



Yield10 Bioscience Reports that Proprietary Varieties of Winter Camelina Show Tolerance to Commonly Used Herbicides in First Field Tests

February 29, 2024

-Herbicide tolerance is critical to planting the Camelina crop on large acreage for the biofuel and omega-3 oil markets

WOBURN, Mass., Feb. 29, 2024 (GLOBE NEWSWIRE) -- Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today reported that its proprietary varieties of winter *Camelina sativa* ("Camelina") in development responded as expected to herbicides in the first field tests conducted in the United States. Yield10 tested winter Camelina engineered with tolerance to glufosinate ("HT"), an herbicide widely used to manage weeds and protect yields in crop rotations in North America, as well as Camelina with stacked glufosinate and Group 2 tolerance ("Stacked HT"), to provide tolerance to Group 2 herbicide residues in soil persisting from use on prior crops. Yield10 believes that HT and Stacked HT traits in Camelina are critical to enabling grower adoption of the crop and planting on large acreage to produce feedstocks for biofuel and omega-3 oil for the aquafeed and nutrition markets. Yield10 has previously reported herbicide tolerance in spring Camelina, where the Company has selected lead and back-up commercial-quality lines for development.

In the fall of 2023, Yield10 researchers initiated the first field tests of candidate winter Camelina deployed with stacked HT traits intended to provide the plants with tolerance to the application of glufosinate, an over-the-top broadleaf herbicide, as well as tolerance to soil residues of Group 2 herbicides, specifically including tolerance to both imidazolinones ("IMI") and sulfonyleureas ("SU"). Group 2 herbicides are commonly used to manage weeds in cereal and other crop rotations and can persist in the soil for months following use. Prior to planting, the test fields were pretreated with Group 2 herbicides (two weeks prior to planting) to generate plots with soil residues of either IMI or SU herbicides. The winter stacked HT Camelina and control Camelina without HT were subsequently planted. Preliminary interim results of these field tests indicated that Yield10's stacked HT winter Camelina performed well on the field plots pre-treated with Group 2 herbicides. By comparison, significant injury was observed to control winter Camelina grown on soil containing IMI or SU residues. In the spring of 2024, these winter field plots will be sprayed with glufosinate for broad leaf weed control.

Yield10 researchers also initiated in the fall of 2023 the first field tests of candidate winter Camelina lines deployed with the trait that provides tolerance to the spray application of glufosinate. The winter Camelina was planted, and the field plots were subsequently sprayed with glufosinate in accordance with the field trial design. Winter Camelina engineered with glufosinate tolerance remained healthy, while field plots of Camelina without the herbicide tolerance trait did not survive the spray. Additional spraying of glufosinate on the winter HT Camelina is planned in the spring of 2024.

Yield10 expects to harvest the winter field test plantings in the summer of 2024 and conduct an evaluation of its seed yield, oil content, herbicide tolerance and overall agronomy.

"Our focus on the development of herbicide tolerant and stacked herbicide tolerant Camelina is intended to provide significant differentiation of our elite Camelina varieties from conventional varieties while potentially enabling growers to seamlessly integrate Camelina production into their crop rotations on a large-scale," said Kristi Snell, Ph.D., Chief Science Officer of Yield10 Bioscience. "Stacked HT technology is particularly important for planting winter Camelina in the fall after harvest of the previous crop. The encouraging results from the first field testing of our winter HT and Stacked HT Camelina varieties marks another milestone in our Camelina program and demonstrates the leadership position we have established deploying new traits into Camelina to potentially drive the value of the crop."

Regulatory status

Yield10 is a leader in the development of elite Camelina, including herbicide tolerant varieties. In November of 2023, USDA-APHIS determined that Yield10's [glufosinate tolerant Camelina](#) as well as its [stacked herbicide tolerant Camelina](#) may be planted and bred in the United States in response to two Requests for Regulatory Status Review packages submitted by Yield10. An application to add Camelina to a glufosinate label is pending with the U.S. Environmental Protection Agency.

About Yield10 Bioscience

Yield10 Bioscience, Inc. ("Yield10" or the "Company") is an agricultural bioscience company that is leveraging advanced genetics to develop the oilseed *Camelina sativa* ("Camelina") as a platform crop for large-scale production of sustainable seed products. These seed products include feedstock oils for renewable diesel and sustainable aviation biofuels; omega-3 (EPA and DHA+EPA) oils for pharmaceutical, nutraceutical and aquafeed applications; and, in the future, PHA biomaterials for use as biodegradable bioplastics. Subject to the availability of sufficient financial resources to continue operations, our commercial plan is based on establishing a grain contracting business leveraging our proprietary elite Camelina seed varieties, focusing on the growing demand for low-carbon intensity feedstock oil for biofuels and omega-3 oils for nutritional applications. Yield10 is headquartered in Woburn, MA and has a Canadian subsidiary, Yield10 Oilseeds Inc., located in Saskatoon, Canada.

For more information about the Company, please visit www.yield10bio.com, or follow the Company on [X \(formerly Twitter\)](#), [Facebook](#) and [LinkedIn](#).

(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, expectations related to research, development and harvesting of Camelina, the expected path to regulatory approvals, the potential for herbicide tolerance in Camelina to support grower adoption and large-scale production, the potential for Camelina to provide sustainable means to produce biofuels and omega-3 oils, and expectations regarding the integration of Camelina with current weed control and crop rotation practices of major crops, 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, but not limited to, the fact that interim results of field tests may not necessarily be indicative of later results, the Company's ability to secure adequate funding in the near term to continue operations and to remain listed on the Nasdaq Stock Market, as to which no assurance can be given, as well as 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 matters described herein.

Contact:

Yield10 Bioscience:

Lynne H. Brum, (617) 682-4693, LBrum@yield10bio.com



Source: Yield10 Bioscience, Inc.