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 July 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 Discovery and Validation of Novel Plant Targets for Herbicides.

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: July 29, 2015

By: /s/ Sigal Fattal
Sigal Fattal
Chief Financial Officer

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EXHIBIT INDEX

EXHIBIT NO. 99.1

<u>DESCRIPTION</u>
Press Release: Evogene Announces Discovery and Validation of Novel Plant Targets for Herbicides.



Evogene Announces Discovery and Validation of Novel Plant Targets for Herbicides

- Newly discovered targets predicted to represent new modes of action -

Rehovot, Israel – July 29, 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 the discovery and successful validation in plants of the first set of novel plant targets, representing a key milestone in its product program for new chemical herbicides. Targets for herbicides are vital plant macro-molecules taking part in essential biological processes in weeds ('modes of action'). The Evogene discovered targets will now be the subject of a unique methodology for the discovery of chemical molecules that can inhibit their functionality, resulting in weed death. These chemical molecules would then serve as the basis for the development of the active ingredients in commercial herbicide products. The milestone follows an earlier announcement this year on the completion of a dedicated start-to-end discovery infrastructure for the herbicide program.

Herbicides ("weed killers"), currently a market of approximately \$26 billion, are chemicals that are toxic to plants and are applied to eradicate unwanted weeds. Over the past two decades, weed resistance to existing chemical solutions is soaring, mainly due to the over-use of these chemicals that act on a very limited number of known 'modes of action' (MoA). A key avenue for alleviating this challenge would be the discovery of new targets associated with new MoA to serve as the basis for the next generation of herbicide solutions. Evogene's newly discovered and successfully validated targets are predicted to provide this potential.

Ofer Haviv, President and CEO of Evogene stated, "The discovery and successful validation in plants of these novel targets is a significant achievement for Evogene's herbicide program, particularly since they are predicted to represent potential new 'modes of action'. In addition, this achievement provides further evidence that our computational based predictive approach for the development of agriculture based products has the potential to be a game-changer in shaping the future landscape of our industry."

Utilizing Evogene's proprietary target identification platform PoinTarTM, the newly discovered and validated targets have been prioritized based on their predicted role in essential biological processes in plants, their ability to interact with chemical molecules, and other considerations relating to desired product attributes. The next major milestone in the program will utilize PointHitTM for identification of chemical molecules that are designed to inhibit the activity of the discovered targets. Once discovered and validated on a wide range of weeds and crops, these chemical molecules could then serve as the active ingredients for the development of next generation herbicide products, a major unmet market need in worldwide agriculture.



About Evogene Ltd.:

Evogene (NYSE, TASE: EVGN) is a leading company for the improvement of crop productivity and economics for the food, feed and biofuel 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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