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.003000, LODRES (NonDetects)=0.003000<br>TOTALZ=772<br>TOTALLOD=20<br>LODRES=0.003000 | RDF#4 Potato_wPeel_Uncooked.rdf<br>'PDP Data: POFR (2015,2016), Total Samples=1415, Total Detects=0, Total LODs=35, Total Zeros=1380<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=1380<br>TOTALLOD=35<br>LODRES=0.001500 |
| RDF#5 Potato_wopeel_Frozen.rdf<br>'PDP Data: PZFZ (2006,2007), Total Samples=1544, Total Detects=0, Total LODs=39, Total Zeros=1505<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001456, LODRES (NonDetects)=0.001456<br>TOTALZ=1505<br>TOTALLOD=39<br>LODRES=0.001456 | RDF#6 Potato_Sweet.rdf<br>'PDP Data: SWFR (2016,2017,2018), Total Samples=1410, Total Detects=0, Total LODs=1410, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0025, Avg Residue (PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=0<br>TOTALLOD=1410<br>LODRES=0.002500 |
| RDF#7 Potato_Sweet_BF.rdf<br>'PDP Data: ISGJ,ISPC,ISSE (2010,2011), Total Samples=776, Total Detects=0, Total LODs=776, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0014, Avg Residue (PCT=100)=0.001389, LODRES (NonDetects)=0.001389<br>TOTALZ=0<br>TOTALLOD=776<br>LODRES=0.001389 | RDF#8 Lettuce_Fresh.rdf<br>'PDP Data: LTFR,LTHD,LTLF,LTOT (2015,2016,2017), Total Samples=1512, Total Detects=0, Total LODs=227, Total Zeros=1285<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001007, LODRES (NonDetects)=0.001007<br>TOTALZ=1285<br>TOTALLOD=227<br>LODRES=0.001007 |
| RDF#9 Lettuce_Fresh_Leaf.rdf<br>'PDP Data: LTLF (2015,2016,2017), Total Samples=442, Total Detects=0, Total LODs=66, Total Zeros=376<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001011, LODRES (NonDetects)=0.001011 | RDF#10 Kale.rdf<br>'PDP Data: GKFR (2017,2018), Total Samples=1415, Total Detects=0, Total LODs=1415, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0075, Avg Residue (PCT=100)=0.007500, LODRES (NonDetects)=0.007500 |

| MALAOXON ONLY | |
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| TOTALZ=376<br>TOTALLOD=66<br>LODRES=0.001011 | TOTALZ=0<br>TOTALLOD=1415<br>LODRES=0.007500 |
| RDF#11 Onion_Bulb.rdf<br>'PDP Data: ONFR (2017), Total Samples=708, Total Detects=0, Total LODs=106, Total Zeros=602<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0004, Avg Residue (PCT=100)=0.002839, LODRES (NonDetects)=0.002839<br>TOTALZ=602<br>TOTALLOD=106<br>LODRES=0.002839 | RDF#12 Onion_Green.rdf<br>'PDP Data: GOFR (2018), Total Samples=707, Total Detects=0, Total LODs=707, Total Zeros=0<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=601<br>TOTALLOD=106<br>LODRES=0.005000 |
| RDF#13 Spinach_Fresh.rdf<br>'PDP Data: SPFR (2015,2016), Total Samples=1415, Total Detects=0, Total LODs=71, Total Zeros=1344<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.002756, LODRES (NonDetects)=0.002756<br>TOTALZ=1344<br>TOTALLOD=71<br>LODRES=0.002756 | RDF#14 Collards.rdf<br>'PDP Data: GLFR (2019), Total Samples=187, Total Detects=0, Total LODs=187, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=187<br>LODRES=0.001000 |
| RDF#15 Lettuce_Fresh_Head.rdf<br>'PDP Data: LTHD (2015,2016,2017), Total Samples=1024, Total Detects=0, Total LODs=154, Total Zeros=870<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.001004, LODRES (NonDetects)=0.001004<br>TOTALZ=870<br>TOTALLOD=154<br>LODRES=0.001004 | RDF#16 Spinach_Canned.rdf<br>'PDP Data: SCCA (2019), Total Samples=375, Total Detects=0, Total LODs=19, Total Zeros=356<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000791, LODRES (NonDetects)=0.000791<br>TOTALZ=356<br>TOTALLOD=19<br>LODRES=0.000791 |
| RDF#17 Spinach_Frozen.rdf<br>'PDP Data: SFFZ (2018,2019), Total Samples=377, Total Detects=0, Total LODs=19, Total Zeros=358<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000784, LODRES (NonDetects)=0.000784<br>TOTALZ=358<br>TOTALLOD=19<br>LODRES=0.000784 | RDF#18 Banana.rdf<br>'PDP Data: BNFR (2012,2013,2014), Total Samples=1446, Total Detects=0, Total LODs=1446, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=1446<br>LODRES=0.001000 |
| RDF#19 Asparagus.rdf<br>'PDP Data: AACA,ASFR (2017,2018,2019), Total Samples=1330, Total Detects=0, Total LODs=333, Total Zeros=997<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=997<br>TOTALLOD=333 | RDF#20 Broccoli.rdf<br>'PDP Data: BRFR (2013,2014), Total Samples=1420, Total Detects=0, Total LODs=1420, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0050, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=0<br>TOTALLOD=1420 |

| MALAOXON ONLY | |
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| LODRES=0.001000 | LODRES=0.005000 |
| RDF#21 Cabbage.rdf<br>'PDP Data: CGFR (2017,2018,2019), Total Samples=1327, Total Detects=0, Total LODs=34, Total Zeros=408<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0035, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=1327<br>TOTALLOD=34<br>LODRES=0.005000 | RDF#22 Cauliflower.rdf<br>'PDP Data: CFFR (2019), Total Samples=176, Total Detects=0, Total LODs=18, Total Zeros=158<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.000750, LODRES (NonDetects)=0.000750<br>TOTALZ=158<br>TOTALLOD=18<br>LODRES=0.00075 |
| RDF#23 Soybean_Grain.rdf<br>'PDP Data: SYGR (2011), Total Samples=300, Total Detects=0, Total LODs=300, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0014, Avg Residue (PCT=100)=0.001350, LODRES (NonDetects)=0.001350<br>TOTALZ=0<br>TOTALLOD=300<br>LODRES=0.001350 | RDF#24 InfantFormula_Soy.rdf<br>'PDP Data: YFCO,YFPD,YFRE (2013,2014), Total Samples=706, Total Detects=0, Total LODs=706, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0012, Avg Residue (PCT=100)=0.001250, LODRES (NonDetects)=0.001250<br>TOTALZ=0<br>TOTALLOD=706<br>LODRES=0.001250 |
| RDF#25 Bean_Green_Canned.rdf<br>'PDP Data: GCCA (2014), Total Samples=378, Total Detects=0, Total LODs=9, Total Zeros=369<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=369<br>TOTALLOD=9<br>LODRES=0.005000 | RDF#26 Bean_Green_Fresh.rdf<br>'PDP Data: GBFR (2013,2014,2015,2016), Total Samples=2456, Total Detects=0, Total LODs=61, Total Zeros=2395<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000500, LODRES (NonDetects)=0.000500<br>TOTALZ=2395<br>TOTALLOD=61<br>LODRES=0.000500 |
| RDF#27 Bean_Green_Frozen.rdf<br>'PDP Data: GZFZ (2014), Total Samples=378, Total Detects=0, Total LODs=9, Total Zeros=369<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=369<br>TOTALLOD=9<br>LODRES=0.005000 | RDF#28 Bean_Green_BF.rdf<br>'PDP Data: IGGJ,IGPC (2010,2011), Total Samples=776, Total Detects=0, Total LODs=19, Total Zeros=757<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001389, LODRES (NonDetects)=0.001389<br>TOTALZ=757<br>TOTALLOD=19<br>LODRES=0.001389 |
| RDF#29 Pea_Snap.rdf<br>'PDP Data: SNFR (2011,2012), Total Samples=1487, Total Detects=0, Total LODs=1487, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0013, Avg Residue (PCT=100)=0.001265, LODRES (NonDetects)=0.001265<br>TOTALZ=1450<br>TOTALLOD=37<br>LODRES=0.001265 | RDF#30 Pea_Sweet_Canned.rdf<br>'PDP Data: SDCA (2019), Total Samples=379, Total Detects=0, Total LODs=379, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=370<br>TOTALLOD=9<br>LODRES=0.001000 |

| MALAOXON ONLY | |
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| RDF#31 Pea_Sweet_Frozen.rdf<br>'PDP Data: PSFZ (2018,2019), Total Samples=315, Total Detects=0, Total LODs=315, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=307<br>TOTALLOD=8<br>LODRES=0.001000 | RDF#32 Pea_BF.rdf<br>'PDP Data: IEPU (2012,2013), Total Samples=773, Total Detects=0, Total LODs=773, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0025, Avg Residue (PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=754<br>TOTALLOD=19<br>LODRES=0.002500 |
| RDF#33 Bean_Black.rdf<br>'PDP Data: ABCA (2010), Total Samples=367, Total Detects=0, Total LODs=367, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=367<br>LODRES=0.001000 | RDF#34 Bean_Kidney.rdf<br>'PDP Data: KBCA (2008,2009), Total Samples=372, Total Detects=0, Total LODs=372, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001007, LODRES (NonDetects)=0.001007<br>TOTALZ=0<br>TOTALLOD=372<br>LODRES=0.001007 |
| RDF#35 Bean_Pinto.rdf<br>'PDP Data: NBCA (2009), Total Samples=372, Total Detects=0, Total LODs=372, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001014, LODRES (NonDetects)=0.001014<br>TOTALZ=0<br>TOTALLOD=372<br>LODRES=0.001014 | RDF#36 Bean_Garbanzo rdf<br>'Residue=Concen, RPF=RPF,<br>'PDP Data: ZBCA (2017,2018), Total Samples=755, Total Detects=0, Total LODs=755, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0007, Avg Residue (PCT=100)=0.000750, LODRES (NonDetects)=0.000750<br>TOTALZ=0<br>TOTALLOD=755<br>LODRES=0.000750 |
| RDF#37 Celery.rdf<br>'PDP Data: CEFR (2013,2014), Total Samples=1416, Total Detects=162, Total LODs=192, Total Zeros=1062<br>'MaxPCT=0.250, Avg Residue (Detects Only)=0.027066, Avg Residue (MaxPCT)=0.0033, Avg Residue (PCT=100)=0.004413, LODRES (NonDetects)=0.001486<br>TOTALZ=1062<br>TOTALLOD=192<br>LODRES=0.001486<br>0.17, 0.16, 0.12, 0.12, 0.11, 0.11, 0.11, 0.11<br>0.11, 0.096, 0.093, 0.091, 0.09, 0.079, 0.078<br>0.073, 0.073, 0.068, 0.068, 0.064, 0.06, 0.055<br>0.053, 0.049, 0.046, 0.045, 0.043, 0.042, 0.042<br>0.042, 0.042, 0.04, 0.04, 0.04, 0.039, 0.038, 0.038<br>0.038, 0.036, 0.036, 0.035, 0.035, 0.034, 0.034<br>0.034, 0.033, 0.032, 0.032, 0.031, 0.028, 0.028<br>0.027, 0.026, 0.026, 0.025, 0.025, 0.024, 0.024<br>0.023, 0.022, 0.022, 0.022, 0.022, 0.022, 0.022<br>0.022, 0.022, 0.022, 0.021, 0.019, 0.018, 0.018<br>0.017, 0.017, 0.017, 0.016, 0.015, 0.015, 0.015<br>0.015, 0.015, 0.014, 0.014, 0.014, 0.014, 0.014<br>0.013, 0.013, 0.012, 0.012, 0.012, 0.012, 0.012 | RDF#38 Tomato_Fresh.rdf<br>'PDP Data: TOFR (2014,2015,2016), Total Samples=1413, Total Detects=0, Total LODs=71, Total Zeros=1342<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=1342<br>TOTALLOD=71<br>LODRES=0.001500 |

| MALAOXON ONLY | |
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| 0.012, 0.011, 0.011, 0.011, 0.011, 0.011, 0.011<br>0.011, 0.01, 0.0098, 0.0098, 0.0097, 0.0096, 0.0093<br>0.0092, 0.009, 0.0083, 0.0083, 0.0078, 0.0077, 0.0077<br>0.0074, 0.0074, 0.0074, 0.0073, 0.0072, 0.0069<br>0.0067, 0.0066, 0.0065, 0.0063, 0.0061, 0.006<br>0.0059, 0.0059, 0.0057, 0.0055, 0.0053, 0.0051<br>0.0049, 0.0048, 0.0048, 0.0047, 0.0043, 0.0041<br>0.0039, 0.0038, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002, 0.002, 0.002, 0.002, 0.002<br>0.002, 0.002, 0.002 | |
| RDF#39 Tomato_Canned.rdf<br>'PDP Data: TCCA (2016,2017), Total Samples=755, Total Detects=0, Total LODs=38, Total Zeros=717<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000938, LODRES (NonDetects)=0.000938<br>TOTALZ=717<br>TOTALLOD=38<br>LODRES=0.000938 | RDF#40 Tomato_Paste.rdf<br>'PDP Data: TPCA,TPGJ (2019), Total Samples=189, Total Detects=0, Total LODs=189, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0009, Avg Residue (PCT=100)=0.000863, LODRES (NonDetects)=0.000863<br>TOTALZ=0<br>TOTALLOD=189<br>LODRES=0.000863 |
| RDF#41 Eggplant.rdf<br>'PDP Data: EPFR (2005,2006), Total Samples=1476, Total Detects=0, Total LODs=1476, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0095, Avg Residue (PCT=100)=0.009500, LODRES (NonDetects)=0.009500<br>TOTALZ=0<br>TOTALLOD=1476<br>LODRES=0.009500 | RDF#42 Pepper_Nonbell.rdf<br>'PDP Data: HPFR (2019), Total Samples=651, Total Detects=0, Total LODs=651, Total Zeros=0<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.1, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=586<br>TOTALLOD=65<br>LODRES=0.005000 |
| RDF#43 Pepper_Bell.rdf<br>'PDP Data: PPFR (2019), Total Samples=354, Total Detects=0, Total LODs=35, Total Zeros=319<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=319<br>TOTALLOD=35<br>LODRES=0.00500 | RDF#44 Cantaloupe.rdf<br>'PDP Data: CNFR (2019), Total Samples=354, Total Detects=0, Total LODs=18, Total Zeros=336<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=336<br>TOTALLOD=18<br>LODRES=0.001000 |
| RDF#45 Watermelon.rdf<br>'PDP Data: WMFR (2014,2015), Total Samples=760, Total Detects=0, Total LODs=19, Total Zeros=741<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=741<br>TOTALLOD=19<br>LODRES=0.001000 | RDF#46 Cucumber.rdf<br>'PDP Data: CUFR (2015,2016,2017), Total Samples=1510, Total Detects=0, Total LODs=151, Total Zeros=1359<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=1359<br>TOTALLOD=151<br>LODRES=0.005000 |

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| RDF#47 Squash_Summer.rdf<br>'PDP Data: SSFR (2012,2013,2014), Total Samples=1426, Total Detects=0, Total LODs=71, Total Zeros=1355<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.001830, LODRES (NonDetects)=0.001830<br>TOTALZ=1355<br>TOTALLOD=71<br>LODRES=0.001830 | RDF#48 Squash_Winter_Fresh.rdf<br>'PDP Data: WSFR (2011,2012,2013), Total Samples=1115, Total Detects=0, Total LODs=56, Total Zeros=1059<br>'MaxPCT=0.050, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000750, LODRES (NonDetects)=0.000750<br>TOTALZ=1059<br>TOTALLOD=56<br>LODRES=0.000750 |
| RDF#49 Orange.rdf<br>'PDP Data: OGFR (2015,2016), Total Samples=1415, Total Detects=0, Total LODs=425, Total Zeros=990<br>'MaxPCT=0.300, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0015, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=990<br>TOTALLOD=425<br>LODRES=0.005000 | RDF#50 Orange_Juice.rdf<br>'PDP Data: OJCO,OJFZ,OJRE (2019), Total Samples=191, Total Detects=0, Total LODs=57, Total Zeros=134<br>'MaxPCT=0.300, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.000650, LODRES (NonDetects)=0.000650<br>TOTALZ=134<br>TOTALLOD=57<br>LODRES=0.000650 |
| RDF#51 Tangerine.rdf<br>'PDP Data: TAFR (2019), Total Samples=180, Total Detects=0, Total LODs=45, Total Zeros=135<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=135<br>TOTALLOD=45<br>LODRES=0.001000 | RDF#52 Grapefruit.rdf<br>'PDP Data: GFFR (2015,2016,2017), Total Samples=1407, Total Detects=0, Total LODs=211, Total Zeros=1196<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.000551, LODRES (NonDetects)=0.000551<br>TOTALZ=1196<br>TOTALLOD=211<br>LODRES=0.000551 |
| RDF#53 Apple_Fresh.rdf<br>'PDP Data: APFR (2014,2015,2016), Total Samples=1387, Total Detects=0, Total LODs=35, Total Zeros=1352<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=1352<br>TOTALLOD=35<br>LODRES=0.001000 | RDF#54 Apple_Juice.rdf<br>'PDP Data: AJCO,AJRE (2012,2013), Total Samples=775, Total Detects=0, Total LODs=19, Total Zeros=756<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=756<br>TOTALLOD=19<br>LODRES=0.001000 |
| RDF#55 , Apple_Sauce.rdf<br>'PDP Data: ACCA,ACGJ,ACNP,ACOT,ACPC,ACPU (2016,2017), Total Samples=760, Total Detects=0, Total LODs=19, Total Zeros=741<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=741<br>TOTALLOD=19<br>LODRES=0.001000 | RDF#56 Apple_Sauce_BF.rdf<br>'PDP Data: IAPU (2012,2013), Total Samples=775, Total Detects=0, Total LODs=19, Total Zeros=756<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=756<br>TOTALLOD=19<br>LODRES=0.005000 |

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| RDF#57 Pear.rdf<br>'PDP Data: PEFR (2015,2016), Total Samples=1412, Total Detects=0, Total LODs=282, Total Zeros=1130<br>'MaxPCT=0.200, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=1130<br>TOTALLOD=282<br>LODRES=0.002500 | RDF#58 Pear_BF.rdf<br>'PDP Data: IPGJ,IPPC,IPSE (2010,2011), Total Samples=776, Total Detects=0, Total LODs=155, Total Zeros=621<br>'MaxPCT=0.200, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0003, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=621<br>TOTALLOD=155<br>LODRES=0.001500 |
| RDF#59 Pear_Canned.rdf<br>'PDP Data: CPCA (2000), Total Samples=106, Total Detects=0, Total LODs=21, Total Zeros=85<br>'MaxPCT=0.200, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0007, Avg Residue (PCT=100)=0.003575, LODRES (NonDetects)=0.003575<br>TOTALZ=85<br>TOTALLOD=21<br>LODRES=0.003575 | RDF#60 Cherries_Frozen.rdf<br>'PDP Data: CZFZ (2014,2015,2016), Total Samples=879, Total Detects=0, Total LODs=220, Total Zeros=659<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0005, Avg Residue (PCT=100)=0.002000, LODRES (NonDetects)=0.002000<br>TOTALZ=659<br>TOTALLOD=220<br>LODRES=0.002000 |
| RDF#61 Peach_Fresh.rdf<br>'PDP Data: PCFR (2013,2014,2015), Total Samples=1354, Total Detects=0, Total LODs=34, Total Zeros=1320<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=100)=0.005000, LODRES (NonDetects)=0.005000<br>TOTALZ=1320<br>TOTALLOD=34<br>LODRES=0.005000 | RDF#62 Plum.rdf<br>'PDP Data: PUFR (2011,2012,2013), Total Samples=1347, Total Detects=0, Total LODs=1347, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0009, Avg Residue (PCT=100)=0.000938, LODRES (NonDetects)=0.000938<br>TOTALZ=0<br>TOTALLOD=1347<br>LODRES=0.000938 |
| RDF#63 Nectarine.rdf<br>'PDP Data: NEFR (2013,2014,2015), Total Samples=1802, Total Detects=0, Total LODs=1802, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0011, Avg Residue (PCT=100)=0.001076, LODRES (NonDetects)=0.001076<br>TOTALZ=0<br>TOTALLOD=1802<br>LODRES=0.001076 | |
| RDF#64 Peach_BF.rdf<br>'PDP Data: IHPU (2012), Total Samples=777, Total Detects=0, Total LODs=19, Total Zeros=758<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000869, LODRES (NonDetects)=0.000869<br>TOTALZ=758<br>TOTALLOD=19<br>LODRES=0.000869 | RDF#65 Peach_Canned.rdf<br>'PDP Data: CCCA (2018), Total Samples=755, Total Detects=0, Total LODs=19, Total Zeros=736<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.001564, LODRES (NonDetects)=0.001564<br>TOTALZ=736<br>TOTALLOD=19<br>LODRES=0.001564 |

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| RDF#66 Raspberry_Fresh.rdf<br>'PDP Data: RSFR,RZFZ (2013), Total Samples=705,<br>Total Detects=1, Total LODs=493, Total Zeros=211<br>'MaxPCT=0.700, Avg Residue (Detects<br>Only)=0.002900, Avg Residue (MaxPCT)=0.0008, Avg<br>Residue (PCT=100)=0.001130, LODRES<br>(NonDetects)=0.001128<br>TOTALZ=211<br>TOTALLOD=493<br>LODRES=0.001128<br>0.0029 | RDF#67 Blueberry_Fresh.rdf<br>'PDP Data: BBFR,BZFZ (2014), Total Samples=707,<br>Total Detects=31, Total LODs=323, Total Zeros=353<br>'MaxPCT=0.500, Avg Residue (Detects<br>Only)=0.008413, Avg Residue (MaxPCT)=0.0011, Avg<br>Residue (PCT=100)=0.001923, LODRES<br>(NonDetects)=0.001625<br>TOTALZ=353<br>TOTALLOD=323<br>LODRES=0.001625<br>0.034, 0.017, 0.015, 0.015, 0.014, 0.012, 0.011, 0.011<br>0.0099, 0.0095, 0.0088, 0.008, 0.0077, 0.0072, 0.007<br>0.0066, 0.0063, 0.0061, 0.0058, 0.0054, 0.0053, 0.005<br>0.0047, 0.0046,, 0.0046, 0.004, 0.0036, 0.0034<br>0.0031, 0.0026, 0.0026 |
| RDF#68 Grape_Fresh.rdf<br>'PDP Data: GRFR (2015,2016), Total Samples=1416,<br>Total Detects=0, Total LODs=35, Total Zeros=1381<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0001, Avg Residue<br>(PCT=100)=0.002500, LODRES (NonDetects)=0.002500<br>TOTALZ=0<br>TOTALLOD=1416<br>LODRES=0.002500 | RDF#69 Grape_Juice.rdf<br>'PDP Data: GJCO,GJFZ,GJRE (2013,2014), Total<br>Samples=677, Total Detects=0, Total LODs=17, Total<br>Zeros=660<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0000, Avg Residue<br>(PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=677<br>LODRES=0.001000 |
| RDF#70 Cranberry.rdf<br>'PDP Data: CAFR (2016,2017), Total Samples=467,<br>Total Detects=0, Total LODs=467, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0010, Avg Residue<br>(PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=467<br>LODRES=0.001000 | RDF#71 Strawberry_Fresh.rdf<br>'PDP Data: STFR (2014,2015,2016), Total<br>Samples=1412, Total Detects=28, Total LODs=607,<br>Total Zeros=777<br>'MaxPCT=0.450, Avg Residue (Detects<br>Only)=0.003132, Avg Residue (MaxPCT)=0.0005, Avg<br>Residue (PCT=100)=0.000972, LODRES<br>(NonDetects)=0.000928<br>TOTALZ=777<br>TOTALLOD=607<br>LODRES=0.000928<br>0.0072, 0.0063, 0.0059, 0.0051, 0.0042<br>0.0041, 0.0039, 0.0038, 0.0037, 0.0037<br>0.0036, 0.0033, 0.0029, 0.0028, 0.0027<br>0.0027, 0.0026, 0.0024, 0.0022, 0.0021<br>0.002, 0.0019, 0.0016, 0.0015, 0.0014<br>0.0014, 0.0014, 0.0013 |
| RDF#72 Strawberry_Frozen.rdf<br>'PDP Data: SZFZ (2018,2019), Total Samples=753,<br>Total Detects=31, Total LODs=308, Total Zeros=414<br>'MaxPCT=0.450, Avg Residue (Detects<br>Only)=0.003332, Avg Residue (MaxPCT)=0.0005, Avg<br>Residue (PCT=100)=0.001096, LODRES<br>(NonDetects)=0.001000<br>TOTALZ=414<br>TOTALLOD=308 | RDF#73 Almond.rdf<br>'PDP Data: ALCA,ALFR,ALPC,ALSE (2007,2008), Total<br>Samples=547, Total Detects=0, Total LODs=547, Total<br>Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0020, Avg Residue<br>(PCT=100)=0.002000, LODRES (NonDetects)=0.002000<br>TOTALZ=0<br>TOTALLOD=547 |

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| LODRES=0.001000<br>0.0073, 0.0061, 0.0046, 0.0046, 0.0044, 0.0044,<br>0.0044, 0.0043, 0.0042, 0.0038, 0.0034, 0.0033<br>0.0033, 0.0032, 0.0031, 0.0029, 0.0029, 0.0028<br>0.0028, 0.0026, 0.0026, 0.0026, 0.0024, 0.0024<br>0.0023, 0.0023, 0.0022, 0.0021, 0.002, 0.002, 0.002 | LODRES=0.002000 |
| RDF#74 Barley_Grain.rdf<br>'PDP Data: BYGR (2002,2003), Total Samples=1047,<br>Total Detects=1, Total LODs=1046, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects<br>Only)=0.017000, Avg Residue (MaxPCT)=0.0050, Avg<br>Residue (PCT=100)=0.005011, LODRES<br>(NonDetects)=0.005000<br>TOTALZ=0<br>TOTALLOD=1046<br>LODRES=0.005000<br>0.017 | RDF#75 Corn_Grain.rdf<br>'PDP Data: COGR (2007,2008), Total Samples=1290,<br>Total Detects=1, Total LODs=1289, Total Zeros=0<br>'MaxPCT=0.025 (Blended RAC), Avg Residue (Detects<br>Only)=0.024000, Avg Residue (MaxPCT)=0.0020, Avg<br>Residue (PCT=100)=0.002017, LODRES<br>(NonDetects)=0.002000<br>TOTALZ=0<br>TOTALLOD=1289<br>LODRES=0.002000<br>0.024 |
| | RDF#76 Corn_Sweet_Canned.rdf<br>'PDP Data: CSCA (2001,2002), Total Samples=723,<br>Total Detects=0, Total LODs=18, Total Zeros=705<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0003, Avg Residue<br>(PCT=100)=0.002930, LODRES (NonDetects)=0.002930<br>TOTALZ=705<br>TOTALLOD=18<br>LODRES=0.002930 |
| RDF#77 Corn_Sweet_Fresh.rdf<br>PDP Data: CBFR (2014,2015), Total Samples=602,<br>Total Detects=0, Total LODs=15, Total Zeros=587<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0001, Avg Residue<br>(PCT=100)=0.001250, LODRES (NonDetects)=0.001250<br>TOTALZ=587<br>TOTALLOD=15<br>LODRES=0.001250 | RDF#78 Corn_Sweet_Frozen.rdf<br>'PDP Data: CSFZ (2014,2015), Total Samples=106,<br>Total Detects=0, Total LODs=3, Total Zeros=103<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg<br>Residue (MaxPCT)=0.0001, Avg Residue<br>(PCT=100)=0.001250, LODRES (NonDetects)=0.001250<br>TOTALZ=103<br>TOTALLOD=3<br>LODRES=0.001250 |
| RDF#79 Oat_Bran.rdf<br>PDP Data: OABR (2019), Total Samples=14, Total<br>Detects=0, Total LODs=14, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects<br>Only)=., Avg Residue (MaxPCT)=0.0006, Avg Residue<br>(PCT=100)=0.000621, LODRES (NonDetects)=0.000621<br>TOTALZ=0<br>TOTALLOD=14<br>LODRES=0.000621 | RDF#80 Oat_Grain.rdf<br>'PDP Data: OAGR,OARO,OASC (2019), Total<br>Samples=681, Total Detects=0, Total LODs=681, Total<br>Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects<br>Only)=., Avg Residue (MaxPCT)=0.0006, Avg Residue<br>(PCT=100)=0.000623, LODRES (NonDetects)=0.000623<br>TOTALZ=0<br>TOTALLOD=681<br>LODRES=0.000623 |
| RDF#81 Rice_White.rdf<br>'PDP Data: RIGR,RIOT (2018,2019), Total<br>Samples=754, Total Detects=0, Total LODs=754, Total<br>Zeros=0 | RDF#82 Wheat_Grain.rdf<br>'PDP Data: WHGR (2005,2006), Total Samples=1361,<br>Total Detects=0, Total LODs=1361, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects<br>Only)=., Avg Residue (MaxPCT)=0.0025, Avg Residue<br>(PCT=100)=0.002500, LODRES (NonDetects)=0.002500 |

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| 'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0006, Avg Residue (PCT=100)=0.000612, LODRES (NonDetects)=0.000612<br>TOTALZ=0<br>TOTALLOD=754<br>LODRES=0.000612 | TOTALZ=0<br>TOTALLOD=1361<br>LODRES=0.002500 |
| RDF#83 Wheat_Flour.rdf<br>'PDP Data: WFGR (2018), Total Samples=758, Total Detects=4, Total LODs=754, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=0.004150, Avg Residue (MaxPCT)=0.0006, Avg Residue (PCT=100)=0.000619, LODRES (NonDetects)=0.000600<br>TOTALZ=0<br>TOTALLOD=754<br>LODRES=0.000600<br>0.01<br>0.0028<br>0.002<br>0.0018 | |
| RDF#84 Malaoxon Fig FT data 100%CT<br>TOTALZ=0<br>TOTALNZ=12<br><br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025<br>0.025 | RDF#85 Asparagus_Canned.rdf<br>'PDP Data: AACA (2003), Total Samples=101, Total Detects=0, Total LODs=25, Total Zeros=76<br>'MaxPCT=0.250, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0004, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=76<br>TOTALLOD=25<br>LODRES=0.001500 |
| RDF#86 Avocado.rdf<br>'PDP Data: AVFR (2012), Total Samples=352, Total Detects=0, Total LODs=35, Total Zeros=317<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0007, Avg Residue (PCT=100)=0.007500, LODRES (NonDetects)=0.007500<br>TOTALZ=317<br>TOTALLOD=35<br>LODRES=0.007500 | RDF#87 Grape_Raisin.rdf<br>'PDP Data: RAOT,RADR (2018), Total Samples=756, Total Detects=0, Total LODs=19, Total Zeros=737<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0000, Avg Residue (PCT=100)=0.000750, LODRES (NonDetects)=0.000750<br>TOTALZ=0<br>TOTALLOD=756<br>LODRES=0.000750 |
| RDF#88 Mango.rdf<br>'PDP Data: MAFR (2017,2018), Total Samples=709, Total Detects=0, Total LODs=709, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0008, Avg Residue (PCT=100)=0.000796, LODRES (NonDetects)=0.000796 | RDF#89 Papaya.rdf<br>'PDP Data: YAFR (2011,2012), Total Samples=750, Total Detects=0, Total LODs=750, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000 |

| MALAOXON ONLY | |
|---|---|
| TOTALZ=0<br>TOTALLOD=709<br>LODRES=0.000796 | TOTALZ=0<br>TOTALLOD=750<br>LODRES=0.001000 |
| RDF#90 PeanutButter.rdf<br>'PDP Data: PBCA,PBGJ,PBNP,PBOT,PBPC (2015), Total Samples=315, Total Detects=0, Total LODs=315, Total Zeros=0<br>'MaxPCT=1.000 (Blended RAC), Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.2500, Avg Residue (PCT=100)=0.250000, LODRES (NonDetects)=0.250000<br>TOTALZ=0<br>TOTALLOD=315<br>LODRES=0.250000 | RDF#91 Pineapple.rdf<br>'PDP Data: PNFR (2000,2001,2002), Total Samples=1454, Total Detects=0, Total LODs=1454, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0104, Avg Residue (PCT=100)=0.010394, LODRES (NonDetects)=0.010394<br>TOTALZ=0<br>TOTALLOD=1454<br>LODRES=0.010394 |
| RDF#92 Pineapple_Canned.rdf<br>'PDP Data: NCCA (2017), Total Samples=756, Total Detects=0, Total LODs=756, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0038, Avg Residue (PCT=100)=0.003813, LODRES (NonDetects)=0.003813<br>TOTALZ=0<br>TOTALLOD=756<br>LODRES=0.003813 | RDF#93 Malaoxon Guava FT 100%CT<br>TOTALZ=0<br>TOTALNZ=20<br><br>0.025 0.025 0.1 0.11 0.15<br>0.18 0.05 0.05 0.05 0.09<br>0.025 0.025 0.025 0.025 0.025<br>0.025 0.025 0.025 0.025 0.025 |
| RDF#94 Malaoxon Passionfruit 100%CT<br>TOTALZ=0<br>TOTALNZ=12<br><br>0.025 0.025 0.025 0.025<br>0.025 0.025 0.025 0.025<br>0.025 0.025 0.025 0.025<br>0.025 | RDF#95 Malaoxon Date FT data 100%CT<br>TOTALNZ=0<br>TOTALZ=3<br><br>0.338<br>0.212<br>0.15 |
| RDF#96 Plum_Prune.rdf<br>'PDP Data: PDDR,PDOT (2017,2018), Total Samples=726, Total Detects=0, Total LODs=726, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=726<br>LODRES=0.001000 | RDF#97 Pumpkin.rdf<br>'PDP Data: WSFR (2011,2012,2013) transfer winter squash, Total Samples=1115, Total Detects=0, Total LODs=167, Total Zeros=948<br>'MaxPCT=0.150, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0001, Avg Residue (PCT=0.15)=0.00100, LODRES (NonDetects)=0.00100<br>TOTALZ=948<br>TOTALLOD=167<br>LODRES=0.0010 |
| RDF#98 Pecan.rdf<br>'RDF Filename=Almond.rdf transfer to Pecan<br>'Residue=Concen, RPF=RPF, Brigetable=BT_Recent, PFactor=PF1, PCT=PCT_Max, LOD Rule=LOD3<br>'PDP Data: ALCA,ALFR,ALPC,ALSE (2007,2008), Total Samples=547, Total Detects=0, Total LODs=547, Total Zeros=0<br>'MaxPCT=0.025, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.025, Avg Residue | RDF# 99 Walnuts.rdf<br>'RDF Filename=Almond.rdf transfer to Walnuts<br>'PDP Data: AL (2007,2008), Total Samples=547, Total Detects=0, Total LODs=547, Total Zeros=0<br>'MaxPCT=0.100, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.10, Avg Residue (PCT=100)=0.002000, LODRES (NonDetects)=0.002000<br>TOTALZ=492<br>TOTALLOD=55<br>LODRES=0.002 |

| MALAOXON ONLY | |
|---|---|
| (PCT=0.01)=0.002000, LODRES (NonDetects)=0.002000<br>TOTALZ=533<br>TOTALLOD=14<br>LODRES=0.002000 | |
| RDF#100 Mushroom.rdf<br>'PDP Data: MUFR (2011,2012,2013), Total Samples=1462, Total Detects=0, Total LODs=1462, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0010, Avg Residue (PCT=100)=0.001000, LODRES (NonDetects)=0.001000<br>TOTALZ=0<br>TOTALLOD=1462<br>LODRES=0.001000 | RDF#101Cilantro (parsley leaves)<br>'RDF Filename=Cilantro.rdf<br>'PDP Data: CLFR (2009,2010), Total Samples=739, Total Detects=0, Total LODs=739, Total Zeros=0<br>'MaxPCT=1.000, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0015, Avg Residue (PCT=100)=0.001500, LODRES (NonDetects)=0.001500<br>TOTALZ=0<br>TOTALLOD=739<br>LODRES=0.001500 |
| RDF#102 Orange_Juice.rdf<br>'PDP Data: OJCO,OJFZ,OJRE (2019), Total Samples=191, Total Detects=0, Total LODs=57, Total Zeros=134<br>'MaxPCT=0.300, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.000650, LODRES (NonDetects)=0.000650<br>TOTALZ=134<br>TOTALLOD=57<br>LODRES=0.000650 | RDF#103 Tangerine_Juice.rdf<br>'PDP Data: OJCO,OJFZ,OJRE (2019), Total Samples=191, Total Detects=0, Total LODs=48, Total Zeros=143<br>'MaxPCT=0.300, Avg Residue (Detects Only)=., Avg Residue (MaxPCT)=0.0002, Avg Residue (PCT=100)=0.000650, LODRES (NonDetects)=0.000650<br>TOTALZ=143<br>TOTALLOD=48<br>LODRES=0.000650 |

**Attachment 5: Malathion and Malaoxon Field trials for Cotton, Dates, Figs, Guava, Mints, and Passion fruit**

**Cottonseed oil- Blended** (MRID 43585301; M. Xue, D213105, D213929, 11/05/1998)
Cottonseed oil is a blended processed commodity; therefore, it was appropriate to use a point estimate in the assessment. Apparent residues of malathion and malaoxon were nondetectable in/on one untreated sample of cottonseed (<0.05 ppm each), and in one sample each of hulls (<0.05 ppm), meal (<0.01 ppm), crude oil (<0.01 ppm), and bleached and deodorized oil (<0.01 ppm) processed from untreated cottonseed. Apparent residues of malathion were detectable in one refined oil sample (0.01 ppm) processed from untreated cottonseed; apparent residues of malaoxon were nondetectable (<0.01 ppm) in that sample. The cottonseed processing study (MRID 43585301) is adequate to satisfy reregistration requirements. The combined residues of malathion and malaoxon did not concentrate in cottonseed hulls, meal, crude oil, refined oil, and bleached and deodorized oil processed from cottonseed bearing detectable residues following treatment with the 5 lb/gal EC formulation at 5x the maximum single application rate

**Dates** (MRID 43269401; K. Dockter, D217170, 09/02/1997)
The proposed use requires a label amendment to accommodate the 7th application on **date trees,** i.e., 40 lbs EP/A 7 days. pre-harvest.

| dates | Parent | oxon | 22x | Total |
|---|---|---|---|---|
| | 1.43 | 0.338 | 7.436 | 8.866 |
| | 3.26 | 0.212 | 4.664 | 7.924 |
| | 2.33 | 0.15 | 3.3 | 5.63 |

**Figs** (MRID 44061201; M. Xue, 228271, 09/29/1998)
The combined residues of malathion and malaoxon ranged from <0.10 to <0.41 ppm in/on fresh fig harvested five days following the last of one to three foliar applications, with a 5-day retreatment interval, using the EC formulation at 2.5 lb ai/A/application.

| figs | Parent | oxon | 22x | Total |
|---|---|---|---|---|
| | 0.089 | 0.025 | 0.55 | 0.639 |
| | 0.197 | 0.025 | 0.55 | 0.747 |
| | 0.025 | 0.025 | 0.55 | 0.575 |
| | 0.236 | 0.025 | 0.55 | 0.786 |
| | 0.278 | 0.025 | 0.55 | 0.828 |
| | 0.54 | 0.025 | 0.55 | 1.09 |
| | 0.118 | 0.025 | 0.55 | 0.668 |
| | 0.317 | 0.025 | 0.55 | 0.867 |
| | 0.083 | 0.025 | 0.55 | 0.633 |
| | 0.362 | 0.025 | 0.55 | 0.912 |
| | 0.367 | 0.025 | 0.55 | 0.917 |
| | 0.953 | 0.025 | 0.55 | 1.503 |

**Guava** (MRID 44391501; W. Smith, D239267, 01/27/1998)
The combined residues of malathion and malaoxon ranged from <0.14 to 0.48 ppm in/on guava harvested two days following the last of 11 or 13 foliar applications, with a 3- to 19-day retreatment interval of a representative 5 lb/gal EC formulation at 1.25 lb ai/A/application (approximately 1x the proposed maximum single and seasonal application rates) using ground equipment.

| guva | Parent | oxon | 22x | Total |
|---|---|---|---|---|
| | 0.09 | 0.025 | 0.55 | 0.64 |
| | 0.1 | 0.025 | 0.55 | 0.65 |
| | 0.16 | 0.025 | 0.55 | 0.71 |
| | 0.24 | 0.025 | 0.55 | 0.79 |
| | 0.06 | 0.025 | 0.55 | 0.61 |
| | 0.07 | 0.025 | 0.55 | 0.62 |
| | 0.1 | 0.025 | 0.55 | 0.65 |
| | 0.12 | 0.025 | 0.55 | 0.67 |
| | 0.08 | 0.025 | 0.55 | 0.63 |
| | 0.1 | 0.025 | 0.55 | 0.65 |
| | 0.025 | 0.025 | 0.55 | 0.575 |
| | 0.025 | 0.025 | 0.55 | 0.575 |
| | 0.09 | 0.1 | 2.2 | 2.29 |
| | 0.1 | 0.11 | 2.42 | 2.52 |
| | 0.13 | 0.15 | 3.3 | 3.43 |
| | 0.3 | 0.18 | 3.96 | 4.26 |
| | 0.025 | 0.05 | 1.1 | 1.125 |
| | 0.07 | 0.05 | 1.1 | 1.17 |
| | 0.09 | 0.05 | 1.1 | 1.19 |
| | 0.13 | 0.09 | 1.98 | 2.11 |

**Mint and its processed commodities- Blended** (MRID 44124801; M. Xue, D228271, )

The mint field trial data indicate that the combined residues of malathion and malaoxon in/on peppermint and spearmint did not exceed the established 8 ppm tolerances (presently expressed as malathion *per se*). The combined residues of malathion and malaoxon range from <0.43 to 1.43 ppm in/on peppermint and spearmint tops harvested seven days following the last of three foliar applications, with a 7-day retreatment interval, using the EC formulation at 0.94 lb ai/A/application with ground equipment. The mint processing data indicate that the combined residues of malathion and malaoxon concentrated 13x in mint oil for malathion and 0.3x for malaoxon processed from mint tops bearing detectable residues following applications at 5x. The HAFT (combined residues) from mint field trials reflecting the maximum proposed use pattern is 1.1 ppm. Based on this HAFT and the observed concentration factor, the maximum expected combined residues are 13.97 ppm for mint oil.

| Mint | Parent | Oxon |
|---|---|---|
| | 0.62 | <0.05 |
| | 0.98 | <0.05 |
| | 1.28 | <0.05 |
| | 1.38 | <0.05 |
| | 0.38 | <0.05 |
| | 0.51 | <0.05 |
| | 0.89 | <0.05 |
| | 1.16 | 0.10 |

**Passionfruit** (MRID No. 44472801; M. Xue, D243539, 06/16/1998)
Three field trials were conducted in Florida (2) and Hawaii (1). No detectable residues of malaoxon were found in any of the treated samples from this study. Malathion residues found in treated samples ranged from < 0.05 (below the limit of quantitation) to 0.071 ppm at the application rate of 1.25 lb ai/A, treated 8 times, at 6 - 9 day intervals, up to a maximum of 10 lbs ai/A per year, and a PHI of 3 and 7 days.

| Passionfruit | Parent | Oxon |
|---|---|---|
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | <0.05 | <0.05 |
| | 0.056 | <0.05 |
| | 0.071 | <0.05 |

**Flaxseed** (MRID 43991401) The combined residues of malathion and malaoxon from the flax field trial study did not exceed the established 0.l ppm tolerance; the residues were below the limit of quantitation (LOQ = 0.05 ppm each).

## Attachment 6. DEEM-FCID Acute and Steady State Residue Input File (Food Only) for Malathion

```
Filename: C:\Users\spiper\OneDrive - Environmental Protection Agency
(EPA)\Documents\Malathion\Malathion\Malathion
DEEM\Malathion_DEEM\Malathion\MALATHIONP_ACUTE&SS2.R10
Chemical: MalathionP
RfD(Chronic): 0 mg/kg bw/day  NOEL(Chronic): 0 mg/kg bw/day
RfD(Acute): 1 mg/kg bw/day  NOEL(Acute):  1 mg/kg bw/day
Date created/last modified: 02-27-2023/08:08:32       Program ver. 4.02, 05-10-c
Comment: Malathion Food Only- Acute & Steady State
--------------------------------------------------------------------------------
RDL indices and parameters for Monte Carlo Analysis:
Index Dist Parameter #1        Param #2  Param #3  Comment
  #   Code
----- ---- ------------        --------  --------  -------
  1    6   Beet_garden.rdf
  2    6   Carrot.rdf
  3    6   Carrot_BF.rdf
  4    6   Potato_wPeel_Uncooked.rdf
  5    6   Potato_wopeel_Frozen.rdf
  6    6   Potato_Sweet.rdf
  7    6   Potato_Sweet_BF.rdf
  8    6   Lettuce_Fresh.rdf
  9    6   Lettuce_Fresh_Leaf.rdf
  10   6   Kale.rdf
  11   6   Onion_Bulb.rdf
  12   6   Onion_Green.rdf
  13   6   Spinach_Fresh.rdf
  14   6   Collards.rdf
  15   6   Lettuce_Fresh_Head.rdf
  16   6   Spinach_Canned.rdf
  17   6   Spinach_Frozen.rdf
  18   6   Apple_Fresh100CT.rdf
  19   6   Asparagus.rdf
  20   6   Broccoli.rdf
  21   6   Cabbage.rdf
  22   6   Cauliflower.rdf
  23   6   Soybean_Grain.rdf
  24   6   InfantFormula_Soy.rdf
  25   6   Bean_Green_Canned.rdf
  26   6   Bean_Green_Fresh.rdf
  27   6   Bean_Green_Frozen.rdf
  28   6   Bean_Green_BF.rdf
  29   6   Pea_Snap.rdf
  30   6   Pea_Sweet_Canned.rdf
  31   6   Pea_Sweet_Frozen.rdf
  32   6   Pea_BF.rdf
  33   6   Bean_Black.rdf
  34   6   Bean_Kidney.rdf
  35   6   Bean_Pinto.rdf
  36   6   Bean_Garbanzo.rdf
  37   6   Tomato_Cherry.rdf
  38   6   Tomato_Fresh.rdf
  39   6   Tomato_Canned.rdf
  40   6   Tomato_Paste.rdf
  41   6   Eggplant.rdf
  42   6   Pepper_Nonbell.rdf
  43   6   Pepper_Bell.rdf
  44   6   Cantaloupe.rdf
  45   6   Watermelon.rdf
  46   6   Cucumber.rdf
  47   6   Squash_Summer.rdf
  48   6   Squash_Winter_Fresh.rdf
  49   6   Squash_Winter_Frozen.rdf
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```
50   6   Orange.rdf
51   6   Orange_Juice.rdf
52   6   Tangerine.rdf
53   6   Grapefruit.rdf
54   6   Apple_Fresh.rdf
55   6   Apple_Juice.rdf
56   6   Apple_Sauce.rdf
57   6   Apple_Sauce_BF.rdf
58   6   Pear.rdf
59   6   Pear_BF.rdf
60   6   Pear_Canned.rdf
61   6   Cherry.rdf
62   6   Peach_Fresh.rdf
63   6   Plum.rdf
64   6   Nectarine.rdf
65   6   Peach_BF.rdf
66   6   Peach_Canned.rdf
67   6   Raspberry_Fresh.rdf
68   6   Blueberry_Fresh.rdf
69   6   Grape_Fresh.rdf
70   6   Grape_Juice.rdf
71   6   Cranberry.rdf
72   6   Strawberry_Fresh.rdf
73   6   Strawberry_Frozen.rdf
74   6   Almond.rdf
75   6   Barley_Grain.rdf
76   6   Corn_Grain.rdf
77   6   Corn_Syrup.rdf
78   6   Corn_Sweet_Canned.rdf
79   6   Corn_Sweet_Fresh.rdf
80   6   Corn_Sweet_Frozen.rdf
81   6   Oat_Bran.rdf
82   6   Oat_Grain.rdf
83   6   Rice_White.rdf
84   6   Wheat_Grain.rdf
85   6   Wheat_Flour.rdf
86   6   Beef_Meat.rdf
87   6   Beef_Fat.rdf
88   6   Beef_Liver.rdf
89   6   Pork_Meat.rdf
90   6   Pork_Fat.rdf
91   6   Milk.rdf
92   6   InfantFormula_Dairy.rdf
93   6   Chicken_Meat.rdf
94   6   Chicken_Liver.rdf
95   6   Chicken_Adipose.rdf
96   6   Egg.rdf
97   6   FigFT.rdf
98   6   Asparagus_Canned.rdf
99   6   Avocado.rdf
100  6   Grape_Raisin.rdf
101  6   Mango.rdf
102  6   Papaya.rdf
103  6   PeanutButter.rdf
104  6   Pineapple.rdf
105  6   Pineapple_Canned.rdf
106  6   GuavatFT.rdf
107  6   Date.rdf
108  6   PassionfruitFT.rdf
109  6   Plum_Prune.rdf
110  6   Banana.rdf
111  6   Pumpkin.rdf
112  6   Pecan.rdf
113  6   Walnut.rdf
114  6   Mushroom.rdf
115  6   Onion_Green100CT.rdf
116  6   Cilantro.rdf
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  117  6   Celery100PCT.rdf
  118  6   Grapefruit_juice.rdf
  119  6   Tangerine_juice.rdf

   EPA      Crop Commodity Name                        Def Res     Adj.Factors  RDLComment
   Code      Grp                                        (ppm)       #1     #2   Pntr
---------- ---- --------------------------------  ----------  ------ ------ ---  -------
9500177000 O    Grape, leaves                        8.000000   1.000  1.000  69  grape
9500188000 O    Hop                                  1.000000   1.000  1.000      hop to
    Full comment: hop tolerance
9500263000 O    Peanut                               8.000000   1.000  1.000 103  peanut
9500264000 O    Peanut, butter                       8.000000   1.000  1.000 103  peanut
9500265000 O    Peanut, oil                          0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
9500275000 O    Peppermint                           0.090000   1.000  1.000      mint F
    Full comment: mint FT
9500276000 O    Peppermint, oil                      0.025000  13.000  1.000      mint o
    Full comment: mint oil
9500352000 O    Spearmint                            0.090000   1.000  1.000      mint F
    Full comment: mint FT
9500353000 O    Spearmint, oil                       0.025000  13.000  1.000      mint o
    Full comment: mint oil
0101050000 1AB  Beet, garden, roots                  8.000000   1.000  1.000   1  garden
    Full comment: garden beet
0101050001 1AB  Beet, garden, roots-babyfood        8.000000   1.000  1.000   1  garden
    Full comment: garden beet
0101052000 1A   Beet, sugar                          0.003000   1.000  1.000      garden
    Full comment: garden beet
0101053000 1A   Beet, sugar, molasses                0.003000   1.000  1.000      garden
    Full comment: garden beet
0101053001 1A   Beet, sugar, molasses-babyfood       0.003000   1.000  1.000      garden
    Full comment: garden beet
0101052001 1A   Beet, sugar-babyfood                 0.003000   1.000  1.000      garden
    Full comment: garden beet
0101078000 1AB  Carrot                               8.000000   1.000  1.000   2  carrot
0101079000 1AB  Carrot, juice                       8.000000   1.400  1.000   2  carrot
0101078001 1AB  Carrot-babyfood                     8.000000   1.000  1.000   3  carrot
    Full comment: carrot bf
0101190000 1AB  Horseradish                         8.000000   1.000  1.000   2  carrot
0101251000 1AB  Parsnip                             8.000000   1.000  1.000   2  carrot
0101251001 1AB  Parsnip-babyfood                    8.000000   1.000  1.000   3  carrot
    Full comment: carrot bf
0103296000 1C   Potato, chips                        0.000100   1.000  1.000      potato
0103297000 1C   Potato, dry (granules/ flakes)       0.000100   6.500  1.000      potato
0103297001 1C   Potato, dry (granules/ flakes)-b     0.000100   6.500  1.000      potato
0103298000 1C   Potato, flour                        0.000100   1.000  1.000      potato
0103298001 1C   Potato, flour-babyfood               0.000100   1.000  1.000      potato
0103300000 1C   Potato, tuber, w/o peel
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                     8.000000   1.000  1.000   5  potato
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                     8.000000   1.000  1.000   5  potato
                   211-Cooked; Fresh or N/S; Baked
                                                     8.000000   1.000  1.000   5  potato
                   212-Cooked; Fresh or N/S; Boiled
                                                     8.000000   1.000  1.000   5  potato
                   213-Cooked; Fresh or N/S; Fried
                                                     8.000000   1.000  1.000   5  potato
                   221-Cooked; Frozen; Baked         8.000000   1.000  1.000   5  potato
                   223-Cooked; Frozen; Fried         8.000000   1.000  1.000   5  potato
                   232-Cooked; Dried; Boiled         8.000000   1.000  1.000   5  potato
                   233-Cooked; Dried; Fried          8.000000   1.000  1.000   5  potato
                   240-Cooked; Canned; Cook Meth N/S
                                                     8.000000   1.000  1.000   5  potato
                   242-Cooked; Canned; Boiled        8.000000   1.000  1.000   5  potato
                   252-Cooked; Cured, etc; Boiled    8.000000   1.000  1.000   5  potato
0103300001 1C   Potato, tuber, w/o peel-babyfood     8.000000   1.000  1.000   5  potato
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| | | | | | | |
|---|---|---|---|---|---|---|
| 0103299000 1C | Potato, tuber, w/peel | 8.000000 | 1.000 | 1.000 | 4 | potato |
| 0103299001 1C | Potato, tuber, w/peel-babyfood | 8.000000 | 1.000 | 1.000 | 4 | potato |
| 0101314000 1AB | Radish, roots | 8.000000 | 1.000 | 1.000 | 2 | carrot |
| 0101327000 1AB | Rutabaga | 0.003000 | 1.000 | 1.000 | | garden |
| Full comment: garden beet | | | | | | |
| 0101331000 1AB | Salsify, roots | 8.000000 | 1.000 | 1.000 | 2 | carrot |
| 0101388000 1AB | Turnip, roots | 0.003000 | 1.000 | 1.000 | | garden |
| Full comment: garden beet | | | | | | |
| 0200051000 2 | Beet, garden, tops | 8.000000 | 1.000 | 1.000 | 1 | garden |
| Full comment: garden beet | | | | | | |
| 0200332000 2 | Salsify, tops | 8.000000 | 1.000 | 1.000 | 1 | garden |
| Full comment: garden beet | | | | | | |
| 0301165000 3A | Garlic, bulb | 0.003000 | 1.000 | 1.000 | | onion |
| Full comment: onion bulb | | | | | | |
| 0301165001 3A | Garlic, bulb-babyfood | 0.003000 | 1.000 | 1.000 | | onion |
| Full comment: onion bulb | | | | | | |
| 0302198000 3B | Leek | 8.000000 | 1.000 | 1.000 | 115 | green |
| Full comment: green onion | | | | | | |
| 0301237000 3A | Onion, bulb | 8.000000 | 1.000 | 1.000 | 11 | onion |
| Full comment: onion bulb | | | | | | |
| 0301238000 3A | Onion, bulb, dried | 0.000450 | 9.700 | 1.000 | | onion |
| Full comment: onion bulb | | | | | | |
| 0301238001 3A | Onion, bulb, dried-babyfood | 0.000450 | 9.700 | 1.000 | | onion |
| Full comment: onion bulb | | | | | | |
| 0301237001 3A | Onion, bulb-babyfood | 8.000000 | 1.000 | 1.000 | 11 | onion |
| Full comment: onion bulb | | | | | | |
| 0302239000 3B | Onion, green | 8.000000 | 1.000 | 1.000 | 12 | green |
| Full comment: green onion | | | | | | |
| 0301338000 3A | Shallot, bulb | 8.000000 | 1.000 | 1.000 | 12 | onion |
| Full comment: onion bulb | | | | | | |
| 0302338500 3B | Shallot, fresh leaves | 8.000000 | 1.000 | 1.000 | 12 | green |
| Full comment: green onion | | | | | | |
| 0401005000 4A | Amaranth, leafy | 0.001500 | 1.000 | 1.000 | | spinac |
| Full comment: spinach | | | | | | |
| 0402018000 4B | Arugula | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0402063000 4B | Broccoli raab | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0402062000 4B | Broccoli, Chinese | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0402070000 4B | Cabbage, Chinese, bok choy | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0401104000 4A | Chrysanthemum, garland | 0.001500 | 1.000 | 1.000 | | spinac |
| Full comment: spinach | | | | | | |
| 0401118000 4A | Cilantro, leaves | 1.000000 | 1.000 | 1.000 | 116 | cilant |
| Full comment: cilantro | | | | | | |
| 0401118001 4A | Cilantro, leaves-babyfood | 1.000000 | 1.000 | 1.000 | 116 | cilant |
| Full comment: cilantro | | | | | | |
| 0402117000 4B | Collards | 8.000000 | 1.000 | 1.000 | 14 | collar |
| Full comment: collard | | | | | | |
| 0402133000 4B | Cress, garden | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0402134000 4B | Cress, upland | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0401138000 4A | Dandelion, leaves | 0.001500 | 1.000 | 1.000 | | spinac |
| Full comment: spinach | | | | | | |
| 0401144000 4A | Dillweed | 0.001500 | 1.000 | 1.000 | | spinac |
| Full comment: spinach | | | | | | |
| 0401150000 4A | Endive | 0.001500 | 1.000 | 1.000 | | spinac |
| Full comment: spinach | | | | | | |
| 0402194000 4B | Kale | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0401204000 4A | Lettuce, head | 8.000000 | 1.000 | 1.000 | 15 | lettuc |
| Full comment: lettuce head | | | | | | |
| 0401205000 4A | Lettuce, leaf | 8.000000 | 1.000 | 1.000 | 9 | lettuc |
| Full comment: lettuce leaf | | | | | | |
| 0402229000 4B | Mustard greens | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0401248000 4A | Parsley, leaves | 0.001500 | 1.000 | 1.000 | | spinac |
| Full comment: spinach | | | | | | |
| 0401313000 4A | Radicchio | 8.000000 | 1.000 | 1.000 | 15 | lettuc |
| Full comment: lettuce | | | | | | |
| 0402315000 4B | Radish, tops | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0402318000 4B | Rape greens | 8.000000 | 1.000 | 1.000 | 10 | kale |
| 0401355000 4A | Spinach | | | | | |

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                110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                210-Cooked; Fresh or N/S; Cook Meth N/S
                                                8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                211-Cooked; Fresh or N/S; Baked
                                                8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                212-Cooked; Fresh or N/S; Boiled
                                                8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                213-Cooked; Fresh or N/S; Fried
                                                8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                215-Cooked; Fresh or N/S; Boiled/baked
                                                8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                220-Cooked; Frozen; Cook Meth N/S
                                                8.000000   1.000  1.000  17  spinac
            Full comment: spinach froz
                221-Cooked; Frozen; Baked       8.000000   1.000  1.000  17  spinac
            Full comment: spinach froz
                222-Cooked; Frozen; Boiled      8.000000   1.000  1.000  17  spinac
            Full comment: spinach
                232-Cooked; Dried; Boiled       8.000000   1.000  1.000  13  spinac
            Full comment: spinach
                240-Cooked; Canned; Cook Meth N/S
                                                8.000000   1.000  1.000  16  spinac
            Full comment: spinach canned
                242-Cooked; Canned; Boiled      8.000000   1.000  1.000  16  spinac
            Full comment: spinach canned
0401355001 4A   Spinach-babyfood                8.000000   1.000  1.000  16  spinac
    Full comment: spinach
0401367000 4A   Swiss chard                     0.001500   1.000  1.000      spinac
    Full comment: spinach
0402389000 4B   Turnip, greens                  8.000000   1.000  1.000  10  kale
0402398000 4B   Watercress                      8.000000   1.000  1.000  10  kale
0500061000 5    Broccoli                        8.000000   1.000  1.000  20  brocco
    Full comment: broccoli
0500061001 5    Broccoli-babyfood               8.000000   1.000  1.000  20  brocco
    Full comment: broccoli
0500064000 5    Brussels sprouts                0.005000   1.000  1.000      cabbag
    Full comment: cabbage
0500069000 5    Cabbage                         8.000000   1.000  1.000  21  cabbag
    Full comment: cabbage
0500072000 5    Cabbage, Chinese, mustard       8.000000   1.000  1.000  20  brocco
    Full comment: broccoli
0500071000 5    Cabbage, Chinese, napa          0.005000   1.000  1.000      cabbag
    Full comment: cabbage
0500083000 5    Cauliflower                     8.000000   1.000  1.000  22  caulif
    Full comment: cauliflower
0603035000 6C   Bean,  great northern, seed     0.001000   1.000  1.000      black
    Full comment: black bean
0603030000 6C   Bean, black, seed               0.001000   1.000  1.000      black
    Full comment: black bean
0603032000 6C   Bean, broad, seed               0.001000   1.000  1.000      black
    Full comment: black bean
0602031000 6B   Bean, broad, succulent
                210-Cooked; Fresh or N/S; Cook Meth N/S
                                                8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean canned
0603034000 6C   Bean, cowpea, seed
                232-Cooked; Dried; Boiled       0.001000   1.000  1.000      black
            Full comment: black bean
0602033000 6B   Bean, cowpea, succulent         8.000000   1.000  1.000  35  pinto
    Full comment: pinto bean
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0603036000 6C   Bean, kidney, seed                0.001000   1.000  1.000      black
    Full comment: black bean
0603038000 6C   Bean, lima, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0602037000 6B   Bean, lima, succulent             8.000000   1.000  1.000  34  kidney
    Full comment: kidney bean
0603039000 6C   Bean, mung, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0603040000 6C   Bean, navy, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0603041000 6C   Bean, pink, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0603042000 6C   Bean, pinto, seed                 0.001000   1.000  1.000  35  pinto
    Full comment: pinto bean
0601043000 6A   Bean, snap, succulent
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                  8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                  8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                   211-Cooked; Fresh or N/S; Baked
                                                  8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                   212-Cooked; Fresh or N/S; Boiled
                                                  8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean
                   213-Cooked; Fresh or N/S; Fried
                                                  8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                   215-Cooked; Fresh or N/S; Boiled/baked
                                                  8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean
                   220-Cooked; Frozen; Cook Meth N/S
                                                  8.000000   1.000  1.000  27  g. bea
            Full comment: g. bean bf
                   221-Cooked; Frozen; Baked      8.000000   1.000  1.000  27  g. bea
            Full comment: g. bean bf
                   222-Cooked; Frozen; Boiled     8.000000   1.000  1.000  27  g. bea
            Full comment: g. bean bf
                   232-Cooked; Dried; Boiled      8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
                   240-Cooked; Canned; Cook Meth N/S
                                                  8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
                   242-Cooked; Canned; Boiled     8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
0601043001 6A   Bean, snap, succulent-babyfood    8.000000   1.000  1.000  28  g. bea
    Full comment: g. bean froz
0603099000 6C   Chickpea, flour                   0.001000   1.000  1.000      black
    Full comment: black bean
0603098000 6C   Chickpea, seed                    0.001000   1.000  1.000      black
    Full comment: black bean
0603098001 6C   Chickpea, seed-babyfood           0.001000   1.000  1.000      black
    Full comment: black bean
0603182000 6C   Guar, seed                        0.001000   1.000  1.000      black
    Full comment: black bean
0603182001 6C   Guar, seed-babyfood               0.001000   1.000  1.000      black
    Full comment: black bean
0603203000 6C   Lentil, seed                      0.001000   1.000  1.000      black
    Full comment: black bean
0603256000 6C   Pea, dry                          0.001000   1.000  1.000      black
    Full comment: black bean
0603256001 6C   Pea, dry-babyfood                 0.001000   1.000  1.000      black
    Full comment: black bean
0601257000 6A   Pea, edible podded, succulent     8.000000   1.000  1.000  29  snap p
    Full comment: snap pea
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0603258000 6C   Pea, pigeon, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0602259000 6B   Pea, pigeon, succulent             8.000000   1.000  1.000  29  snap p
    Full comment: snap pea
0602255000 6B   Pea, succulent
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  120-Uncooked; Frozen; Cook Meth N/S
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  140-Uncooked; Canned; Cook Meth N/S
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  211-Cooked; Fresh or N/S; Baked
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  212-Cooked; Fresh or N/S; Boiled
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  213-Cooked; Fresh or N/S; Fried
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  220-Cooked; Frozen; Cook Meth N/S
                                                   8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                  221-Cooked; Frozen; Baked        8.000000   1.000  1.000  31  snap p
            Full comment: snap pea froz
                  222-Cooked; Frozen; Boiled       8.000000   1.000  1.000  31  snap p
            Full comment: snap pea froz
                  232-Cooked; Dried; Boiled        8.000000   1.000  1.000  29  snap p
            Full comment: snap pea canned
                  240-Cooked; Canned; Cook Meth N/S
                                                   8.000000   1.000  1.000  30  snap p
            Full comment: snap pea canned
                  242-Cooked; Canned; Boiled       8.000000   1.000  1.000  30  snap p
            Full comment: snap pea canned
0602255001 6B   Pea, succulent-babyfood            8.000000   1.000  1.000  32  snap p
    Full comment: snap pea babyfood
0600348000 6    Soybean, flour                     8.000000   2.200  1.000  23  soybea
    Full comment: soybean
0600348001 6    Soybean, flour-babyfood            8.000000   2.200  1.000  23  soybea
    Full comment: soybean
0600350000 6    Soybean, oil                       0.025000   1.000  1.000  23  cotton
    Full comment: cottonseed oil
0600350001 6    Soybean, oil-babyfood              0.025000   1.000  1.000  23  cotton
    Full comment: cottonseed oil
0600347000 6    Soybean, seed                      8.000000   1.000  1.000  23  soybea
    Full comment: soybean
0600349000 6    Soybean, soy milk                  8.000000   1.000  1.000  23  soybea
    Full comment: soybean
0600349001 6    Soybean, soy milk-babyfood or in   8.000000   1.000  1.000  24  soybea
    Full comment: soybean
0601349500 6AB  Soybean, vegetable                 8.000000   1.000  1.000  23  soybea
    Full comment: soybean
0802148000 8BC  Eggplant                           8.000000   1.000  1.000  41  eggpla
    Full comment: eggplant
0802234000 8BC  Okra                               8.000000   1.000  1.000  41  eggpla
    Full comment: eggplant
0802270000 8B   Pepper, bell                       8.000000   1.000  1.000  43  pepper
    Full comment: pepper bell
0802271000 8B   Pepper, bell, dried                0.000770  13.500  1.000      pepper
    Full comment: pepper bell
0802271001 8B   Pepper, bell, dried-babyfood       0.000770  13.500  1.000      pepper
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    Full comment: pepper bell
0802270001 8B   Pepper, bell-babyfood              8.000000   1.000  1.000  43  pepper
    Full comment: pepper bell
0802272000 8BC  Pepper, nonbell                    8.000000   1.000  1.000  42  nonbel
    Full comment: nonbell pepper
0802273000 8BC  Pepper, nonbell, dried             0.002600  12.800  1.000      nonbel
    Full comment: nonbell pepper
0802272001 8BC  Pepper, nonbell-babyfood          8.000000   1.000  1.000  42  nonbel
    Full comment: nonbell pepper
0801374000 8A   Tomatillo                          8.000000   1.000  1.000  38
0801375000 8A   Tomato
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                   8.000000   1.000  1.000  38  tomato
                   150-Uncooked; Cured, etc; Cook Meth N/S
                                                   8.000000   1.000  1.000  38  tomato
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                   8.000000   1.000  1.000  38  tomato
                   211-Cooked; Fresh or N/S; Baked
                                                   8.000000   1.000  1.000  38  tomato
                   212-Cooked; Fresh or N/S; Boiled
                                                   8.000000   1.000  1.000  38  tomato
                   213-Cooked; Fresh or N/S; Fried
                                                   8.000000   1.000  1.000  38  tomato
                   214-Cooked; Fresh or N/S; Fried/baked
                                                   8.000000   1.000  1.000  38  tomato
                   215-Cooked; Fresh or N/S; Boiled/baked
                                                   8.000000   1.000  1.000  38  tomato
                   221-Cooked; Frozen; Baked       8.000000   1.000  1.000  38  tomato
                   222-Cooked; Frozen; Boiled      8.000000   1.000  1.000  38  tomato
                   232-Cooked; Dried; Boiled       8.000000   1.000  1.000  38  tomato
                   240-Cooked; Canned; Cook Meth N/S
                                                   8.000000   1.000  1.000  39  tomato
            Full comment: tomato canned
                   242-Cooked; Canned; Boiled      8.000000   1.000  1.000  39  tomato
            Full comment: tomato canned
                   252-Cooked; Cured, etc; Boiled  8.000000   1.000  1.000  38  tomato
0801378000 8A   Tomato, dried                      0.000060  14.300  1.000      tomato
0801378001 8A   Tomato, dried-babyfood             0.000060  14.300  1.000      tomato
0801379000 8A   Tomato, juice                      8.000000   1.400  1.000  39  tomato
    Full comment: tomato canned
0801376000 8A   Tomato, paste                      8.000000   1.000  1.000  40  tomato
    Full comment: tomato paste
0801376001 8A   Tomato, paste-babyfood             8.000000   1.000  1.000  40  tomato
    Full comment: tomato paste
0801377000 8A   Tomato, puree                      0.003500   3.300  1.000      tomato
    Full comment: tomato paste
0801377001 8A   Tomato, puree-babyfood             0.003500   3.300  1.000      tomato
    Full comment: tomato paste
0801375001 8A   Tomato-babyfood                    8.000000   1.000  1.000  39  tomato
    Full comment: tomato canned
0902021000 9B   Balsam pear                        0.004000   1.000  1.000      summer
    Full comment: summer squash
0901075000 9A   Cantaloupe                         8.000000   1.000  1.000  44  cantal
    Full comment: cantaloupe
0902088000 9B   Chayote, fruit                     0.004000   1.000  1.000      summer
    Full comment: summer squash
0902135000 9B   Cucumber                           8.000000   1.000  1.000  46  cucumb
    Full comment: cucumber
0901187000 9A   Honeydew melon                     8.000000   1.000  1.000  44  cantal
    Full comment: cantaloupe
0902308000 9B   Pumpkin                            8.000000   1.000  1.000 111  pumpki
    Full comment: pumpkin
0902309000 9B   Pumpkin, seed                      8.000000   1.000  1.000 111  pumpki
    Full comment: pumpkin
0902356000 9B   Squash, summer                     8.000000   1.000  1.000  47  s squa
    Full comment: s squash
0902356001 9B   Squash, summer-babyfood            8.000000   1.000  1.000  47  s squa
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    Full comment: s squash
0902357000 9B   Squash, winter
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                  8.000000   1.000  1.000  48  w squa
            Full comment: w squash
                  211-Cooked; Fresh or N/S; Baked
                                                  8.000000   1.000  1.000  48  w squa
            Full comment: w squash
                  212-Cooked; Fresh or N/S; Boiled
                                                  8.000000   1.000  1.000  48  w squa
            Full comment: w squash
                  215-Cooked; Fresh or N/S; Boiled/baked
                                                  8.000000   1.000  1.000  48  w squa
            Full comment: w squash
                  222-Cooked; Frozen; Boiled      8.000000   1.000  1.000  49  w squa
            Full comment: w squash froz
                  242-Cooked; Canned; Boiled      8.000000   1.000  1.000  48  w squa
            Full comment: w squash
0902357001 9B   Squash, winter-babyfood           8.000000   1.000  1.000  48  w squa
    Full comment: w squash
0901399000 9A   Watermelon                        8.000000   1.000  1.000  45  waterm
    Full comment: watermelon
0901400000 9A   Watermelon, juice                 8.000000   1.000  1.000  45  waterm
    Full comment: watermelon
1003180000 10C  Grapefruit                        8.000000   1.000  1.000  53  grapef
    Full comment: grapefruit
1003181000 10C  Grapefruit, juice                 8.000000   1.000  1.000 118  OJ
1002197000 10B  Kumquat                          0.005000   1.000  1.000      orange
1002199000 10B  Lemon                            0.005000   1.000  1.000      orange
1002200000 10B  Lemon, juice                     0.001250   1.000  1.000      OJ
1002200001 10B  Lemon, juice-babyfood            0.001250   1.000  1.000      OJ
1002201000 10B  Lemon, peel                      0.005000   3.300  1.000      orange
1002206000 10B  Lime                            0.005000   1.000  1.000      orange
1002207000 10B  Lime, juice                     0.001250   1.000  1.000      OJ
1002207001 10B  Lime, juice-babyfood            0.001250   1.000  1.000      OJ
1001240000 10A  Orange                          8.000000   1.000  1.000  50  orange
1001241000 10A  Orange, juice                   8.000000   1.000  1.000  51  OJ
1001241001 10A  Orange, juice-babyfood          8.000000   1.000  1.000  51  OJ
1001242000 10A  Orange, peel                    8.000000   3.300  1.000  50  orange
1001369000 10A  Tangerine                       8.000000   1.000  1.000  52  tanger
    Full comment: tangerine
1001370000 10A  Tangerine, juice                8.000000   1.000  1.000 119  OJ
1100009000 11   Apple, dried                    0.000030   8.000  1.000      apple
1100009001 11   Apple, dried-babyfood           0.000030   8.000  1.000      apple
1100007000 11   Apple, fruit with peel          8.000000   1.000  1.000  54  apple
1100010000 11   Apple, juice                    8.000000   1.000  1.000  55  apple
1100010001 11   Apple, juice-babyfood           8.000000   1.000  1.000  55  apple
    Full comment: apple juice
1100008000 11   Apple, peeled fruit             8.000000   1.000  1.000  54  apple
    Full comment: apple juice
1100008001 11   Apple, peeled fruit-babyfood    8.000000   1.000  1.000  54  apple
1100011000 11   Apple, sauce                    8.000000   1.000  1.000  56  apple
    Full comment: apple sauce
1100011001 11   Apple, sauce-babyfood           8.000000   1.000  1.000  57  apple
    Full comment: apple sauce babyfood
1100266000 11   Pear                            8.000000   1.000  1.000  58  pear
1100267000 11   Pear, dried                     0.000201   6.250  1.000      pear
1100268000 11   Pear, juice                     8.000000   1.300  1.000  60  pear c
    Full comment: pear canned
1100268001 11   Pear, juice-babyfood            8.000000   1.300  1.000  60  pear c
    Full comment: pear canned
1100266001 11   Pear-babyfood                   8.000000   1.000  1.000  59  pear b
    Full comment: pear babyfood
1100310000 11   Quince                          8.000000   1.000  1.000  18  apple
1202012000 12B  Apricot                         0.003000   1.000  1.000      peach
1202013000 12B  Apricot, dried                  0.005000   6.000  1.000      peach
1202014000 12B  Apricot, juice                  0.003000   1.300  1.000      peach
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1202014001 12B  Apricot, juice-babyfood            0.003000   1.300  1.000       peach
1202012001 12B  Apricot-babyfood                   0.003000   1.000  1.000       peach
    Full comment: peach canned
1201090000 12A  Cherry                             8.000000   1.000  1.000  61   cherry
    Full comment: cherry frozen
1201091000 12A  Cherry, juice                     8.000000   1.500  1.000  61   cherry
    Full comment: cherry frozen
1201091001 12A  Cherry, juice-babyfood            8.000000   1.500  1.000  61   cherry
    Full comment: cherry frozen
1201090001 12A  Cherry-babyfood                   8.000000   1.000  1.000  61   cherry
    Full comment: cherry frozen
1202230000 12B  Nectarine                          8.000000   1.000  1.000  64   nectar
    Full comment: nectarine
1202260000 12B  Peach                              8.000000   1.000  1.000  62   nectar
    Full comment: nectarine
1202261000 12B  Peach, dried                      0.000100   7.000  1.000       peach
1202261001 12B  Peach, dried-babyfood             0.000100   7.000  1.000       peach
1202262000 12B  Peach, juice                      8.000000   1.300  1.000  66   peach
    Full comment: peach canned
1202262001 12B  Peach, juice-babyfood             8.000000   1.300  1.000  66   peach
    Full comment: peach canned
1202260001 12B  Peach-babyfood                    8.000000   1.000  1.000  65   peach
1203285000 12C  Plum                               8.000000   1.000  1.000  63   plum
1203287000 12C  Plum, prune, dried                 8.000000   5.000  1.000 109   prune
1203287001 12C  Plum, prune, dried-babyfood        8.000000   5.000  1.000 109   prune
1203286000 12C  Plum, prune, fresh                 8.000000   1.000  1.000 109   prune
1203286001 12C  Plum, prune, fresh-babyfood        8.000000   1.000  1.000 109   prune
1203288000 12C  Plum, prune, juice                 8.000000   1.400  1.000 109   prune
1203288001 12C  Plum, prune, juice-babyfood        8.000000   1.400  1.000 109   prune
1203285001 12C  Plum-babyfood                      8.000000   1.000  1.000  63   plum
1301055000 13A  Blackberry                        8.000000   1.000  1.000  67   raspbe
    Full comment: raspberry
1301056000 13A  Blackberry, juice                 8.000000   1.200  1.000  67   raspbe
    Full comment: raspberry
1301056001 13A  Blackberry, juice-babyfood        8.000000   1.200  1.000  67   raspbe
    Full comment: raspberry
1302057000 13B  Blueberry                         8.000000   1.000  1.000  68   bluebe
    Full comment: blueberry
1302057001 13B  Blueberry-babyfood                8.000000   1.000  1.000  68   bluebe
    Full comment: blueberry
1301058000 13A  Boysenberry                       8.000000   1.000  1.000  67   raspbe
    Full comment: raspberry
1307130000 13G  Cranberry                          8.000000   1.000  1.000  71   cranbe
    Full comment: cranberry
1307131000 13G  Cranberry, dried                  8.000000   7.900  1.000  71   cranbe
    Full comment: cranberry
1307132000 13G  Cranberry, juice                  8.000000   1.200  1.000  71   cranbe
    Full comment: cranberry
1307132001 13G  Cranberry, juice-babyfood         8.000000   1.200  1.000  71   cranbe
    Full comment: cranberry
1307130001 13G  Cranberry-babyfood                8.000000   1.000  1.000  71   cranbe
    Full comment: cranberry
1302136000 13B  Currant                           8.000000   1.000  1.000  68   bluebe
    Full comment: blueberry
1302137000 13B  Currant, dried                    8.000000   7.900  1.000  68   bluebe
    Full comment: blueberry
1302174000 13B  Gooseberry                        8.000000   1.000  1.000  68   bluebe
    Full comment: blueberry
1304175000 13D  Grape                             8.000000   1.000  1.000  69   grape
1304176000 13D  Grape, juice                      8.000000   1.000  1.000  70   grape
    Full comment: grape juice
1304176001 13D  Grape, juice-babyfood            8.000000   1.000  1.000  70   grape
    Full comment: grape juice
1304178000 13D  Grape, raisin                    12.000000   1.000  1.000 100   grape
    Full comment: grape raisin
1304179000 13D  Grape, wine and sherry            8.000000   1.200  1.000  70   grape
    Full comment: grape juice
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1301208000 13A  Loganberry                          8.000000   1.000  1.000  67  raspbe
    Full comment: raspberry
1301320000 13A  Raspberry                           8.000000   1.000  1.000  67  raspbe
    Full comment: raspberry
1301321000 13A  Raspberry, juice                    8.000000   1.200  1.000  67  raspbe
    Full comment: raspberry
1301321001 13A  Raspberry, juice-babyfood           8.000000   1.200  1.000  67  raspbe
    Full comment: raspberry
1301320001 13A  Raspberry-babyfood                  8.000000   1.000  1.000  67  raspbe
    Full comment: raspberry
1307359000 13G  Strawberry
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.000  1.000  72  strawb
            Full comment: strawberry
                   120-Uncooked; Frozen; Cook Meth N/S
                                                    8.000000   1.000  1.000  72  strawb
            Full comment: strawberry
                   211-Cooked; Fresh or N/S; Baked
                                                    8.000000   1.000  1.000  72  strawb
            Full comment: strawberry
                   223-Cooked; Frozen; Fried        8.000000   1.000  1.000  73  strawb
            Full comment: strawberry froz
                   230-Cooked; Dried; Cook Meth N/S
                                                    8.000000   1.000  1.000  72  strawb
            Full comment: strawberry
                   240-Cooked; Canned; Cook Meth N/S
                                                    8.000000   1.000  1.000  72  strawb
            Full comment: strawberry
                   241-Cooked; Canned; Baked        8.000000   1.000  1.000  72  strawb
            Full comment: strawberry
1307360000 13G  Strawberry, juice                   8.000000   1.200  1.000  72  strawb
    Full comment: strawberry
1307360001 13G  Strawberry, juice-babyfood          8.000000   1.200  1.000  72  strawb
    Full comment: strawberry
1307359001 13G  Strawberry-babyfood                 8.000000   1.000  1.000  72  strawb
    Full comment: strawberry
1400003000 14   Almond                              8.000000   1.000  1.000  74  almond
1400004000 14   Almond, oil                         0.001000   2.800  1.000      almond
1400004001 14   Almond, oil-babyfood                0.001000   2.800  1.000      almond
1400003001 14   Almond-babyfood                     8.000000   1.000  1.000  74  almond
1400092000 14   Chestnut                            1.000000   1.000  1.000  74  almond
1400155000 14   Hazelnut                            1.000000   1.000  1.000  74  almond
1400156000 14   Hazelnut, oil                       0.001000   2.800  1.000      almond
1400213000 14   Macadamia nut                       1.000000   1.000  1.000  74  almond
1400269000 14   Pecan                               8.000000   1.000  1.000 112  pecan
1400391000 14   Walnut                              8.000000   1.000  1.000 113  walnut
1500027000 15   Barley, bran                        8.000000   1.000  1.000  75  barley
1500026000 15   Barley, flour                       8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500026001 15   Barley, flour-babyfood              8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500025000 15   Barley, pearled barley              8.000000   1.000  1.000  75  barley
1500025001 15   Barley, pearled barley-babyfood     8.000000   1.000  1.000  75  barley
1500122000 15   Corn, field, bran                   8.000000  21.400  1.000  76  corn g
    Full comment: corn grain
1500120000 15   Corn, field, flour                  8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500120001 15   Corn, field, flour-babyfood         8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500121000 15   Corn, field, meal                   8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500121001 15   Corn, field, meal-babyfood          8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500125000 15   Corn, field, oil                    8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500125001 15   Corn, field, oil-babyfood           8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
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1500123000 15   Corn, field, starch                8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500123001 15   Corn, field, starch-babyfood       8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500124000 15   Corn, field, syrup                 8.000000   1.000  1.000  77  corn s
    Full comment: corn syrup
1500124001 15   Corn, field, syrup-babyfood        8.000000   1.000  1.000  77  corn s
    Full comment: corn syrup
1500126000 15   Corn, pop                          8.000000   1.000  1.000  76  corn g
    Full comment: corn grain
1500127000 15   Corn, sweet
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                   2.000000   1.000  1.000  79  corn s
            Full comment: corn sweet
                   140-Uncooked; Canned; Cook Meth N/S
                                                   2.000000   1.000  1.000  78  corn s
            Full comment: corn sweet canned
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                   2.000000   1.000  1.000  79  corn s
            Full comment: corn sweet
                   211-Cooked; Fresh or N/S; Baked
                                                   2.000000   1.000  1.000  79  corn s
            Full comment: corn sweet
                   212-Cooked; Fresh or N/S; Boiled
                                                   2.000000   1.000  1.000  79  corn s
            Full comment: corn sweet
                   213-Cooked; Fresh or N/S; Fried
                                                   2.000000   1.000  1.000  79  corn s
            Full comment: corn sweet
                   220-Cooked; Frozen; Cook Meth N/S
                                                   2.000000   1.000  1.000  80  corn s
            Full comment: corn sweet froz
                   221-Cooked; Frozen; Baked       2.000000   1.000  1.000  80  corn s
            Full comment: corn sweet froz
                   222-Cooked; Frozen; Boiled      2.000000   1.000  1.000  80  corn s
            Full comment: corn sweet froz
                   232-Cooked; Dried; Boiled       2.000000   1.000  1.000  79  corn s
            Full comment: corn sweet
                   240-Cooked; Canned; Cook Meth N/S
                                                   2.000000   1.000  1.000  78  corn s
            Full comment: corn sweet canned
                   242-Cooked; Canned; Boiled      2.000000   1.000  1.000  78  corn s
            Full comment: corn sweet canned
                   243-Cooked; Canned; Fried       2.000000   1.000  1.000  78  corn s
            Full comment: corn sweet canned
1500127001 15   Corn, sweet-babyfood               2.000000   1.000  1.000  79  corn s
    Full comment: corn sweet
1500231000 15   Oat, bran                          8.000000   1.000  1.000  81  oat br
    Full comment: oat bran
1500232000 15   Oat, flour                         8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500232001 15   Oat, flour-babyfood                8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500233000 15   Oat, groats/rolled oats            8.000000   1.000  1.000  82  oat gr
    Full comment: oat grain
1500233001 15   Oat, groats/rolled oats-babyfood   8.000000   1.000  1.000  82  oat gr
    Full comment: oat grain
1500326000 15   Rice, bran                         8.000000   1.000  1.000  83  rice
1500326001 15   Rice, bran-babyfood                8.000000   1.000  1.000  83  rice
1500324000 15   Rice, brown                        8.000000   1.250  1.000  83  rice
1500324001 15   Rice, brown-babyfood               8.000000   1.250  1.000  83  rice
1500325000 15   Rice, flour                        8.000000   1.250  1.000  83  rice
1500325001 15   Rice, flour-babyfood               8.000000   1.250  1.000  83  rice
1500323000 15   Rice, white                        8.000000   1.000  1.000  83  rice
1500323001 15   Rice, white-babyfood               8.000000   1.000  1.000  83  rice
1500329000 15   Rye, flour                         8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
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1500328000 15   Rye, grain                          8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500344000 15   Sorghum, grain                      8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500345000 15   Sorghum, syrup                      8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500381000 15   Triticale, flour                    8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500381001 15   Triticale, flour-babyfood           8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500404000 15   Wheat, bran                         8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500402000 15   Wheat, flour                        8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500402001 15   Wheat, flour-babyfood               8.000000   1.000  1.000  85  wheat
    Full comment: wheat flour
1500403000 15   Wheat, germ                         8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500401000 15   Wheat, grain                        8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500401001 15   Wheat, grain-babyfood               8.000000   1.000  1.000  84  wheat
    Full comment: wheat grain
1500405000 15   Wild rice                           8.000000   1.000  1.000  83  rice
2003128000 20C  Cottonseed, oil                     0.025000   1.000  0.025      cotton
    Full comment: cottonseed oil
2003128001 20C  Cottonseed, oil-babyfood           0.025000   1.000  0.025      cotton
    Full comment: cottonseed oil
2001163000 20A  Flax seed, oil                      0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001162900 20A  Flax, seed                         0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002330000 20B  Safflower, oil                      0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002330001 20B  Safflower, oil-babyfood            0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002365000 20B  Sunflower, oil                      0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002365001 20B  Sunflower, oil-babyfood            0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002364000 20B  Sunflower, seed                     0.025000   1.000  1.000      cotton
    Full comment: cottonseed oil
2100228000 21   Mushroom                            8.000000   1.000  1.000 114  mushro
    Full comment: mushroom
2201001500 22A  Agave                              0.001000   1.000  1.000      aspara
    Full comment: asparagus
2201019000 22A  Asparagus                          8.000000   1.000  1.000  19  aspara
    Full comment: asparagus
2201022000 22A  Bamboo, shoots                     0.001000   1.000  1.000      aspara
    Full comment: asparagus
2201073000 22A  Cactus                             0.001000   1.000  1.000      aspara
    Full comment: asparagus
2202076000 22B  Cardoon                           8.000000   1.000  1.000 117  celery
2202085000 22B  Celery                            8.000000   1.000  1.000  37  celery
2202086000 22B  Celery, juice                     8.000000   1.400  1.000  37  celery
2202085001 22B  Celery-babyfood                   8.000000   1.000  1.000  37  celery
2201087000 22A  Celtuce                           0.001000   1.000  1.000      aspara
    Full comment: asparagus
2201152000 22A  Fennel, Florence                  0.001000   1.000  1.000      aspara
    Full comment: asparagus
2201196000 22A  Kohlrabi                          0.001000   1.000  1.000      aspara
    Full comment: asparagus
2201243000 22A  Palm heart, leaves                0.001000   1.000  1.000      aspara
    Full comment: asparagus
2202322000 22B  Rhubarb                           8.000000   1.000  1.000 117  celery
2303141000 23C  Date                              8.000000   1.000  1.000 107  date
2302153000 23B  Fig                               8.000000   1.000  1.000  97  fig
2302154000 23B  Fig, dried                         0.297000   1.000  1.000      fig
```

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2302183000 23B  Guava                                8.000000   1.000  1.000 106  guava
2302183001 23B  Guava-babyfood                       8.000000   1.000  1.000 106  guava
2402020000 24B  Avocado                              8.000000   1.000  1.000  99  avocad
    Full comment: avocado
2402215000 24B  Mango                                8.000000   1.000  1.000 101  mango
2402216000 24B  Mango, dried                        8.000000   5.900  1.000 101  mango
2402217000 24B  Mango, juice                        8.000000   2.000  1.000 101  mango
2402217001 24B  Mango, juice-babyfood               8.000000   2.000  1.000 101  mango
2402215001 24B  Mango-babyfood                      8.000000   1.000  1.000 101  mango
2402245000 24B  Papaya                               8.000000   1.000  1.000 102  papaya
2402246000 24B  Papaya, dried                        0.004000   8.000  1.000      papaya
2402247000 24B  Papaya, juice                        8.000000   2.000  1.000 102  papaya
2402245001 24B  Papaya-babyfood                      8.000000   1.000  1.000 102  papaya
2405252000 24E  Passionfruit                         8.000000   1.000  1.000 108  passio
    Full comment: passionfruit
2405253000 24E  Passionfruit, juice                  8.000000   2.000  1.000 108  passio
    Full comment: passionfruit
2405253001 24E  Passionfruit, juice-babyfood         8.000000   2.000  1.000 108  passio
    Full comment: passionfruit
2405252001 24E  Passionfruit-babyfood                8.000000   1.000  1.000 108  passio
    Full comment: passionfruit
2403279000 24C  Pineapple
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                     8.000000   1.000  1.000 104  pineap
            Full comment: pineapple
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                     8.000000   1.000  1.000 104  pineap
            Full comment: pineapple
                   211-Cooked; Fresh or N/S; Baked
                                                     8.000000   1.000  1.000 104  pineap
            Full comment: pineapple
                   212-Cooked; Fresh or N/S; Boiled
                                                     8.000000   1.000  1.000 104  pineap
            Full comment: pineapple
                   221-Cooked; Frozen; Baked         8.000000   1.000  1.000 105  pineap
            Full comment: pineapple canned
                   240-Cooked; Canned; Cook Meth N/S
                                                     8.000000   1.000  1.000 104  pineap
            Full comment: pineapple
2403280000 24C  Pineapple, dried                     0.007000   7.300  1.000      pineap
    Full comment: pineapple
2403281000 24C  Pineapple, juice                     8.000000   1.700  1.000 104  pineap
    Full comment: pineapple
2403281001 24C  Pineapple, juice-babyfood            8.000000   1.700  1.000 104  pineap
    Full comment: pineapple
2403279001 24C  Pineapple-babyfood                   8.000000   1.000  1.000 104  pineap
    Full comment: pineapple
```

## Attachment 7. DEEM-FCID Acute Food Only Output File for Malathion

```
                                                                  Ver. 4.02, 05-10-c
DEEM-FCID ACUTE Analysis for MALATHIONP                        NHANES 2005-2010 2-Day
Residue file: MALATHIONP_ACUTE&SS2.R10                      Adjustment factor #2 used.
Analysis Date: 04-03-2023/08:20:07    Residue file dated: 02-27-2023/08:08:32
NOEL (Acute) =   1.000000 mg/kg body-wt/day
Acute Pop Adjusted Dose (aPAD) varies with population; see individual reports
RAC/FF intake summed over 24 hours
MC iterations = 1000; MC list in residue file; MC seed = 10; RNG = MS VB
Run Comment: "Malathion Food Only- Acute & Steady State"
================================================================================

Summary calculations--per capita:

---   95th Percentile----   ---   99th Percentile----     ---99.9th Percentile----
 Exposure  % aPAD     MOE    Exposure  % aPAD     MOE    Exposure  % aPAD     MOE
---------- ------- -------- ---------- ------- -------- ---------- ------- --------
All Infants:
  0.000119    0.00    8393    0.000319    0.01    3129    0.001415    0.04     706
Children 1-2:
  0.000281    0.01    3561    0.000774    0.02    1291    0.003144    0.09     318
Children 3-5:
  0.000235    0.01    4256    0.000570    0.02    1753    0.002551    0.08     391
Children 6-12:
  0.000149    0.01    6713    0.000413    0.01    2422    0.001614    0.06     619
Youth 13-19:
  0.000098    0.00   10203    0.000292    0.01    3420    0.000877    0.04    1139
Adults 20-49:
  0.000171    0.00    5859    0.000390    0.00    2561    0.001604    0.02     623
Adults 50-99:
  0.000126    0.00    7948    0.000306    0.00    3272    0.001125    0.01     889
Female 13-49:
  0.000114    0.00    8761    0.000288    0.01    3469    0.001442    0.06     693
```

## Attachment 8. DEEM-FCID Acute and Steady State Residue Input File (Food Only) for Malaoxon

```
Filename: C:\Users\spiper\OneDrive - Environmental Protection Agency
(EPA)\Documents\Malathion\Malathion\Malathion
DEEM\Malaoxon_DEEM\Malaoxon_POD_2022\MALAOXON_ACUTE&SS.R10
Chemical: Malaoxon
RfD(Chronic): 0 mg/kg bw/day  NOEL(Chronic): 0 mg/kg bw/day
RfD(Acute): 1 mg/kg bw/day  NOEL(Acute):  1 mg/kg bw/day
Date created/last modified: 03-09-2023/16:18:54       Program ver. 4.02, 05-10-c
Comment: Malaoxon Food Only Acute and Steady State
--------------------------------------------------------------------------------
RDL indices and parameters for Monte Carlo Analysis:
Index Dist Parameter #1        Param #2  Param #3  Comment
  #   Code
----- ---- ------------        --------  --------  -------
  1    6   Beet_garden.rdf
  2    6   Carrot.rdf
  3    6   Carrot_BF.rdf
  4    6   Potato_wPeel_Uncooked.rdf
  5    6   Potato_wopeel_Frozen.rdf
  6    6   Potato_Sweet.rdf
  7    6   Potato_Sweet_BF.rdf
  8    6   Lettuce_Fresh.rdf
  9    6   Lettuce_Fresh_Leaf.rdf
  10   6   Kale.rdf
  11   6   Onion_Bulb.rdf
  12   6   Onion_Green.rdf
  13   6   Spinach_Fresh.rdf
  14   6   Collards.rdf
  15   6   Lettuce_Fresh_Head.rdf
  16   6   Spinach_Canned.rdf
  17   6   Spinach_Frozen.rdf
  18   6   Banana.rdf
  19   6   Asparagus.rdf
  20   6   Broccoli.rdf
  21   6   Cabbage.rdf
  22   6   Cauliflower.rdf
  23   6   Soybean_Grain.rdf
  24   6   InfantFormula_Soy.rdf
  25   6   Bean_Green_Canned.rdf
  26   6   Bean_Green_Fresh.rdf
  27   6   Bean_Green_Frozen.rdf
  28   6   Bean_Green_BF.rdf
  29   6   Pea_Snap.rdf
  30   6   Pea_Sweet_Canned.rdf
  31   6   Pea_Sweet_Frozen.rdf
  32   6   Pea_BF.rdf
  33   6   Bean_Black.rdf
  34   6   Bean_Kidney.rdf
  35   6   Bean_Pinto.rdf
  36   6   Bean_Garbanzo.rdf
  37   6   Celery.rdf
  38   6   Tomato_Fresh.rdf
  39   6   Tomato_Canned.rdf
  40   6   Tomato_Paste.rdf
  41   6   Eggplant.rdf
  42   6   Pepper_Nonbell.rdf
  43   6   Pepper_Bell.rdf
  44   6   Cantaloupe.rdf
  45   6   Watermelon.rdf
  46   6   Cucumber.rdf
  47   6   Squash_Summer.rdf
  48   6   Squash_Winter_Fresh.rdf
  49   6   Orange.rdf
  50   6   Orange_Juice.rdf
  51   6   Tangerine.rdf
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  52   6   Grapefruit.rdf
  53   6   Apple_Fresh.rdf
  54   6   Apple_Juice.rdf
  55   6   Apple_Sauce.rdf
  56   6   Apple_Sauce_BF.rdf
  57   6   Pear.rdf
  58   6   Pear_BF.rdf
  59   6   Pear_Canned.rdf
  60   6   Cherry.rdf
  61   6   Peach_Fresh.rdf
  62   6   Plum.rdf
  63   6   Nectarine.rdf
  64   6   Peach_BF.rdf
  65   6   Peach_Canned.rdf
  66   6   Raspberry_Fresh.rdf
  67   6   Blueberry_Fresh.rdf
  68   6   Grape_Fresh.rdf
  69   6   Grape_Juice.rdf
  70   6   Cranberry.rdf
  71   6   Strawberry_Fresh.rdf
  72   6   Strawberry_Frozen.rdf
  73   6   Almond.rdf
  74   6   Barley_Grain.rdf
  75   6   Corn_Grain.rdf
  76   6   Corn_Sweet_Canned.rdf
  77   6   Corn_Sweet_Fresh.rdf
  78   6   Corn_Sweet_Frozen.rdf
  79   6   Oat_Bran.rdf
  80   6   Oat_Grain.rdf
  81   6   Rice_White.rdf
  82   6   Wheat_Grain.rdf
  83   6   Wheat_Flour.rdf
  84   6   FigFT.rdf
  85   6   Asparagus_Canned.rdf
  86   6   Avocado.rdf
  87   6   Grape_Raisin.rdf
  88   6   Mango.rdf
  89   6   Papaya.rdf
  90   6   PeanutButter.rdf
  91   6   Pineapple.rdf
  92   6   Pineapple_Canned.rdf
  93   6   GuavatFT.rdf
  94   6   PassionfruitFT.rdf
  95   6   Date.rdf
  96   6   Plum_Prune.rdf
  97   6   Pumpkin.rdf
  98   6   Pecan.rdf
  99   6   Walnut.rdf
 100   6   Mushroom.rdf
 101   6   Cilantro.rdf
 102   6   Grapefruit_juice.rdf
 103   6   Tangerine_juice.rdf
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| EPA Code | Crop Grp | Commodity Name | Def Res (ppm) | Adj.Factors #1 | #2 | RDLPntr | Comment |
|---|---|---|---|---|---|---|---|
| 9500177000 | O | Grape, leaves | 8.000000 | 1.000 | 1.000 | 68 | grape |
| 9500188000 | O | Hop | 1.000000 | 1.000 | 1.000 | | hop to |
| Full comment: hop tolerance | | | | | | | |
| 9500263000 | O | Peanut | 8.000000 | 1.000 | 1.000 | 90 | peanut |
| Full comment: peanut butter | | | | | | | |
| 9500264000 | O | Peanut, butter | 8.000000 | 1.000 | 1.000 | 90 | peanut |
| Full comment: peanut butter | | | | | | | |
| 9500265000 | O | Peanut, oil | 0.010000 | 1.000 | 1.000 | | cotton |
| Full comment: cottonseed oil | | | | | | | |
| 9500275000 | O | Peppermint | 0.030000 | 1.000 | 1.000 | | mint F |
| Full comment: mint FT | | | | | | | |

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9500276000 O    Peppermint, oil                     0.010000   1.000  1.000       cotton
    Full comment: cottonseed oil
9500352000 O    Spearmint                           0.030000   1.000  1.000       mint F
    Full comment: mint FT
9500353000 O    Spearmint, oil                      0.010000   1.000  1.000       cotton
    Full comment: cottonseed oil
0101050000 1AB  Beet, garden, roots                 8.000000   1.000  1.000   1   g.beet
0101050001 1AB  Beet, garden, roots-babyfood       8.000000   1.000  1.000   1   g.beet
0101052000 1A   Beet, sugar                         8.000000   1.000  1.000   1   g.beet
0101053000 1A   Beet, sugar, molasses               8.000000   1.000  1.000   1   g.beet
0101053001 1A   Beet, sugar, molasses-babyfood      8.000000   1.000  1.000   1   g.beet
0101052001 1A   Beet, sugar-babyfood                8.000000   1.000  1.000   1   g.beet
0101078000 1AB  Carrot                              8.000000   1.000  1.000   2   carrot
0101079000 1AB  Carrot, juice                       8.000000   1.400  1.000   2   carrot
0101078001 1AB  Carrot-babyfood                     8.000000   1.000  1.000   3   carrot
    Full comment: carrot bf
0101190000 1AB  Horseradish                         8.000000   1.000  1.000   2   carrot
0101251000 1AB  Parsnip                            8.000000   1.000  1.000   2   carrot
0101251001 1AB  Parsnip-babyfood                   8.000000   1.000  1.000   2   carrot
0103296000 1C   Potato, chips                       0.001500   1.000  1.000       potato
0103297000 1C   Potato, dry (granules/ flakes)      0.001500   6.500  1.000       potato
0103297001 1C   Potato, dry (granules/ flakes)-b    0.001500   6.500  1.000       potato
0103298000 1C   Potato, flour                       0.001500   1.000  1.000       potato
0103298001 1C   Potato, flour-babyfood              0.001500   1.000  1.000       potato
0103300000 1C   Potato, tuber, w/o peel
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.000  1.000   4   potato
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.000  1.000   4   potato
                   211-Cooked; Fresh or N/S; Baked
                                                    8.000000   1.000  1.000   4   potato
                   212-Cooked; Fresh or N/S; Boiled
                                                    8.000000   1.000  1.000   4   potato
                   213-Cooked; Fresh or N/S; Fried
                                                    8.000000   1.000  1.000   4   potato
                   221-Cooked; Frozen; Baked        8.000000   1.000  1.000   5   potato
                   223-Cooked; Frozen; Fried        8.000000   1.000  1.000   5   potato
                   232-Cooked; Dried; Boiled        8.000000   1.000  1.000   4   potato
                   233-Cooked; Dried; Fried         8.000000   1.000  1.000   4   potato
                   240-Cooked; Canned; Cook Meth N/S
                                                    8.000000   1.000  1.000   4   potato
                   242-Cooked; Canned; Boiled       8.000000   1.000  1.000   4   potato
                   252-Cooked; Cured, etc; Boiled   8.000000   1.000  1.000   4   potato
0103300001 1C   Potato, tuber, w/o peel-babyfood    8.000000   1.000  1.000   4   potato
0103299000 1C   Potato, tuber, w/peel               8.000000   1.000  1.000   4   potato
0103299001 1C   Potato, tuber, w/peel-babyfood      8.000000   1.000  1.000   4   potato
0101314000 1AB  Radish, roots                       8.000000   1.000  1.000   2   carrot
0101327000 1AB  Rutabaga                           8.000000   1.000  1.000   1   garden
    Full comment: garden beet
0101331000 1AB  Salsify, roots                      8.000000   1.000  1.000   2   carrot
0101388000 1AB  Turnip, roots                       8.000000   1.000  1.000   2   carrot
0301165000 3A   Garlic, bulb                        8.000000   1.000  1.000  11   onion
0301165001 3A   Garlic, bulb-babyfood               8.000000   1.000  1.000  11   onion
0302198000 3B   Leek                                0.005000   1.000  1.000       green
    Full comment: green onion
0301237000 3A   Onion, bulb                         8.000000   1.000  1.000  11   onion
0301238000 3A   Onion, bulb, dried                  0.000400   9.700  1.000       onion
0301238001 3A   Onion, bulb, dried-babyfood         0.000400   9.700  1.000       onion
0301237001 3A   Onion, bulb-babyfood                8.000000   1.000  1.000  11   onion
0302239000 3B   Onion, green                        0.005000   1.000  1.000  12   green
    Full comment: green onion
0301338000 3A   Shallot, bulb                       8.000000   1.000  1.000  11   onion
0302338500 3B   Shallot, fresh leaves               0.005000   1.000  1.000       green
    Full comment: green onion
0401005000 4A   Amaranth, leafy                     0.002800   1.000  1.000       spinac
    Full comment: spinach
0402018000 4B   Arugula                             0.007500   1.000  1.000       kale
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0402063000 4B   Broccoli raab                          0.007500   1.000  1.000       kale
0402062000 4B   Broccoli, Chinese                      0.007500   1.000  1.000       kale
0402070000 4B   Cabbage, Chinese, bok choy             0.007500   1.000  1.000       kale
0401104000 4A   Chrysanthemum, garland                 0.002800   1.000  1.000       spinac
    Full comment: spinach
0401118000 4A   Cilantro, leaves                       8.000000   1.000  1.000 101   cilant
    Full comment: cilantro
0401118001 4A   Cilantro, leaves-babyfood              8.000000   1.000  1.000 101   cilant
    Full comment: cilantro
0402117000 4B   Collards                               8.000000   1.000  1.000  14   collar
    Full comment: collard
0402133000 4B   Cress, garden                          0.007500   1.000  1.000       kale
0402134000 4B   Cress, upland                          0.007500   1.000  1.000       kale
0401138000 4A   Dandelion, leaves                      0.002800   1.000  1.000       spinac
    Full comment: spinach
0401144000 4A   Dillweed                               0.002800   1.000  1.000       spinac
    Full comment: spinach
0401150000 4A   Endive                                 0.002800   1.000  1.000       spinac
    Full comment: spinach
0402194000 4B   Kale                                   8.000000   1.000  1.000  10   kale
0401204000 4A   Lettuce, head                          8.000000   1.000  1.000  15   lettuc
    Full comment: lettuce head
0401205000 4A   Lettuce, leaf                          8.000000   1.000  1.000   9   lettuc
    Full comment: lettuce leaf
0402229000 4B   Mustard greens                         0.007500   1.000  1.000       kale
0401248000 4A   Parsley, leaves                        0.002800   1.000  1.000       spinac
    Full comment: spinach
0401313000 4A   Radicchio                              0.001000   1.000  1.000       lettuc
    Full comment: lettuce
0402315000 4B   Radish, tops                           0.007500   1.000  1.000       kale
0402318000 4B   Rape greens                            0.007500   1.000  1.000       kale
0401355000 4A   Spinach
                   110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                       8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   210-Cooked; Fresh or N/S; Cook Meth N/S
                                                       8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   211-Cooked; Fresh or N/S; Baked
                                                       8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   212-Cooked; Fresh or N/S; Boiled
                                                       8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   213-Cooked; Fresh or N/S; Fried
                                                       8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   215-Cooked; Fresh or N/S; Boiled/baked
                                                       8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   220-Cooked; Frozen; Cook Meth N/S
                                                       8.000000   1.000  1.000  17   spinac
            Full comment: spinach froz
                   221-Cooked; Frozen; Baked           8.000000   1.000  1.000  17   spinac
            Full comment: spinach froz
                   222-Cooked; Frozen; Boiled          8.000000   1.000  1.000  17   spinac
            Full comment: spinach froz
                   232-Cooked; Dried; Boiled           8.000000   1.000  1.000  13   spinac
            Full comment: spinach
                   240-Cooked; Canned; Cook Meth N/S
                                                       8.000000   1.000  1.000  16   spinac
            Full comment: spinach canned
                   242-Cooked; Canned; Boiled          8.000000   1.000  1.000  16   spinac
            Full comment: spinach canned
0401355001 4A   Spinach-babyfood                       8.000000   1.000  1.000  13   spinac
    Full comment: spinach
0401367000 4A   Swiss chard                            0.002800   1.000  1.000       spinac
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    Full comment: spinach
0402389000 4B   Turnip, greens                      0.007500   1.000  1.000      kale
0402398000 4B   Watercress                          0.007500   1.000  1.000      kale
0500061000 5    Broccoli                           8.000000   1.000  1.000  20  brocco
    Full comment: broccoli
0500061001 5    Broccoli-babyfood                  8.000000   1.000  1.000  20  brocco
    Full comment: broccoli
0500064000 5    Brussels sprouts                   0.005000   1.000  1.000      cabbag
    Full comment: cabbage
0500069000 5    Cabbage                            8.000000   1.000  1.000  21  cabbag
    Full comment: cabbage
0500072000 5    Cabbage, Chinese, mustard          0.005000   1.000  1.000      brocco
    Full comment: broccoli
0500071000 5    Cabbage, Chinese, napa             0.005000   1.000  1.000      cabbag
    Full comment: cabbage
0500083000 5    Cauliflower                        8.000000   1.000  1.000  22  caulif
    Full comment: cauliflower
0603035000 6C   Bean,  great northern, seed        0.001000   1.000  1.000      black
    Full comment: black bean
0603030000 6C   Bean, black, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0603032000 6C   Bean, broad, seed                  0.001000   1.000  1.000      black
    Full comment: black bean
0602031000 6B   Bean, broad, succulent             8.000000   1.000  1.000  26  g. bea
    Full comment: g. bean
0603034000 6C   Bean, cowpea, seed                 0.001000   1.000  1.000      black
    Full comment: black bean
0602033000 6B   Bean, cowpea, succulent            8.000000   1.000  1.000  26  g. bea
    Full comment: g. bean
0603036000 6C   Bean, kidney, seed                 8.000000   1.000  1.000  34  kidney
    Full comment: kidney bean
0603038000 6C   Bean, lima, seed                   0.001000   1.000  1.000      black
    Full comment: black bean
0602037000 6B   Bean, lima, succulent              8.000000   1.000  1.000  34  kidney
    Full comment: kidney bean
0603039000 6C   Bean, mung, seed                   0.001000   1.000  1.000      black
    Full comment: black bean
0603040000 6C   Bean, navy, seed                   0.001000   1.000  1.000      black
    Full comment: black bean
0603041000 6C   Bean, pink, seed                   0.001000   1.000  1.000      black
    Full comment: black bean
0603042000 6C   Bean, pinto, seed                  0.001000   1.000  1.000      pinto
    Full comment: pinto bean
0601043000 6A   Bean, snap, succulent
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                   8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                   8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                  211-Cooked; Fresh or N/S; Baked
                                                   8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                  212-Cooked; Fresh or N/S; Boiled
                                                   8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
                  213-Cooked; Fresh or N/S; Fried
                                                   8.000000   1.000  1.000  26  g. bea
            Full comment: g. bean
                  215-Cooked; Fresh or N/S; Boiled/baked
                                                   8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
                  220-Cooked; Frozen; Cook Meth N/S
                                                   8.000000   1.000  1.000  27  g. bea
            Full comment: g. bean froz
                  221-Cooked; Frozen; Baked        8.000000   1.000  1.000  27  g. bea
            Full comment: g. bean froz
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                222-Cooked; Frozen; Boiled      8.000000   1.000  1.000  27  g. bea
            Full comment: g. bean froz
                232-Cooked; Dried; Boiled       8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
                240-Cooked; Canned; Cook Meth N/S
                                                8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
                242-Cooked; Canned; Boiled      8.000000   1.000  1.000  25  g. bea
            Full comment: g. bean canned
0601043001 6A   Bean, snap, succulent-babyfood  8.000000   1.000  1.000  28  g. bea
    Full comment: g. bean bf
0603099000 6C   Chickpea, flour                 0.001000   1.000  1.000  36  black
    Full comment: black bean
0603098000 6C   Chickpea, seed                  0.001000   1.000  1.000  36  black
    Full comment: black bean
0603098001 6C   Chickpea, seed-babyfood         0.001000   1.000  1.000  36  black
    Full comment: black bean
0603182000 6C   Guar, seed                      0.001000   1.000  1.000      black
    Full comment: black bean
0603182001 6C   Guar, seed-babyfood             0.001000   1.000  1.000      black
    Full comment: black bean
0603203000 6C   Lentil, seed                    0.001000   1.000  1.000      black
    Full comment: black bean
0603256000 6C   Pea, dry                        0.001000   1.000  1.000      black
    Full comment: black bean
0603256001 6C   Pea, dry-babyfood               0.001000   1.000  1.000      black
    Full comment: black bean
0601257000 6A   Pea, edible podded, succulent   8.000000   1.000  1.000  29  snap p
    Full comment: snap pea
0603258000 6C   Pea, pigeon, seed               0.001000   1.000  1.000      snap p
    Full comment: snap pea
0602259000 6B   Pea, pigeon, succulent          8.000000   1.000  1.000  29  snap p
    Full comment: snap pea
0602255000 6B   Pea, succulent
                110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                120-Uncooked; Frozen; Cook Meth N/S
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                140-Uncooked; Canned; Cook Meth N/S
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                210-Cooked; Fresh or N/S; Cook Meth N/S
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                211-Cooked; Fresh or N/S; Baked
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                212-Cooked; Fresh or N/S; Boiled
                                                8.000000   1.000  1.000  30  pea ca
            Full comment: pea canned
                213-Cooked; Fresh or N/S; Fried
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                220-Cooked; Frozen; Cook Meth N/S
                                                8.000000   1.000  1.000  29  snap p
            Full comment: snap pea
                221-Cooked; Frozen; Baked       8.000000   1.000  1.000  31  snap p
            Full comment: snap pea froz
                222-Cooked; Frozen; Boiled      8.000000   1.000  1.000  31  snap p
            Full comment: snap pea froz
                232-Cooked; Dried; Boiled       8.000000   1.000  1.000  30  pea ca
            Full comment: pea canned
                240-Cooked; Canned; Cook Meth N/S
                                                8.000000   1.000  1.000  30  pea ca
            Full comment: pea canned
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                  242-Cooked; Canned; Boiled      8.000000   1.000  1.000  30  pea ca
            Full comment: pea canned
0602255001 6B   Pea, succulent-babyfood           8.000000   1.000  1.000  32  pea bf
0600348000 6    Soybean, flour                    8.000000   2.200  1.000  23  soybea
    Full comment: soybean
0600348001 6    Soybean, flour-babyfood           8.000000   2.200  1.000  23  soybea
    Full comment: soybean
0600350000 6    Soybean, oil                      0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
0600350001 6    Soybean, oil-babyfood             0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
0600347000 6    Soybean, seed                     8.000000   1.000  1.000  23  soybea
    Full comment: soybean
0600349000 6    Soybean, soy milk                 8.000000   1.000  1.000  24  soy in
    Full comment: soy infant
0600349001 6    Soybean, soy milk-babyfood or in  8.000000   1.000  1.000  24  soy in
    Full comment: soy infant
0601349500 6AB  Soybean, vegetable               8.000000   1.000  1.000  23  soybea
    Full comment: soybean
0802148000 8BC  Eggplant                          8.000000   1.000  1.000  41  eggpla
    Full comment: eggplant
0802234000 8BC  Okra                              0.005000   1.000  1.000      bell p
    Full comment: bell pepper
0802270000 8B   Pepper, bell                      8.000000   1.000  1.000  43  bell p
    Full comment: bell pepper
0802271000 8B   Pepper, bell, dried               0.000500  13.500  1.000      bell p
    Full comment: bell pepper
0802271001 8B   Pepper, bell, dried-babyfood      0.000500  13.500  1.000      bell p
    Full comment: bell pepper
0802270001 8B   Pepper, bell-babyfood             8.000000   1.000  1.000  43  bell p
    Full comment: bell pepper
0802272000 8BC  Pepper, nonbell                   8.000000   1.000  1.000  42  non-be
    Full comment: non-bell pepper
0802273000 8BC  Pepper, nonbell, dried            0.000500  12.800  1.000      non-be
    Full comment: non-bell pepper
0802272001 8BC  Pepper, nonbell-babyfood          8.000000   1.000  1.000  42  non-be
    Full comment: non-bell pepper
0801374000 8A   Tomatillo                         8.000000   1.000  1.000  38  tomato
0801375000 8A   Tomato
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                  8.000000   1.000  1.000  38  tomato
                  150-Uncooked; Cured, etc; Cook Meth N/S
                                                  8.000000   1.000  1.000  38  tomato
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                  8.000000   1.000  1.000  38  tomato
                  211-Cooked; Fresh or N/S; Baked
                                                  8.000000   1.000  1.000  38  tomato
                  212-Cooked; Fresh or N/S; Boiled
                                                  8.000000   1.000  1.000  38  tomato
                  213-Cooked; Fresh or N/S; Fried
                                                  8.000000   1.000  1.000  38  tomato
                  214-Cooked; Fresh or N/S; Fried/baked
                                                  8.000000   1.000  1.000  38  tomato
                  215-Cooked; Fresh or N/S; Boiled/baked
                                                  8.000000   1.000  1.000  38  tomato
                  221-Cooked; Frozen; Baked       8.000000   1.000  1.000  38  tomato
                  222-Cooked; Frozen; Boiled      8.000000   1.000  1.000  38  tomato
                  232-Cooked; Dried; Boiled       8.000000   1.000  1.000  38  tomato
                  240-Cooked; Canned; Cook Meth N/S
                                                  8.000000   1.000  1.000  39  tomato
            Full comment: tomato canned
                  242-Cooked; Canned; Boiled      8.000000   1.000  1.000  39  tomato
            Full comment: tomato canned
                  252-Cooked; Cured, etc; Boiled  8.000000   1.000  1.000  38  tomato
0801378000 8A   Tomato, dried                     0.000100  14.300  1.000      tomato
0801378001 8A   Tomato, dried-babyfood            0.000100  14.300  1.000      tomato
0801379000 8A   Tomato, juice                     8.000000   1.400  1.000  39  tomato
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    Full comment: tomato canned
0801376000 8A   Tomato, paste                      8.000000   1.000  1.000  40  tomato
    Full comment: tomato paste
0801376001 8A   Tomato, paste-babyfood             8.000000   1.000  1.000  40  tomato
    Full comment: tomato paste
0801377000 8A   Tomato, puree                      0.000900   3.300  1.000      tomato
    Full comment: tomato paste
0801377001 8A   Tomato, puree-babyfood             0.000900   3.300  1.000      tomato
    Full comment: tomato paste
0801375001 8A   Tomato-babyfood                    0.001000   1.000  1.000  39  tomato
    Full comment: tomato canned
0902021000 9B   Balsam pear                        8.000000   1.000  1.000  47  s squa
    Full comment: s squash
0901075000 9A   Cantaloupe                         8.000000   1.000  1.000  44  cantal
    Full comment: cantaloupe
0902088000 9B   Chayote, fruit                     0.005000   1.000  1.000      cucumb
    Full comment: cucumber
0902135000 9B   Cucumber                           8.000000   1.000  1.000  46  cucumb
    Full comment: cucumber
0901187000 9A   Honeydew melon                     8.000000   1.000  1.000  44  cantal
    Full comment: cantaloupe
0902308000 9B   Pumpkin                            0.000750   1.000  1.000  97  pumpki
    Full comment: pumpkin
0902309000 9B   Pumpkin, seed                      0.000750   1.000  1.000  97  pumpki
    Full comment: pumpkin
0902356000 9B   Squash, summer                     8.000000   1.000  1.000  47  s squa
    Full comment: s squash
0902356001 9B   Squash, summer-babyfood            8.000000   1.000  1.000  47  s squa
    Full comment: s squash
0902357000 9B   Squash, winter                     8.000000   1.000  1.000  48  w squa
    Full comment: w squash
0902357001 9B   Squash, winter-babyfood            8.000000   1.000  1.000  48  w squa
    Full comment: w squash
0901399000 9A   Watermelon                         8.000000   1.000  1.000  45  waterm
    Full comment: watermelon
0901400000 9A   Watermelon, juice                  8.000000   1.000  1.000  45  waterm
    Full comment: watermelon
1003180000 10C  Grapefruit                         8.000000   1.000  1.000  52  grapef
    Full comment: grapefruit
1003181000 10C  Grapefruit, juice                  8.000000   1.000  1.000 102  OJ
1002197000 10B  Kumquat                           0.005000   1.000  1.000      orange
1002199000 10B  Lemon                             0.005000   1.000  1.000      orange
1002200000 10B  Lemon, juice                       0.000650   1.000  1.000      OJ
1002200001 10B  Lemon, juice-babyfood             0.000650   1.000  1.000      OJ
1002201000 10B  Lemon, peel                        0.005000   3.300  1.000      orange
1002206000 10B  Lime                              0.005000   1.000  1.000      orange
1002207000 10B  Lime, juice                       0.000650   1.000  1.000      OJ
1002207001 10B  Lime, juice-babyfood             0.000650   1.000  1.000      OJ
1001240000 10A  Orange                            8.000000   1.000  1.000  49  orange
1001241000 10A  Orange, juice                     8.000000   1.000  1.000  50  OJ
1001241001 10A  Orange, juice-babyfood            8.000000   1.000  1.000  50  OJ
1001242000 10A  Orange, peel                      8.000000   3.300  1.000  49  orange
1001369000 10A  Tangerine                         8.000000   1.000  1.000  51  tanger
    Full comment: tangerine
1001370000 10A  Tangerine, juice                  8.000000   1.000  1.000 103  OJ
1100009000 11   Apple, dried                       0.000025   8.000  1.000      apple
1100009001 11   Apple, dried-babyfood              0.000025   8.000  1.000      apple
1100007000 11   Apple, fruit with peel             8.000000   1.000  1.000  53  apple
1100010000 11   Apple, juice                       8.000000   1.000  1.000  54  apple
    Full comment: apple juice
1100010001 11   Apple, juice-babyfood              8.000000   1.000  1.000  54  apple
    Full comment: apple juice
1100008000 11   Apple, peeled fruit                8.000000   1.000  1.000  53  apple
1100008001 11   Apple, peeled fruit-babyfood       8.000000   1.000  1.000  53  apple
1100011000 11   Apple, sauce                       8.000000   1.000  1.000  55  apple
    Full comment: apple sauce
1100011001 11   Apple, sauce-babyfood              8.000000   1.000  1.000  56  apple
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    Full comment: apple sauce bf
1100266000 11   Pear                                8.000000   1.000  1.000  57  pear
1100267000 11   Pear, dried                         0.000500   6.250  1.000      pear
1100268000 11   Pear, juice                         8.000000   1.300  1.000  59  pear c
    Full comment: pear canned
1100268001 11   Pear, juice-babyfood                8.000000   1.300  1.000  59  pear c
    Full comment: pear canned
1100266001 11   Pear-babyfood                       8.000000   1.000  1.000  58  pear b
    Full comment: pear bf
1100310000 11   Quince                              0.001000   1.000  1.000      apple
1202012000 12B  Apricot                             0.005000   1.000  1.000      peach
1202013000 12B  Apricot, dried                       0.005000   6.000  1.000      peach
1202014000 12B  Apricot, juice                       0.001600   1.300  1.000      peach
    Full comment: peach canned
1202014001 12B  Apricot, juice-babyfood             0.001600   1.300  1.000      peach
    Full comment: peach canned
1202012001 12B  Apricot-babyfood                    0.000900   1.000  1.000      peach
    Full comment: peach bf
1201090000 12A  Cherry
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  120-Uncooked; Frozen; Cook Meth N/S
                                                    8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  211-Cooked; Fresh or N/S; Baked
                                                    8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  213-Cooked; Fresh or N/S; Fried
                                                    8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  223-Cooked; Frozen; Fried         8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  240-Cooked; Canned; Cook Meth N/S
                                                    8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
                  241-Cooked; Canned; Baked         8.000000   1.000  1.000  60  cherry
            Full comment: cherry frozen
1201091000 12A  Cherry, juice
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.500  1.000  60  cherry
            Full comment: cherry frozen
                  120-Uncooked; Frozen; Cook Meth N/S
                                                    8.000000   1.500  1.000  60  cherry
            Full comment: cherry frozen
                  130-Uncooked; Dried; Cook Meth N/S
                                                    8.000000   1.500  1.000  60  cherry
            Full comment: cherry frozen
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                    8.000000   1.500  1.000  60  cherry
            Full comment: cherry frozen
                  211-Cooked; Fresh or N/S; Baked
                                                    8.000000   1.500  1.000  60  cherry
            Full comment: cherry frozen
                  240-Cooked; Canned; Cook Meth N/S
                                                    8.000000   1.500  1.000  60  cherry
            Full comment: cherry frozen
1201091001 12A  Cherry, juice-babyfood              8.000000   1.500  1.000  60  cherry
    Full comment: cherry frozen
1201090001 12A  Cherry-babyfood                     8.000000   1.000  1.000  60  cherry
    Full comment: cherry frozen
1202230000 12B  Nectarine                           8.000000   1.000  1.000  63  nectar
    Full comment: nectarine
1202260000 12B  Peach                               8.000000   1.000  1.000  61  peach
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1202261000 12B  Peach, dried                          0.000126   7.000  1.000       peach
1202261001 12B  Peach, dried-babyfood                 0.000126   7.000  1.000       peach
1202262000 12B  Peach, juice                          8.000000   1.300  1.000  65   peach
    Full comment: peach canned
1202262001 12B  Peach, juice-babyfood                 8.000000   1.300  1.000  65   peach
    Full comment: peach canned
1202260001 12B  Peach-babyfood                       8.000000   1.000  1.000  64   peach
    Full comment: peach bf
1203285000 12C  Plum                                  8.000000   5.000  1.000  62   plum
1203287000 12C  Plum, prune, dried                    8.000000   5.000  1.000  96   prune
1203287001 12C  Plum, prune, dried-babyfood           8.000000   1.000  1.000  96   prune
1203286000 12C  Plum, prune, fresh                    8.000000   1.000  1.000  96   prune
1203286001 12C  Plum, prune, fresh-babyfood           8.000000   1.000  1.000  96   prune
1203288000 12C  Plum, prune, juice                    8.000000   1.400  1.000  96   prune
1203288001 12C  Plum, prune, juice-babyfood           8.000000   1.400  1.000  96   prune
1203285001 12C  Plum-babyfood                        8.000000   1.000  1.000  62   plum
1301055000 13A  Blackberry                           8.000000   1.000  1.000  66   raspbe
    Full comment: raspberry
1301056000 13A  Blackberry, juice                    8.000000   1.200  1.000  66   raspbe
    Full comment: raspberry
1301056001 13A  Blackberry, juice-babyfood           8.000000   1.200  1.000  66   raspbe
    Full comment: raspberry
1302057000 13B  Blueberry                            8.000000   1.000  1.000  67   bluebe
    Full comment: blueberry
1302057001 13B  Blueberry-babyfood                   8.000000   1.000  1.000  67   bluebe
    Full comment: blueberry
1301058000 13A  Boysenberry                         8.000000   1.000  1.000  66   raspbe
    Full comment: raspberry
1307130000 13G  Cranberry                            8.000000   1.000  1.000  70   cranbe
    Full comment: cranberry
1307131000 13G  Cranberry, dried                    8.000000   7.900  1.000  70   cranbe
    Full comment: cranberry
1307132000 13G  Cranberry, juice                    8.000000   1.200  1.000  70   cranbe
    Full comment: cranberry
1307132001 13G  Cranberry, juice-babyfood           8.000000   1.200  1.000  70   cranbe
    Full comment: cranberry
1307130001 13G  Cranberry-babyfood                  8.000000   1.000  1.000  70   cranbe
    Full comment: cranberry
1302136000 13B  Currant                              8.000000   1.000  1.000  67   bluebe
    Full comment: blueberry
1302137000 13B  Currant, dried                      8.000000   7.900  1.000  67   bluebe
    Full comment: blueberry
1302174000 13B  Gooseberry                          8.000000   1.000  1.000  67   bluebe
    Full comment: blueberry
1304175000 13D  Grape                                8.000000   1.000  1.000  68   grape
1304176000 13D  Grape, juice                         8.000000   1.000  1.000  69   grape
    Full comment: grape juice
1304176001 13D  Grape, juice-babyfood                8.000000   1.000  1.000  69   grape
    Full comment: grape juice
1304178000 13D  Grape, raisin                        8.000000   1.000  1.000  87   grape
    Full comment: grape raisin
1304179000 13D  Grape, wine and sherry               8.000000   1.200  1.000  69   grape
    Full comment: grape juice
1301208000 13A  Loganberry                           8.000000   1.000  1.000  66   raspbe
    Full comment: raspberry
1301320000 13A  Raspberry                            8.000000   1.000  1.000  66   raspbe
    Full comment: raspberry
1301321000 13A  Raspberry, juice                     8.000000   1.200  1.000  66   raspbe
    Full comment: raspberry
1301321001 13A  Raspberry, juice-babyfood           8.000000   1.200  1.000  66   raspbe
    Full comment: raspberry
1301320001 13A  Raspberry-babyfood                  8.000000   1.000  1.000  66   raspbe
    Full comment: raspberry
1307359000 13G  Strawberry
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                     8.000000   1.000  1.000  71   strawb
            Full comment: strawberry
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                120-Uncooked; Frozen; Cook Meth N/S
                                                8.000000   1.000  1.000  71  strawb
          Full comment: strawberry
                211-Cooked; Fresh or N/S; Baked
                                                8.000000   1.000  1.000  71  strawb
          Full comment: strawberry
                223-Cooked; Frozen; Fried       8.000000   1.000  1.000  72  strawb
          Full comment: strawberry froz
                230-Cooked; Dried; Cook Meth N/S
                                                8.000000   1.000  1.000  71  strawb
          Full comment: strawberry
                240-Cooked; Canned; Cook Meth N/S
                                                8.000000   1.000  1.000  71  strawb
          Full comment: strawberry
                241-Cooked; Canned; Baked       8.000000   1.000  1.000  71  strawb
          Full comment: strawberry
1307360000 13G  Strawberry, juice               8.000000   1.200  1.000  71  strawb
    Full comment: strawberry
1307360001 13G  Strawberry, juice-babyfood      8.000000   1.200  1.000  71  strawb
    Full comment: strawberry
1307359001 13G  Strawberry-babyfood             8.000000   1.000  1.000  71  strawb
    Full comment: strawberry
1400003000 14   Almond                          8.000000   1.000  1.000  73  almond
1400004000 14   Almond, oil                     0.002000   2.800  1.000      almond
1400004001 14   Almond, oil-babyfood            0.002000   2.800  1.000      almond
1400003001 14   Almond-babyfood                 8.000000   1.000  1.000  73  almond
1400092000 14   Chestnut                        0.002000   1.000  1.000      almond
1400155000 14   Hazelnut                        0.002000   1.000  1.000      almond
1400156000 14   Hazelnut, oil                   0.002000   1.800  1.000      almond
1400213000 14   Macadamia nut                   0.002000   1.000  1.000      almond
1400269000 14   Pecan                           8.000000   1.000  1.000  98  pecan
1400391000 14   Walnut                          8.000000   1.000  1.000  99  walnut
1500027000 15   Barley, bran                    8.000000   1.000  1.000  74  barley
1500026000 15   Barley, flour                   8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500026001 15   Barley, flour-babyfood          8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500025000 15   Barley, pearled barley          8.000000   1.000  1.000  74  barley
1500025001 15   Barley, pearled barley-babyfood 8.000000   1.000  1.000  74  barley
1500122000 15   Corn, field, bran               8.000000  21.400  1.000  75  corn g
    Full comment: corn grain
1500120000 15   Corn, field, flour              8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500120001 15   Corn, field, flour-babyfood     8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500121000 15   Corn, field, meal               8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500121001 15   Corn, field, meal-babyfood      8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500125000 15   Corn, field, oil                8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500125001 15   Corn, field, oil-babyfood       8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500123000 15   Corn, field, starch             8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500123001 15   Corn, field, starch-babyfood    8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500124000 15   Corn, field, syrup              8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500124001 15   Corn, field, syrup-babyfood     8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500126000 15   Corn, pop                       8.000000   1.000  1.000  75  corn g
    Full comment: corn grain
1500127000 15   Corn, sweet
                110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                2.000000   1.000  1.000  77  sweet
          Full comment: sweet corn
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                140-Uncooked; Canned; Cook Meth N/S
                                                2.000000   1.000  1.000  76  sweet
          Full comment: sweet corn canned
                210-Cooked; Fresh or N/S; Cook Meth N/S
                                                2.000000   1.000  1.000  77  sweet
          Full comment: sweet corn
                211-Cooked; Fresh or N/S; Baked
                                                2.000000   1.000  1.000  77  sweet
          Full comment: sweet corn
                212-Cooked; Fresh or N/S; Boiled
                                                2.000000   1.000  1.000  77  sweet
          Full comment: sweet corn
                213-Cooked; Fresh or N/S; Fried
                                                2.000000   1.000  1.000  77  sweet
          Full comment: sweet corn
                220-Cooked; Frozen; Cook Meth N/S
                                                2.000000   1.000  1.000  78  sweet
          Full comment: sweet corn froz
                221-Cooked; Frozen; Baked       2.000000   1.000  1.000  78  sweet
          Full comment: sweet corn froz
                222-Cooked; Frozen; Boiled      2.000000   1.000  1.000  78  sweet
          Full comment: sweet corn froz
                232-Cooked; Dried; Boiled       2.000000   1.000  1.000  77  sweet
          Full comment: sweet corn
                240-Cooked; Canned; Cook Meth N/S
                                                2.000000   1.000  1.000  76  sweet
          Full comment: sweet corn canned
                242-Cooked; Canned; Boiled      2.000000   1.000  1.000  76  sweet
          Full comment: sweet corn canned
                243-Cooked; Canned; Fried       2.000000   1.000  1.000  76  sweet
          Full comment: sweet corn canned
1500127001 15   Corn, sweet-babyfood            2.000000   1.000  1.000  77  sweet
    Full comment: sweet corn
1500226000 15   Millet, grain                   8.000000   1.000  1.000  82  wheat
    Full comment: wheat grain
1500231000 15   Oat, bran                       8.000000   1.000  1.000  79  oat br
    Full comment: oat bran
1500232000 15   Oat, flour                      8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500232001 15   Oat, flour-babyfood             8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500233000 15   Oat, groats/rolled oats         8.000000   1.000  1.000  80  oat gr
    Full comment: oat grain
1500233001 15   Oat, groats/rolled oats-babyfood 8.000000  1.000  1.000  80  oat gr
    Full comment: oat grain
1500326000 15   Rice, bran                      8.000000   1.000  1.000  81  rice w
    Full comment: rice white
1500326001 15   Rice, bran-babyfood             8.000000   1.000  1.000  81  rice w
    Full comment: rice white
1500324000 15   Rice, brown                     8.000000   1.250  1.000  81  rice w
    Full comment: rice white
1500324001 15   Rice, brown-babyfood            8.000000   1.250  1.000  81  rice w
    Full comment: rice white
1500325000 15   Rice, flour                     8.000000   1.250  1.000  81  rice w
    Full comment: rice white
1500325001 15   Rice, flour-babyfood            8.000000   1.250  1.000  81  rice w
    Full comment: rice white
1500323000 15   Rice, white                     8.000000   1.000  1.000  81  rice w
    Full comment: rice white
1500323001 15   Rice, white-babyfood            8.000000   1.000  1.000  81  rice w
    Full comment: rice white
1500329000 15   Rye, flour                      8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500328000 15   Rye, grain                      8.000000   1.000  1.000  83  wheat
1500344000 15   Sorghum, grain                  8.000000   1.000  1.000  82  wheat
    Full comment: wheat grain
1500345000 15   Sorghum, syrup                  8.000000   1.000  1.000  82  wheat
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    Full comment: wheat grain
1500381000 15   Triticale, flour                  8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500381001 15   Triticale, flour-babyfood        8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500404000 15   Wheat, bran                      8.000000   1.000  1.000  82  wheat
    Full comment: wheat grain
1500402000 15   Wheat, flour                     8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500402001 15   Wheat, flour-babyfood            8.000000   1.000  1.000  83  wheat
    Full comment: wheat flour
1500403000 15   Wheat, germ                      8.000000   1.000  1.000  82  wheat
    Full comment: wheat grain
1500401000 15   Wheat, grain                     8.000000   1.000  1.000  82  wheat
    Full comment: wheat grain
1500401001 15   Wheat, grain-babyfood            8.000000   1.000  1.000  82  wheat
    Full comment: wheat grain
1500405000 15   Wild rice                        8.000000   1.000  1.000  81  rice w
    Full comment: rice white
2003128000 20C  Cottonseed, oil                  0.010000   1.000  0.025      cotton
    Full comment: cottonseed oil
2003128001 20C  Cottonseed, oil-babyfood         0.010000   1.000  0.025      cotton
    Full comment: cottonseed oil
2001163000 20A  Flax seed, oil                   0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001162900 20A  Flax, seed                       0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001319000 20A  Rapeseed, oil                    0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001319001 20A  Rapeseed, oil-babyfood           0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002330000 20B  Safflower, oil                   0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002330001 20B  Safflower, oil-babyfood          0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001337000 20A  Sesame, oil                     0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001337001 20A  Sesame, oil-babyfood            0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001336000 20A  Sesame, seed                    0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2001336001 20A  Sesame, seed-babyfood           0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002365000 20B  Sunflower, oil                  0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002365001 20B  Sunflower, oil-babyfood         0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2002364000 20B  Sunflower, seed                 0.010000   1.000  1.000      cotton
    Full comment: cottonseed oil
2100228000 21   Mushroom                        8.000000   1.000  1.000 100  mushro
    Full comment: mushroom
2201001500 22A  Agave                           0.001000   1.000  1.000      aspara
    Full comment: asparagus
2201019000 22A  Asparagus
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                8.000000   1.000  1.000  19  aspara
           Full comment: asparagus
                  212-Cooked; Fresh or N/S; Boiled
                                                8.000000   1.000  1.000  19  aspara
           Full comment: asparagus
                  213-Cooked; Fresh or N/S; Fried
                                                8.000000   1.000  1.000  19  aspara
           Full comment: asparagus
                  222-Cooked; Frozen; Boiled    8.000000   1.000  1.000  19  aspara
           Full comment: asparagus
                  242-Cooked; Canned; Boiled    8.000000   1.000  1.000  19  aspara
           Full comment: asparagus
```

```
2201022000 22A  Bamboo, shoots                        0.001000   1.000  1.000       aspara
    Full comment: asparagus
2201073000 22A  Cactus                                0.001000   1.000  1.000       aspara
    Full comment: asparagus
2202076000 22B  Cardoon                               0.001000   1.000  1.000       celery
2202085000 22B  Celery                                8.000000   1.000  1.000  37   celery
2202086000 22B  Celery, juice                         8.000000   1.400  1.000  37   celery
2202085001 22B  Celery-babyfood                      8.000000   1.000  1.000  37   celery
2201087000 22A  Celtuce                              0.001000   1.000  1.000       celery
2201152000 22A  Fennel, Florence                      0.001000   1.000  1.000       aspara
    Full comment: asparagus
2201196000 22A  Kohlrabi                              0.001000   1.000  1.000       aspara
    Full comment: asparagus
2201243000 22A  Palm heart, leaves                    0.001000   1.000  1.000       aspara
    Full comment: asparagus
2202322000 22B  Rhubarb                               0.001000   1.000  1.000       celery
2303141000 23C  Date                                  8.000000   1.000  1.000  95   date
2302153000 23B  Fig                                   8.000000   1.000  1.000  84   fig
2302154000 23B  Fig, dried                            0.025000   1.000  1.000       fig
2302183000 23B  Guava                                 8.000000   1.000  1.000  93   guava
2302183001 23B  Guava-babyfood                       8.000000   1.000  1.000  93   guava
2402020000 24B  Avocado                               8.000000   1.000  1.000  86   avocad
    Full comment: avocado
2402215000 24B  Mango                                 8.000000   1.000  1.000  88   mango
2402216000 24B  Mango, dried                         8.000000   5.900  1.000  88   mango
2402217000 24B  Mango, juice                         8.000000   2.000  1.000  88   mango
2402217001 24B  Mango, juice-babyfood                8.000000   2.000  1.000  88   mango
2402215001 24B  Mango-babyfood                       8.000000   1.000  1.000  88   mango
2402245000 24B  Papaya                                1.000000   1.000  1.000  89   papaya
2402246000 24B  Papaya, dried                         0.001000   1.000  1.000       papaya
2402247000 24B  Papaya, juice                         1.000000   2.000  1.000  89   papaya
2402245001 24B  Papaya-babyfood                      1.000000   1.000  1.000  89   papaya
2405252000 24E  Passionfruit                          8.000000   1.000  1.000  94   passio
    Full comment: passionfruit
2405253000 24E  Passionfruit, juice                   8.000000   2.000  1.000  94   passio
    Full comment: passionfruit
2405253001 24E  Passionfruit, juice-babyfood          8.000000   2.000  1.000  94   passio
    Full comment: passionfruit
2405252001 24E  Passionfruit-babyfood                 8.000000   1.000  1.000  94   passio
    Full comment: passionfruit
2403279000 24C  Pineapple
                  110-Uncooked; Fresh or N/S; Cook Meth N/S
                                                      8.000000   1.000  1.000  91   pineap
            Full comment: pineapple
                  210-Cooked; Fresh or N/S; Cook Meth N/S
                                                      8.000000   1.000  1.000  91   pineap
            Full comment: pineapple
                  211-Cooked; Fresh or N/S; Baked
                                                      8.000000   1.000  1.000  91   pineap
            Full comment: pineapple
                  212-Cooked; Fresh or N/S; Boiled
                                                      8.000000   1.000  1.000  91   pineap
            Full comment: pineapple
                  221-Cooked; Frozen; Baked           8.000000   1.000  1.000  91   pineap
            Full comment: pineapple
                  240-Cooked; Canned; Cook Meth N/S
                                                      8.000000   1.000  1.000  92   pineap
            Full comment: pineapple canned
2403280000 24C  Pineapple, dried                      0.010400   7.300  1.000       pineap
    Full comment: pineapple
2403281000 24C  Pineapple, juice                      8.000000   1.700  1.000  92   pineap
    Full comment: pineapple canned
2403281001 24C  Pineapple, juice-babyfood             8.000000   1.700  1.000  92   pineap
    Full comment: pineapple canned
2403279001 24C  Pineapple-babyfood                    8.000000   1.000  1.000  92   pineap
    Full comment: pineapple canned
```

## Attachment 9. DEEM-FCID Acute Food Only Output File for Malaoxon

```
                                                                  Ver. 4.02, 05-10-c
DEEM-FCID ACUTE Analysis for MALAOXON                      NHANES 2005-2010 2-Day
Residue file: MALAOXON_ACUTE&SS.R10                     Adjustment factor #2 used.
Analysis Date: 04-03-2023/08:53:38    Residue file dated: 03-09-2023/16:18:54
NOEL (Acute) =   1.000000 mg/kg body-wt/day
Acute Pop Adjusted Dose (aPAD) varies with population; see individual reports
RAC/FF intake summed over 24 hours
MC iterations = 1000; MC list in residue file; MC seed = 10; RNG = MS VB
Run Comment: "Malaoxon Food Only Acute and Steady State"
================================================================================

Summary calculations--per capita:

---   95th Percentile----   ---   99th Percentile----     ---99.9th Percentile----
 Exposure  % aPAD     MOE    Exposure  % aPAD     MOE    Exposure  % aPAD     MOE
---------- ------- -------- ---------- ------- -------- ---------- ------- --------
All Infants:
  0.000079    0.02   12683    0.000168    0.04    5955    0.000496    0.10    2015
Children 1-2:
  0.000356    0.08    2812    0.000705    0.16    1419    0.001502    0.33     665
Children 3-5:
  0.000346    0.08    2891    0.000782    0.18    1279    0.001289    0.30     775
Children 6-12:
  0.000241    0.06    4142    0.000553    0.14    1808    0.001223    0.31     817
Youth 13-19:
  0.000127    0.04    7901    0.000362    0.11    2760    0.001415    0.41     706
Adults 20-49:
  0.000183    0.06    5459    0.000367    0.11    2724    0.000768    0.24    1302
Adults 50-99:
  0.000154    0.05    6475    0.000351    0.11    2850    0.000626    0.19    1597
Female 13-49:
  0.000134    0.04    7456    0.000276    0.08    3620    0.000550    0.16    1818
```

## Attachment 10. DEEM-FCID Acute Drinking Water Only Input File for Malaoxon

```
                                                    Ver. 4.02, 05-10-c
DEEM-FCID Acute analysis for MALATHION
Residue file name: C:\Users\spiper\OneDrive - Environmental Protection Agency
(EPA)\Documents\Malathion\Malathion\Malathion
DEEM\Malathion_DEEM\Malathion\MALATHIONP_DW_FLCitrus_ACUTE.R10
Analysis Date 01-11-2023            Residue file dated: 01-11-2023/13:40:53
Reference dose (aRfD) = 1 mg/kg bw/day
Comment: DW only
--------------------------------------------------------------------------------
  EPA      Crop                                  Def Res     Adj.Factors   Comment
  Code      Grp  Food Name                        (ppm)       #1    #2
---------- ---- -------------------------------  ----------  ------ ------  -------
8601000000 86A  Water, direct, all sources        0.093000   1.000  1.000FL Cit
          Full comment: FL Citrus
8602000000 86B  Water, indirect, all sources      0.093000   1.000  1.000FL Cit
          Full comment: FL Citrus
```

## Attachment 11. DEEM-FCID Acute Drinking Water Only Output File for Malaoxon

```
                                                                  Ver. 4.02, 05-10-c
DEEM-FCID ACUTE Analysis for MALATHION                      NHANES 2005-2010 2-Day
Residue file: MALATHIONP_DW_FLCitrus_ACUTE.R10    Adjustment factor #2 NOT used.
Analysis Date: 04-03-2023/09:02:18    Residue file dated: 01-11-2023/13:40:53
NOEL (Acute) =   1.000000 mg/kg body-wt/day
Acute Pop Adjusted Dose (aPAD) varies with population; see individual reports
RAC/FF intake summed over 24 hours
Run Comment: "DW only"
================================================================================

Summary calculations--per capita:

---   95th Percentile----   ---   99th Percentile----     ---99.9th Percentile----
 Exposure  % aPAD     MOE    Exposure  % aPAD     MOE    Exposure  % aPAD     MOE
---------- ------- -------- ---------- ------- -------- ---------- ------- --------
All Infants:
  0.016977    3.09       58    0.023321    4.25       42    0.031656    5.77       31
Children 1-2:
  0.007147    1.37      139    0.010803    2.08       92    0.027881    5.36       35
Children 3-5:
  0.005627    1.13      177    0.008576    1.72      116    0.014560    2.91       68
Children 6-12:
  0.004415    0.98      226    0.007327    1.63      136    0.012145    2.70       82
Youth 13-19:
  0.004128    1.05      242    0.006400    1.63      156    0.009799    2.50      102
Adults 20-49:
  0.004844    1.30      206    0.007325    1.96      136    0.010301    2.76       97
Adults 50-99:
  0.004213    1.13      237    0.006683    1.79      149    0.010533    2.82       94
Female 13-49:
  0.004889    1.27      204    0.007115    1.85      140    0.010736    2.80       93
```

## Attachment 12. DEEM-FCID Steady State Residue Output File (Food Only) for Malathion

```
                                                                    Ver. 4.02, 05-10-c
DEEM-FCID ACUTE Analysis for MALATHIONP                          NHANES 2005-2010 2-Day
Residue file: MALATHIONP_ACUTE&SS2.R10                       Adjustment factor #2 used.
Analysis Date: 04-03-2023/09:49:37    Residue file dated: 02-27-2023/08:08:32
NOEL (Acute) =   1.000000 mg/kg body-wt/day
Acute Pop Adjusted Dose (aPAD) varies with population; see individual reports
Two-Day Average Results Reported
RAC/FF intake summed over 24 hours
MC iterations = 2000; MC list in residue file; MC seed = 10; RNG = MS VB
Run Comment: "Malathion Food Only- Acute & Steady State"
================================================================================

Summary calculations--per capita:

---   95th Percentile----   ---   99th Percentile----     ---99.9th Percentile----
 Exposure  % aPAD     MOE    Exposure  % aPAD     MOE    Exposure  % aPAD     MOE
---------- ------- -------- ---------- ------- -------- ---------- ------- --------
All Infants:
  0.000116    0.02    8625    0.000319    0.05    3134    0.000923    0.13    1083
Children 1-2:
  0.000266    0.04    3753    0.000677    0.10    1477    0.002417    0.36     413
Children 3-5:
  0.000217    0.03    4600    0.000485    0.08    2063    0.001946    0.31     513
Children 6-12:
  0.000139    0.02    7199    0.000360    0.06    2776    0.001233    0.21     810
Youth 13-19:
  0.000092    0.02   10810    0.000234    0.05    4277    0.000741    0.15    1349
Adults 20-49:
  0.000161    0.01    6201    0.000350    0.02    2857    0.001327    0.08     753
Adults 50-99:
  0.000119    0.01    8423    0.000268    0.02    3732    0.000838    0.05    1193
Female 13-49:
  0.000103    0.02    9725    0.000259    0.05    3861    0.001203    0.24     831
```

## Attachment 13. DEEM-FCID Steady State Residue Output File (Food Only) for Malaoxon

```
                                                                    Ver. 4.02, 05-10-c
DEEM-FCID ACUTE Analysis for MALAOXON                          NHANES 2005-2010 2-Day
Residue file: MALAOXON_ACUTE&SS.R10                         Adjustment factor #2 used.
Analysis Date: 04-03-2023/09:28:45    Residue file dated: 03-09-2023/16:18:54
NOEL (Acute) =   1.000000 mg/kg body-wt/day
Acute Pop Adjusted Dose (aPAD) varies with population; see individual reports
Two-Day Average Results Reported
RAC/FF intake summed over 24 hours
MC iterations = 2000; MC list in residue file; MC seed = 10; RNG = MS VB
Run Comment: "Malaoxon Food Only Acute and Steady State"
================================================================================

Summary calculations--per capita:

---   95th Percentile----   ---   99th Percentile----     ---99.9th Percentile----
 Exposure  % aPAD     MOE    Exposure  % aPAD     MOE    Exposure  % aPAD     MOE
---------- ------- -------- ---------- ------- -------- ---------- ------- --------
All Infants:
  0.000075    0.05   13405    0.000179    0.12    5602    0.000389    0.26    2570
Children 1-2:
  0.000327    0.23    3059    0.000636    0.45    1572    0.001194    0.85     837
Children 3-5:
  0.000284    0.21    3517    0.000606    0.45    1649    0.001509    1.11     662
Children 6-12:
  0.000201    0.16    4977    0.000381    0.31    2622    0.000814    0.66    1228
Youth 13-19:
  0.000130    0.12    7709    0.000325    0.30    3081    0.000722    0.66    1385
Adults 20-49:
  0.000161    0.15    6213    0.000303    0.29    3298    0.000490    0.47    2041
Adults 50-99:
  0.000135    0.13    7403    0.000278    0.27    3602    0.000487    0.47    2053
Female 13-49:
  0.000122    0.11    8225    0.000212    0.20    4720    0.000423    0.40    2365
```

## Attachment 14. DEEM-FCID Steady State Drinking Water Only Input File for Malaoxon

```
                                                                Ver. 4.02, 05-10-c
DEEM-FCID Acute analysis for MALATHION
Residue file name: C:\Users\spiper\OneDrive - Environmental Protection Agency
(EPA)\Documents\Malathion\Malathion\Malathion
DEEM\Malathion_DEEM\Malathion\Malaoxon_POD_2022\MALAOXON_DW_WACHERRYULV_SS.R10
Analysis Date 01-11-2023            Residue file dated: 01-11-2023/13:54:59
Reference dose (aRfD) = 1 mg/kg bw/day
Comment: DW only (steady state)
--------------------------------------------------------------------------------
RDL indices and parameters for Monte Carlo Analysis:
Index Dist Parameter #1           Param #2    Param #3    Comment
  #   Code
----- ---- ------------           ----------- ----------- ----------
  1    6   WACherry_SS.rdf

  EPA      Crop Food Name                          Def Res     Adj.Factors  RDL  Comment
  Code      Grp                                     (ppm)       #1     #2   Pntr
---------- ---- -------------------------------  ----------  ------ ------ ---  -------
8601000000 86A  Water, direct, all sources         0.015000   1.000  1.000      WA Che
    Full comment: WA Cherry ULV
8602000000 86B  Water, indirect, all sources       0.015000   1.000  1.000      WA Che
    Full comment: WA Cherry ULV
```

## Attachment 15. DEEM-FCID Steady State Drinking Water Only Output File for Malaoxon

```
DEEM-FCID ACUTE Analysis for MALATHION                    NHANES 2005-2010 2-Day
Residue file: MALAOXON_DW_WACHERRYULV_SS.R10      Adjustment factor #2 NOT used.
Analysis Date: 04-03-2023/10:04:50    Residue file dated: 01-11-2023/13:54:59
NOEL (Acute) =   1.000000 mg/kg body-wt/day
Acute Pop Adjusted Dose (aPAD) varies with population; see individual reports
Two-Day Average Results Reported
RAC/FF intake summed over 24 hours
Run Comment: "DW only (steady state)"
================================================================================

Summary calculations--per capita:

---   95th Percentile----   ---   99th Percentile----     ---99.9th Percentile----
 Exposure  % aPAD     MOE    Exposure  % aPAD     MOE    Exposure  % aPAD     MOE
---------- ------- -------- ---------- ------- -------- ---------- ------- --------
All Infants:
  0.002740    1.66     364    0.003554    2.15     281    0.004451    2.70     224
Children 1-2:
  0.001065    0.68     939    0.001430    0.91     699    0.003403    2.17     293
Children 3-5:
  0.000807    0.53    1239    0.001295    0.85     772    0.001879    1.24     532
Children 6-12:
  0.000658    0.51    1519    0.001041    0.81     960    0.001779    1.38     562
Youth 13-19:
  0.000603    0.50    1659    0.000925    0.76    1080    0.001259    1.04     794
Adults 20-49:
  0.000722    0.63    1384    0.001013    0.88     987    0.001436    1.25     696
Adults 50-99:
  0.000650    0.56    1539    0.000983    0.85    1017    0.001374    1.19     727
Female 13-49:
  0.000727    0.62    1376    0.001004    0.85     996    0.001417    1.20     705
```

## Attachment 16. Malathion SLUA Report

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C., 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 2, 2021

**ERRATUM**

**SUBJECT:** Correction to Malathion (057701) Screening Level Usage Analysis (SLUA) memorandum Table 1

**FROM:** Rachel Fovargue, Biologist
Science Information and Analysis Branch
Biological and Economic Analysis Division (7503P)

**THRUS:** Hope Johnson, Chief
Science Information and Analysis Branch
Biological and Economic Analysis Division (7503P)

**TO:** Carolyn Smith, Risk Manager
Risk Management and Implementation Branch III
Pesticide Re-evaluation division (7508P)

Avivah Jakob, Team Leader
Risk Management and Implementation Branch III
Pesticide Re-evaluation division (7508P)

This erratum provides corrections to transcription errors in memorandum Table 1 of the Malathion SLUA, dated 28 January 2021.

Specific changes:

- Carrot 2015 reported maximum PCT: 20
- Lettuce 2015 reported maximum PCT: 15
- Lettuce 2021 reported average Lbs. AI applied: 20,000

Please substitute the corrected table below for Table 1 in the referenced SLUA. A complete copy of that memorandum and SLUA follows this erratum.

**Table 1.** Comparison of average annual pounds active ingredient (AI) applied and maximum percent crop treated for sites with relatively large differences in the 2015 and 2021 SLUAs.

| Crop | Annual Average Lbs. AI Applied | | Maximum Percent Crop Treated | |
|---|---|---|---|---|
| | 2015 | 2021 | 2015 | 2021 |
| Almond (added in 2021 SLUA) | -- | <500 | -- | NC |
| Asparagus | 1,000 | 2,000 | 10 | 25 |
| Blueberries | 60,000 | 70,000 | 40 | 50 |
| Broccoli | 4,000 | 20,000 | 5 | NC |
| Caneberries | 30,000 | 40,000 | 70 | 70 |
| Canola (Not Registered) | <500 | NR | 10 | NR |
| Carrot** | 10,000 | <500 | 20 | <2.5 |
| Celery | 10,000 | 7,000 | 30 | 25 |
| Cotton | 900,000 | 100,000 | 20 | <2.5 |
| Eggplant (no longer nationally surveyed) | <500 | NR | 5 | NR |
| Lettuce | 40,000 | 20,000 | 15 | 15 |
| Nectarines (added in 2021 SLUA) | -- | <500 | -- | NC |
| Oats (no usage detected) | <500 | NR | <2.5 | NR |
| Onions | 6,000 | 10,000 | 10 | 15 |
| Oranges | 70,000 | 200,000 | 20 | 30 |
| Pears**(recent uptick in usage) | 5,000 | 3,000 | <2.5 | 20 |
| Peas, Green (no usage detected) | 2,000 | NR | <2.5 | NR |
| Pecans | 20,000 | 10,000 | 5 | <2.5 |
| Strawberries | 100,000 | 70,000 | 55 | 45 |
| Sugar Beets* (Not Registered) | 20,000 | NR | <2.5 | NR |
| Sunflowers (Not Registered) | 1,000 | NR | <2.5 | NR |
| Tangelos | <500 | 600 | 10 | 45 |
| Tangerines | 10,000 | 20,000 | 25 | 25 |
| Walnuts | 100,000 | 30,000 | 15 | 10 |

* Value reported originally in 2015 SLUA deemed no longer reliable

** Multiple product registrations containing this use were cancelled during the reporting time frame (2008-2019).

NC: not calculated, only pounds AI applied available. Due to reporting inconsistencies across CA counties, PCTs calculated from CDPR data are being withheld. PCTs for specific California crops and time periods may be available upon request, subject to availability and data quality considerations.

NR: Not Reported in 2021 SLUA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C., 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

January 28, 2021

**MEMORANDUM**

**SUBJECT:** Malathion (057701) Screening Level Usage Analysis (SLUA)

**FROM:** Rachel Fovargue, Biologist
Science Information and Analysis Branch
Biological and Economic Analysis Division (7503P)

**THRUS:** Hope Johnson, Chief
Science Information and Analysis Branch
Biological and Economic Analysis Division (7503P)

**TO:** Carolyn Smith, Risk Manager
Risk Management and Implementation Branch III
Pesticide Re-evaluation division (7508P)

Avivah Jakob, Team Leader
Risk Management and Implementation Branch III
Pesticide Re-evaluation division (7508P)

This memorandum transmits an update of the Screening Level Usage Analysis (SLUA) report for malathion (last update April 2015). Notable differences in values reported on the 2015 and 2021 SLUAs are summarized in Table 1 below. Sites for which usage was reported during the SLUA reporting period, but that are not currently registered or were cancelled before or during the SLUA reporting period are not included in SLUA. These sites are outlined in Table 2 below.

This SLUA report is divided into three sections as follows to facilitate your use of the information presented:

- *Coversheet* – a description of the SLUA, the assumptions, data sources and limitations
- *SLUA Data*– usage data estimates (average annual pounds a.i. applied and average and maximum percent crop treated) for each surveyed crop
- *SLUA Appendix A* – listing of crops that are not surveyed for any chemical by our data sources

**Table 1.** Comparison of average annual pounds active ingredient (AI) applied and maximum percent crop treated for sites with relatively large differences in the 2015 and 2021 SLUAs.

| Crop | Annual Average Lbs. AI Applied | | Maximum Percent Crop Treated | |
|---|---|---|---|---|
| | 2015 | 2021 | 2015 | 2021 |
| Almond (added in 2021 SLUA) | -- | <500 | -- | NC |
| Asparagus | 1,000 | 2,000 | 10 | 25 |
| Blueberries | 60,000 | 70,000 | 40 | 50 |
| Broccoli | 4,000 | 20,000 | 5 | NC |
| Caneberries | 30,000 | 40,000 | 70 | 70 |
| Canola (Not Registered) | <500 | NR | 10 | NR |
| Carrot** | 10,000 | <500 | 10 | <2.5 |
| Celery | 10,000 | 7,000 | 30 | 25 |
| Cotton | 900,000 | 100,000 | 20 | <2.5 |
| Eggplant (no longer nationally surveyed) | <500 | NR | 5 | NR |
| Lettuce | 40,000 | 15 | 20,000 | 15 |
| Nectarines (added in 2021 SLUA) | -- | <500 | -- | NC |
| Oats (no usage detected) | <500 | NR | <2.5 | NR |
| Onions | 6,000 | 10,000 | 10 | 15 |
| Oranges | 70,000 | 200,000 | 20 | 30 |
| Pears**(recent uptick in usage) | 5,000 | 3,000 | <2.5 | 20 |
| Peas, Green (no usage detected) | 2,000 | NR | <2.5 | NR |
| Pecans | 20,000 | 10,000 | 5 | <2.5 |
| Strawberries | 100,000 | 70,000 | 55 | 45 |
| Sugar Beets* (Not Registered) | 20,000 | NR | <2.5 | NR |
| Sunflowers (Not Registered) | 1,000 | NR | <2.5 | NR |
| Tangelos | <500 | 600 | 10 | 45 |
| Tangerines | 10,000 | 20,000 | 25 | 25 |
| Walnuts | 100,000 | 30,000 | 15 | 10 |

* Value reported originally in 2015 SLUA deemed no longer reliable

** Multiple product registrations containing this use were cancelled during the reporting time frame (2008-2019).

NC: not calculated, only pounds AI applied available. Due to reporting inconsistencies across CA counties, PCTs calculated from CDPR data are being withheld. PCTs for specific California crops and time periods may be available upon request, subject to availability and data quality considerations.

NR: Not Reported in 2021 SLUA.

**Table 2.** Sites for which usage was reported but that are not registered or were cancelled before or during the SLUA reporting period (2008-2019).

| Crop |
|---|
| Dates* |
| Olive+ |
| Plums/Prunes* |

+ Use not registered.
* Use cancelled before or during SLUA reporting period.

For questions, comments and other usage or label use information requests, please contact the Science Information and Analysis Branch (SIAB) at OPP_BEAD_SIAB@epa.gov.

cc: Kelly Sherman
Brad Kells
Charmaine Hanson
Nikhil Mallampalli
Claire Paisley-Jones

**Malathion (057701)**
**Screening Level Usage Analysis (SLUA)**
**January 28, 2021**

## What is a Screening Level Usage Analysis (SLUA)?

- A summary of U.S. usage for a pesticidal active ingredient by **agricultural** crop from 2008 to 2019.
- The information presented is not proprietary, business confidential, or trade secret.

## What does it contain?

- Pesticide usage statistics for a **single active ingredient** only.
- Available U.S., **national summary statistics** for pesticide usage information **by crop**.
- **Average pounds of active ingredient applied** – Annual average pounds of the pesticide reported applied for each agricultural crop (i.e., **for surveyed states**, not for the entire United States). Values are calculated by merging pesticide usage data sources together; averaging across all observations within a year for each data source, averaging across data sources within years, averaging across year, and then rounding. Any surveyed year without reported usage for the AI is included as a value of zero pounds applied in the calculation of the average. Values are rounded using common rounding rules (i.e., the half round up method). *Note: If the estimated value is less than 500, then that value is labeled <500. Estimated values between 500 & <1,000,000 are rounded to 1 place value. Estimated values of 1,000,000 or greater are rounded to the hundred thousands' place value.* (Examples: 478 would be reported as "<500"; 43,873 would be reported as "40,000"; 47,873,901 would be reported as "47,900,000")
- **Average percent of crop treated** - Values are calculated by merging data sources together; averaging by year, averaging across all years, & **rounded up** to the nearest multiple of 5. *Note: If the estimated value is less than 1, then the value is labeled <1. If the estimated value is less than 2.5, then the value is labeled <2.5.*
- **Maximum percent of crop treated** - Value is the single maximum annual average value reported across all data sources, across all years. The value is **rounded up** to the nearest multiple of 5. *Note: If the estimated value is less than 2.5, then the value is labeled <2.5.*

## What are the data sources used?

- **United States Department of Agriculture's National Agricultural Statistics Service (USDA-NASS)**- pesticide usage data from 2010 to 2019. (available at https://quickstats.nass.usda.gov/)
- **Kynetec USA, Inc. (Kynetec)** – pesticide usage data from 2010 to 2019 from The AgroTrak Study.
- **California Department of Pesticide Regulation Pesticide Use Reporting (CDPR)** data for 2008 to 2017. (available at http://www.cdpr.ca.gov/docs/pur/purmain.htm)

## What should I consider when interpreting the reported data?

- The surveys sample from enough states to represent 80% or more of the crop production, in most cases. In rare cases, the survey may sample fewer states than required to reach 80% of the crop production; such deviations are based on the scope of the survey and availability of resources.
- Usage statistics are included only for surveyed crops with reported, quantitative use of the active ingredient during the sampling period.
- Lack of reported usage data for the pesticide on a crop **does not imply** zero usage. There are several reasons for this. As with any sampling data, it is possible some usage may be overlooked. Also, even if usage is noted in data sources, it may **not be quantified**. In such instances, site and associated usage are **not reported** in the SLUA.
- Additional registered uses may exist but are not included because the available surveys neither collect, nor report, usage for those crops (e.g., small acreage crops).
- Seed treatment data are no longer available and are not included in this report.
- Non-agricultural use sites (e.g., turf, post-harvest, mosquito control, etc.) are not reported in the SLUA. A separate request must be made to receive these estimates.
- Some sites have reported usage without a registered FIFRA Section 3 use. This usage could be due to various factors, including, but not limited to Section 18 requests, existing stocks of the chemical, data collection errors, and experimental use permits (EUPs).

Malathion, January 2021 (2)

**Screening Level Estimates of Agricultural Uses of Malathion (057701)**
**Sorted Alphabetically**
**Reporting Years: 2008-2019**
**January 28, 2021**

| | | Annual Average | Percent Crop Treated | |
|---|---|---|---|---|
| | Crop | Lbs. A.I. Applied | Average | Maximum |
| 1 | Alfalfa | 100,000 | <1 | <2.5 |
| 2 | Almonds* | <500 | NC | NC |
| 3 | Apples | 700 | <1 | <2.5 |
| 4 | Apricots* | <500 | <1 | <2.5 |
| 5 | Asparagus | 2,000 | 10 | 25 |
| 6 | Avocados* | <500 | <1 | 10 |
| 7 | Barley | D | D | D |
| 8 | Beans (Snap, Bush, Pole, String) | 1,000 | <1 | <2.5 |
| 9 | Blueberries | 70,000 | 40 | 50 |
| 10 | Broccoli* | 20,000 | NC | NC |
| 11 | Brussels Sprout* | 2,000 | NC | NC |
| 12 | Cabbage | 1,000 | <1 | <2.5 |
| 13 | Caneberries | 40,000 | 40 | 70 |
| 14 | Cantaloupes | <500 | <1 | 5 |
| 15 | Carrots | <500 | <1 | <2.5 |
| 16 | Cauliflower | 1,000 | <2.5 | 10 |
| 17 | Celery | 7,000 | 15 | 25 |
| 18 | Cherries | 50,000 | 20 | 25 |
| 19 | Corn | 1,000 | <1 | <2.5 |
| 20 | Cotton | 100,000 | <1 | <2.5 |
| 21 | Cucumbers | 5,000 | <2.5 | 10 |
| 22 | Dry Beans/Peas | 500 | <1 | <2.5 |
| 23 | Figs* | 800 | 10 | 20 |
| 24 | Garlic* | <500 | NC | NC |
| 25 | Grapefruit | 5,000 | 10 | 15 |
| 26 | Grapes* | 3,000 | <1 | <2.5 |
| 27 | Grapes, Wine* | 3,000 | <1 | <2.5 |
| 28 | Honeydew | D | D | D |
| 29 | Lemons* | <500 | <1 | <2.5 |
| 30 | Lettuce | 20,000 | 5 | 15 |
| 31 | Nectarines* | <500 | NC | NC |
| 32 | Onions | 10,000 | 5 | 15 |
| 33 | Oranges | 200,000 | 20 | 30 |

*Continued on next page*

Malathion, January 2021 (3)

| | Crop | Annual Average Lbs. A.I. Applied | Percent Crop Treated Average | Percent Crop Treated Maximum |
|---|---|---|---|---|
| 34 | Peaches | 2,000 | <2.5 | <2.5 |
| 35 | Peanuts | 2,000 | <1 | <2.5 |
| 36 | Pears | 3,000 | 5 | 20 |
| 37 | Pecans | 10,000 | <1 | <2.5 |
| 38 | Peppers | 1,000 | <2.5 | 10 |
| 39 | Potatoes | 1,000 | <1 | <2.5 |
| 40 | Pumpkins | 2,000 | 5 | 15 |
| 41 | Rice | 20,000 | <1 | 5 |
| 42 | Sorghum (Milo) | 3,000 | <1 | <2.5 |
| 43 | Soybeans | 10,000 | <1 | <2.5 |
| 44 | Spinach | 500 | <1 | 5 |
| 45 | Squash | 2,000 | <2.5 | 5 |
| 46 | Strawberries | 70,000 | 35 | 45 |
| 47 | Sweet Corn | 7,000 | <2.5 | 10 |
| 48 | Tangelos | 600 | 25 | 45 |
| 49 | Tangerines | 20,000 | 20 | 25 |
| 50 | Tomatoes | 20,000 | <2.5 | 5 |
| 51 | Walnuts | 30,000 | 5 | 10 |
| 52 | Watermelons | 2,000 | <1 | <2.5 |
| 53 | Wheat, Spring | 7,000 | <1 | <2.5 |
| 54 | Wheat, Winter | 50,000 | <1 | <2.5 |

All numbers are rounded to one significant digit, except those over 1 million, which are rounded to the hundred thousands' place.
<500: less than 500 pounds of active ingredient applied.
<2.5: less than 2.5 percent of crop is treated.
<1: less than 1 percent of crop is treated.

* Based on CDPR data only (80% or more of U.S. acres grown are in California)
NC: not calculated, only pounds AI applied available. Due to reporting inconsistencies across CA counties, PCTs calculated from CDPR data are being withheld. PCTs for specific California crops and time periods may be available upon request, subject to availability and data quality considerations.
D: information is withheld by USDA-NASS to avoid disclosing data for individual farms (USDA-NASS)

These results reflect amalgamated data developed by the Agency and are releasable to the public.

Malathion, January 2021 (4)

SLUA Appendix A

CROPS NOT SURVEYED FOR ANY CHEMICAL USE

Usage data are not available for the *high consumption crops** listed below. These crops are not surveyed for chemical use on the national level by authoritative sources.

| | | |
|---|---|---|
| Beets | Hops | Papaya |
| Cactus | Pineapple | Radishes |
| Cashew | Plantain | Rye |
| Cassava | Limes | Safflower |
| Collards | Maple syrup | Spices, other |
| Cranberries | Mushroom | Sweet Potatoes |
| Endive | Okra | Tomatillo |
| Honey | Onion, green | Turnips |

**high consumption crops = crops that have a large share of U.S. food consumption based on the Food Commodity Intake Database (FCID).*

***Note**: There are many other relatively low consumption crops that are not surveyed as well. If you have questions about a particular crop not mentioned in this SLUA, please contact the "OPP Usage and Label Use Team" via email for more information.*