
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 **August 2015**

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: Evogene Announces Successful Completion of First Computational Discovery of Novel Microbial Genes for Insect Control.

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)

By: /s/ Sigal Fattal

Sigal Fattal
Chief Financial Officer

Date: August 4, 2015

EXHIBIT INDEX

EXHIBIT NO. DESCRIPTION

99.1 Press Release: Evogene Announces Successful Completion of First Computational Discovery of Novel Microbial Genes for Insect Control.



Evogene Announces Successful Completion of First Computational Discovery of Novel Microbial Genes for Insect Control

*- Candidate genes, identified for their insecticidal properties, were discovered utilizing newly
developed microbial database and dedicated computational platform -*

Rehovot, Israel – August 4, 2015 – Evogene Ltd. (NYSE; TASE: EVGN), a leading company for the improvement of crop productivity and economics for the food and feed industries, announced today a key milestone in its insect control program with the successful completion of the first computational discovery round for microbial genes with insecticidal properties. The discovery round utilized a unique computational technology infrastructure consisting of a proprietary microbial-based database and a dedicated analysis platform, BiomeMiner™. The candidate genes will be validated against target insects at the Company's dedicated R&D site located in St. Louis, Missouri. Validation is expected to be completed next year.

The first computational discovery round using BiomeMiner™ yielded a set of novel candidate genes with insecticidal properties to be validated against Coleoptera and Lepidoptera insects. These families of insects include some of the most devastating insects to crop yields such as corn rootworm and corn earworm. In addition to these novel candidate genes, the platform also identified previously known genes that are already recognized for their insecticidal properties, providing a proof of concept for the predictive power of Evogene's discovery platform.

Ofar Haviv, President and CEO of Evogene stated: "This milestone in Evogene's insect control program is an important achievement. Within a very short period of time we were able to leverage our knowhow and technology in plant science to tackle the field of microbial traits, a new field for us with significant barriers to innovation. By formulating unique approaches to data generation and computational analysis, we are paving the path for the future development of new insect control products. The validation of these candidate genes, which is the next significant milestone in the program, will further advance us on this path."

The current market for insect control traits based on microbial genes is estimated at approximately \$4.5 billion annually. When inserted into a target crop, these genes and their insecticidal traits provide protection for the plant from certain harmful insects. Today, most of these products are based on microbial genes derived from one type of bacteria, named *Bacillus thuringiensis* (Bt), to which insects have grown resistant over the years. The next generation of insect control products that will address this growing resistance will most probably be based on the discovery of microbial genes not derived from the Bt bacteria. With the microbial gene pool constituting hundreds of millions of potential genes, the challenge of finding novel microbial genes that can form the basis of future insect control products, depends on both compiling the huge amount of relevant data into one integrated database and successfully analyzing this huge diversity.



Evogene has utilized its core competencies to meet this challenge with the development of a proprietary microbial-based database and BiomeMiner™, a data analysis platform.

The database, currently containing tens of millions of microbial genes, is capable of integrating data from diverse microbial sources including publicly available data and data collections from proprietary experimental samples enriched for insecticidal activity. A unique feature of the database is the integration capabilities of vast amounts of highly sparse and complex 'metagenomics' data.

To process this huge microbial gene pool within the database, the BiomeMiner™ analysis platform utilizes advanced machine learning algorithms to rapidly identify and prioritize genes with insecticidal properties. The platform sifts through the vast microbial gene pool in the database and elects a limited number of genes with the potential for insecticidal properties.

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About Evogene Ltd.:

Evogene (NYSE, TASE: EVGN) is a leading company for the improvement of crop productivity and economics for the food and feed industries. The Company has strategic collaborations with world-leading agricultural companies to develop improved seed traits in relation to yield and a-biotic stress (such as tolerance to drought), and biotic stress (such as resistance to disease and nematodes), in key crops as corn, soybean, wheat and rice, and is also focused on the research and development of new products for crop protection (such as weed control). In addition, the Company has a wholly-owned subsidiary, Evofuel, developing seeds for second generation feedstock for biodiesel. For more information, please visit www.evogene.com.

This press release contains "forward-looking statements" relating to future events. These statements may be identified by words such as "may", "expects", "intends", "anticipates", "plans", "believes", "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 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 Evogene's control, including, without limitation, those risk factors contained in Evogene's reports filed with the appropriate securities authority. Evogene disclaims 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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