

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) December 11, 2017

YIELD10 BIOSCIENCE, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE

(State or Other Jurisdiction of Incorporation)

001-33133

(Commission File Number)

04-3158289

(IRS Employer Identification No.)

19 Presidential Way, Woburn, Massachusetts

(Address of Principal Executive Offices)

01801

(Zip Code)

(617) 583-1700

(Registrant's Telephone Number, Including Area Code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01. Other Events

On December 11, 2017, Yield10 Bioscience, Inc., a Delaware corporation (the “Company”), issued a press release announcing that the Company granted a non-exclusive research license to Monsanto Company (“Monsanto”) to evaluate its novel C3003 and C3004 yield traits in soybean. Under the license, Monsanto plans to research both traits within its soybean pipeline as a strategy to improve plant yields. A copy of the press release is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) **Exhibits.**

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of Yield10 Bioscience, Inc. dated December 11, 2017.

SIGNATURES

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 hereunto duly authorized.

YIELD10 BIOSCIENCE, INC.

Date: December 11, 2017

By: /s/ Charles B. Haaser
Charles B. Haaser
Chief Accounting Officer



Yield10 Bioscience Grants Research License to Monsanto to Evaluate Two Novel Yield Traits in Soybean

WOBURN, Mass. - December 11, 2017 - Yield10 Bioscience, Inc. (NASDAQ:YTEN) announced today that it has granted a non-exclusive research license to Monsanto Company to evaluate its novel C3003 and C3004 yield traits in soybean. Under the license, Monsanto plans to research both traits within its soybean pipeline as a strategy to improve plant yields. Yield10 Bioscience is focused on "building better plants" by developing proprietary, breakthrough technologies that produce higher yields in major food and feed crops to enhance global food security using lower inputs of land, water and fertilizer.

Yield10's "Smart Carbon Grid for Plants" advanced metabolic engineering technology platform incorporates sourcing of new metabolic functionality from non-plant systems with sophisticated models of carbon-flux pathways to identify gene targets that enhance carbon capture from photosynthesis and regulate the flow of carbon to seed. Derived from algae, C3003 represents the lead plant trait in this platform. C3004, another platform trait, is believed to play a role in carbon partitioning. Monsanto plans to conduct research with C3003 and C3004 individually and in combination to evaluate the effectiveness of the trait stack.

"The early development work with C3003 and C3004 in oilseeds and the mechanisms are very interesting, and we are excited to have the opportunity to explore the potential of these yield traits in soybean," said Janice Edwards, Ph.D., Director, Yield Traits and Disease, Monsanto. "We are also impressed by Yield10's metabolic engineering and advanced carbon flux modeling capabilities, as Monsanto is committed to developing solutions that meet farmers' important needs, while positively affecting modern agriculture's carbon footprint and overall sustainability."

"Monsanto is a worldwide leader in soybean research, and we are pleased that they have chosen Yield10 and our novel C3003 and C3004 traits for integration into their soybean program," said Oliver Peoples, Ph.D., Chief Executive Officer of Yield10. "The Yield10 team looks forward to supporting Monsanto with further insights from our research to contribute to their R&D success with the technology."

Soybean is an oilseed crop used for animal feed, food, and food additives. It is the second highest value agricultural crop in the United States with the 2016 harvest estimated at over 4.31 billion bushels (USDA¹) and a value of approximately \$41 billion. Soybeans are widely cultivated in North and South America where a majority of the seed that is grown is genetically modified for crop enhancements, such as increased yield or pest resistance. Demands for agriculture are growing and evolving with a growing global population, rising middle class and shifting diets. As a result, increases in commodity crop yields are needed to keep pace with growing global demand for food security as well as to increase crop yield on agriculture's existing footprint.

Background on Novel Yield Gene Trait C3003

Yield10's C3003 novel yield gene trait is part of a system in algae that enables carbon fixation in low CO₂ environments and appears to be a unique gene that impacts photorespiration, a biochemical pathway in C3 photosynthetic plants which is responsible for significant losses in yield. The purpose of increased seed yield is to enable farmers to increase the productivity of their land. Yield10 is progressing the introduction of C3003 as well as improvements to the C3003 trait, in Camelina, canola, soybean and rice, and expects to report additional results from a number of these activities throughout 2017 and 2018.

About Yield10 Bioscience

Yield10 Bioscience, Inc. is focused on developing new technologies to achieve step-change improvements in crop yield to enhance global food security. Yield10 has an extensive track record of innovation based around optimizing the flow of carbon in living systems. Yield10 leverages its technology platforms and unique knowledge base to design precise alterations to gene activity and the flow of carbon in plants to produce higher yields with lower inputs of land, water or fertilizer. Yield10 is advancing several yield traits it has developed in crops such as Camelina, canola, soybean and rice. Yield10 is headquartered in Woburn, MA and has an Oilseeds center of excellence in Saskatoon, Canada.

For more information about the company, please visit www.yield10bio.com.

(YTEN-G)

Safe Harbor for Forward-Looking Statements

This press release contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The forward-looking statements in this release do not constitute guarantees of future performance. Investors are cautioned that statements in this press release which are not strictly historical, including, without limitation, statements regarding the research license to Monsanto including producing new, higher yielding varieties of soybean, constitute forward-looking statements. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated, including the risks and uncertainties detailed in Yield10 Bioscience's filings with the Securities and Exchange Commission. Yield10 assumes no obligation to update any forward-looking information contained in this press release or with respect to the announcements described herein.

¹ Source: https://www.nass.usda.gov/Newsroom/2017/01_12_2017.php

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