UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of November 2019

Commission File Number: 001-36187

EVOGENE LTD.

(Translation of Registrant's Name into English)

13 Gad Feinstein Street Park Rehovot P.O.B 2100 Rehovot 7612002 Israel

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F ⊠ Form 40-F □
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

CONTENTS

Attached hereto and incorporated by reference herein is the following exhibit:

99.1 Press Release: Lavie Bio Announces Advancement in its Product Development Pipeline for Wheat Bio-Stimulants.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

EVOGENE LTD. (Registrant)

Date: November 18, 2019

By: /s/ Dorit Kreiner
Dorit Kreiner
Chief Financial Officer

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EXHIBIT INDEX

EXHIBIT NO. DESCRIPTION

99.1 Press Release: Lavie Bio Announces Advancement in its Product Development Pipeline for Wheat Bio-Stimulants.



Lavie Bio Announces Advancement in its Product Development Pipeline for Wheat Bio-Stimulants

Leading wheat bio-stimulant candidate for spring wheat, exhibiting consistent performance, advancing to 'development stage 2', in line with Lavie Bio's commercialization plans for 2022

Rehovot, Israel – November 18, 2019 – Lavie Bio (Lavie), a subsidiary of Evogene (NASDAQ: EVGN, TASE: EVGN), aiming to improve food quality, sustainability and agriculture productivity through the introduction of microbiome based ag-biological products, announces today phase advancement in its product development pipeline for wheat bio-stimulants. This follows the success of its leading wheat bio-stimulant candidate in demonstrating consistent performance across various locations and varieties at target markets. Lavie Bio is advancing its leading product candidate LAV211 into 'development stage 2', while continuing the development of its additional product candidates LAV212 and LAV213. The spring wheat bio-stimulants program is running in-line with the team's expectations, and commercialization of the leading candidate is targeted for 2022.

Wheat is a highly important crop that accounts for a significant portion of the world's diet. The global wheat flour market is expected to grow to \$270 billion by 2022¹. In North America alone, 25 million acres of spring wheat are planted each year, largely in North Dakota and Western Canada². This is a significant addressable market for Lavie Bio, whose wheat bio-stimulant products have the potential to increase farmer's profits by \$20-\$50 per acre through yield gains.

This announcement follows a series of trials for Lavie Bio's wheat bio-stimulants candidates, in which LAV211, which was prioritized for advancement, exhibited consistent positive results across commercial varieties in target locations, with advanced product formulation for extended shelf life. Overall, the fields treated with LAV211 showed significant yield improvement compared with controls and industry benchmarks with a 'win rate' in over 75% of the locations, with up to 25% yield improvement in top performing locations and an average improvement of ~6% (p value<0.05). Following these trials, which took place in North Dakota, a key target market for the Company, LAV211 is advancing to 'development stage 2'. In parallel, Lavie Bio will further advance the development of LAV 212,213 as basis for future potential new products.

¹ https://www.alliedmarketresearch.com/flour-market

 $[\]frac{2 \text{https://www.ers.usda.gov/webdocs/publications/86210/whs-17l.pdf?v=43083 pg. 18; Markets\&Markets, 2019, \underline{\text{https://www150.statcan.gc.ca/t1/tb11/en/tv.action?pid=3210035901}}{\text{https://www.ers.usda.gov/webdocs/publications/86210/whs-17l.pdf?v=43083 pg. 18; Markets\&Markets, 2019, \underline{\text{https://www150.statcan.gc.ca/t1/tb11/en/tv.action?pid=3210035901}}}$

In terms of the next steps, a key focus will be continuing the development of scale-up production and application protocols, while maintaining LAV211's product attributes such as, efficacy, shelf life and stability. Additionally, improvement of application protocols will facilitate ease of use for farmers, the targeted end-customers. These improvements will be tested in broader field trials during the next crop season in North America.

Ido Dor, CEO of Lavie Bio commented, "I am very pleased with the results of these additional field trials, which have now allowed us to advance in this product program. Our leading wheat biostimulant candidate has consistently demonstrated strong results, exhibiting improved crop yields, indicating that we are on the right path to meeting our targeted 2022 commercialization. I look forward to updating you as we proceed with our program."

About Lavie Bio Ltd.

Lavie Bio, a subsidiary of Evogene (NASDAQ, TASE: EVGN), aims to improve food quality, agricultural sustainability and productivity through the introduction of microbiome based agbiological products. Lavie's unique approach utilizes a proprietary computational predictive technology, leveraging big data and advanced informatics for the design of microbiome-based products. Lavie's product candidate pipeline of bio-stimulants and bio-pesticides addresses major needs in row crops such as corn and wheat as well as specialty crops such as grapes. For more information on the company, please visit: https://www.lavie-bio.com/.

Forward Looking Statements:

This press release contains "forward-looking statements" relating to future events. These statements may be identified by words such as "may", "could", "expects", "intends", "anticipates", "plans", "believes", "target", "scheduled", "estimates" or words of similar meaning. Such statements are based on current expectations, estimates, projections and assumptions, describe opinions about future events, involve certain risks and uncertainties which are difficult to predict and are not guarantees of future performance. Therefore, actual future results, performance or achievements of Lavie and Evogene may differ materially from what is expressed or implied by such forward-looking statements due to a variety of factors, many of which beyond the control of Lavie Bio or Evogene, including, without limitation, those risk factors contained in Evogene's reports filed with the appropriate securities authority. Lavie Bio and Evogene disclaim any obligation or commitment to update these forward-looking statements to reflect future events or developments or changes in expectations, estimates, projections and assumptions.

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