Lavie Bio Leverages Artificial Intelligence to Make Significant Advancement in Development of Yield Increasing Bio-Stimulants in its collaboration with ICL

More than one dozen novel microbes identified for row crops
suffering from extreme weather conditions

Rehovot, Israel; July 22, 2024 - Lavie Bio Ltd., a leading ag-biologicals company and subsidiary of Evogene Ltd. (Nasdaq: EVGN) (TASE: EVGN), today announced a significant milestone in its collaboration with ICL, a leading global specialty minerals company, to develop bio-stimulant solutions for key row crops facing various abiotic stresses. By leveraging artificial intelligence (AI), Lavie Bio has computationally identified more than a dozen novel microbial candidates believed to have commercial viability as bio-stimulants for crops grown under extreme weather conditions, including drought. While this process can normally take several years, the collaboration achieved success within its first 12 months – thanks to Lavie Bio's proprietary Biology Driven Design (BDD) technology platform.

The ambitious AI-driven program, jointly developed by ICL and Lavie Bio, has identified novel microbe-based biological solutions that, when combined with fertilizers, are expected to be a game changer in overcoming various abiotic stresses under different weather conditions. By focusing on bio-stimulants that enhance crop resilience to such conditions, the collaboration has aimed to deliver tangible benefits to farmers, including a 5% to 10% increase in yield, on average.

As part of this AI-driven achievement, more than a dozen novel microbe candidates, which met the product requirements for efficacy, stability, shelf life and fertilizer compatibility, were computationally identified and verified in multiple greenhouse trials. The microbes were discovered and validated using Lavie Bio's BDD technology platform, powered by Evogene's *MicroBoost AI* tech-engine, and achieved a remarkable prediction rate from computer modelling to greenhouse validation – a rate ten times higher than the industry standard, according to company estimates.

This success paves the way for field trials in both the U.S. and Brazil in the second half of 2024, with results available by year-end. Lavie Bio will continue to leverage AI to drive product development and optimization, while ICL will guide the development and lead the way to product commercialization. The parties aim to start the regulatory process in 2026, just three years from program initiation.

"We are very proud of the collaborations' significant progress, which was achieved by leveraging artificial intelligence to drive rapid advancements in our research," said Amit Noam, CEO of Lavie Bio. "Using ICL's deep agricultural expertise has been essential in focusing Lavie Bio's discovery efforts and has enabled us to advance to field trials in multiple target geographies quickly. Our team did a remarkable job of pushing our discovery process and platform to new heights, continuously improving computational accuracy and reducing both the time and cost to market for our novel products."

Recent research underscores the economic impact of climate change on global row crops, with extreme weather events, like droughts and floods, potentially causing billions in annual losses. Reports from the World Economic Forum and World Meteorological Organization highlight the rising costs, noting that extreme weather and climate-related disasters resulted in $4.3 trillion in losses from 1970 to 2021.[123] The agricultural sector urges the adoption of resilient strategies, technological innovations, and policy interventions to safeguard food security and mitigate economic vulnerabilities.

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About Lavie Bio Ltd.
Lavie Bio, a subsidiary of Evogene Ltd., aims to improve food quality, sustainability, and agriculture productivity through the introduction of microbiome-based ag-biological products. Lavie Bio utilizes a proprietary computational predictive platform, the BDD platform, powered by Evogene's proprietary MicroBoost AI tech-engine, harnessing the power of big data, artificial intelligence, and advanced informatics, for the discovery, optimization and development of bio-stimulant and bio-pesticide products.

For more information, please visit www.lavie-bio.com.

About Evogene Ltd.
Evogene is a computational biology company aiming to revolutionize the development of life-science based products by utilizing cutting edge technologies to increase probability of success while reducing development time and cost. Evogene established three unique technological engines – *MicroBoost AI, ChemPass AI* and *GeneRator AI* – leveraging Big Data and Artificial Intelligence and incorporating deep multidisciplinary understanding in life sciences. Each technological engine is focused on the discovery and development of products based on one of the following core components: microbes (MicroBoost AI), small molecules (ChemPass AI), and genetic elements (GeneRator AI). Evogene uses its technological engines to develop products through subsidiaries and with strategic partners. Currently, Evogene's main subsidiaries utilize the technological engines to develop human microbiome-based therapeutics by Biomica Ltd., ag-chemicals by AgPlenus Ltd. and ag-biologicals by Lavie Bio Ltd. For more information, please visit www.evogene.com.

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[1] https://www.weforum.org/agenda/2023/11/climate-crisis-cost-global-economies/

[2] https://www.weforum.org/agenda/2022/05/one-more-reason-for-rapid-climate-action-economics/

[3] https://wmo.int/news/media-centre/economic-costs-of-weather-related-disasters-soars-early-warnings-save-lives

Forward Looking Statements
This announcement contains statements that constitute forward-looking statements, many of which can be identified by the use of forward-looking words such as "anticipate," "believe," "could," "expect," "should," "plan," "intend," "estimate" and "potential," among others.

Forward-looking statements appear in this press release and include, but are not limited to, statements regarding the company's intent, belief or current expectations. For example, Evogene, and its subsidiaries are using forward-looking statement in this press release when they discuss the development of bio-stimulant solutions for key row crops facing various abiotic stresses, that can be a game changer in overcoming various abiotic stresses, the conduction of field trials in leading agricultural markets in the second half of 2024, and commencement of regulatory process in 2026. Forward-looking statements are based on management's beliefs and assumptions and on information currently available to management. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to: estimates, forecasts and statements as to management's expectations with respect to, among other things, business and financial prospects, financial multiples and accretion estimates, future trends, plans, strategies, positioning, objectives and expectations, general economic, market and business conditions, supply chain and logistics disruptions, energy storage and electric vehicle growth, the potential for new COVID-19 variants, global unrest and conflict, governmental and regulatory requirements and actions by governmental authorities, including changes in government policy, changes in environmental, tax and other laws or regulations and the interpretation thereof, and war or acts of terror and/or political, economic and military instability in Israel and its region, including the current state of war declared in Israel and any resulting disruptions to supply and production chains. As a result of the foregoing, readers should not place undue reliance on the forward-looking statements contained in this press release concerning the timing of the transaction, or other more specific risks and uncertainties facing Evogene and its subsidiaries, such as those risk factors contained in Evogene's reports filed with the applicable securities authority, including those set forth in the "Risk Factors" section of its Annual Report on Form 20-F filed on March 28, 2024.

Forward-looking statements refer only to the date they are made, and the company does not undertake any obligation to update them in light of new information or future developments or to publicly release any revisions to these statements in order to reflect later events or circumstances or to reflect the occurrence of unanticipated events.