

Yield10 Bioscience Announces Positive Results in the First Field Test of Stacked Herbicide Tolerance Traits in Camelina, Supporting Large Acreage Production of Low-carbon Intensity Feedstock Oil for the Biofuel Market

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-Findings demonstrate a key advancement in the development of proprietary Camelina varieties tolerant to application of broadleaf weed control as well as to Group 2 soil residual herbicide chemistries

-Yield10 RSR filing pending under USDA-APHIS's SECURE Rule for stacked herbicide tolerant Camelina

WOBURN, Mass., Aug. 02, 2023 (GLOBE NEWSWIRE) -- Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today announced positive results in the first field test of stacked herbicide tolerance ("HT") traits in Camelina. These proprietary stacked HT Camelina varieties developed by Yield10 demonstrate tolerance to the application of an over-the-top herbicide for weed control as well as tolerance to Group 2 herbicide soil residues. These results represent a key advancement for supporting grower adoption of stacked HT Camelina for the biofuel feedstock market by enabling weed control and increased access to acreage previously treated with Group 2 herbicides. Yield10 is executing a program to develop and commercialize spring and winter Camelina varieties with stacked herbicide traits to achieve large acreage adoption of the crop in North America.

In the second quarter of 2023, Yield10 researchers initiated the first field tests of candidate E3902 spring Camelina lines deployed with stacked HT traits intended to provide the plants with tolerance to the application of an over-the-top broadleaf herbicide for weed control as well as tolerance to soil residues of Group 2 herbicides, specifically including tolerance to both imidazolinones ("IMI") and sulfonylureas ("SU"). Preliminary results of these field tests indicate that these Camelina lines demonstrate tolerance to both target herbicide chemistries. By comparison, significant injury was observed to control E3902 Camelina plants following application of an over-the-top herbicide and exposure to increasing concentrations of IMI or SU soil residues. 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. Yield10 intends to harvest the plants and collect seed yield and oil yield data in the weeks ahead with the goal of selecting lead and back-up stacked HT spring E3902 Camelina lines for commercial development and seed scale-up.

In addition to its program for spring Camelina, Yield10 researchers have also developed candidate stacked HT traits in a winter Camelina variety, and the first field tests of these stacked HT Camelina lines are planned for the fall of 2023. In the second quarter of 2023, Yield10 filed a request for Regulatory Status Review (RSR) with USDA-APHIS Biotechnology Regulatory Services (BRS) for stacked herbicide tolerant Camelina under the SECURE Rule, and a response from the agency is pending.

"The positive field test results with our stacked HT spring Camelina underscore the significant progress we are making in the development of elite herbicide tolerant Camelina varieties," said Kristi Snell, Ph.D., Chief Science Officer of Yield10 Bioscience. "Based on these positive field trial results, we remain firmly on-track executing our program to develop and commercialize stacked herbicide tolerant spring and winter Camelina varieties. The combination of over-the-top broad leaf weed control and tolerance to Group 2 soil residues is intended to provide significant differentiation of our elite Camelina varieties from common types and enable growers to plant Yield10 elite Camelina with confidence on a large-scale."

"Yield10's commercial vision for our Camelina feedstock oil program is well aligned with the climate impact and sustainability needs of the biofuel market," said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10 Bioscience. "Our proprietary HT Camelina varieties and stacked HT varieties are designed to be an excellent fit for growers in cover cropping as well as a seamless fit into crop rotations with other major crops in the U.S. and Canada. Based on the positive field test results we have reported over the last year, we remain on track with our plan to launch our first commercial HT Camelina varieties in 2025 and following soon thereafter with stacked HT Camelina varieties."

About the SECURE Rule

The <u>SECURE</u> Rule was published on May 18, 2020 and represents the first comprehensive revision of APHIS' biotechnology regulations since 1987. The revisions enable APHIS to regulate organisms developed using genetic engineering for plant pest risk with greater precision and reduce the regulatory burden for developers of organisms that are unlikely to pose plant pest risks. Once a specific plant developed through genetic engineering is found not to require regulation, new varieties of the plant containing the same genetic modification would similarly not be regulated. Herbicides must be labeled for use on Camelina plants containing herbicide tolerance traits under Environmental Protection Agency regulations.

About Yield10 Bioscience

Yield10 Bioscience, Inc. is an agricultural bioscience company that is using its differentiated trait gene discovery platform, the "Trait Factory", to develop improved Camelina varieties for the production of proprietary seed products, and to discover high value genetic traits for the agriculture and food industries. Our goals are to efficiently establish a high value seed products business based on developing superior varieties of Camelina for the production of feedstock oils, PHA bioplastics and omega-3 (EPA, DHA+EPA) oils, and to license our yield traits to major seed companies for commercialization in major row crops, including corn, soybean and canola. 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.vield10bio.com, or follow the Company on Twitter, Facebook and LinkedIn.

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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 and development activities, the expected regulatory path for its traits, the reproducibility of data from greenhouse and field tests, the start and timing of completion of field tests and seed scale-up activities, commercial launch plans and timing, and the overall progress of Yield10 Bioscience, Inc., 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 matters described herein.

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