



Yield10 Bioscience Chief Science Officer Dr. Kristi Snell to Present on Advances Using Camelina Platform to Produce PHA Bioplastic at 2021 Synthetic Biology: Engineering, Evolution and Design Virtual Conference

June 16, 2021

WOBURN, Mass., June 16, 2021 (GLOBE NEWSWIRE) -- Yield10 Bioscience, Inc. (Nasdaq:YTEN), an agricultural bioscience company, today announced that its Chief Science Officer Dr. Kristi Snell will present during the 2021 Synthetic Biology: Engineering, Evolution & Design (SEED) conference, taking place in a virtual format June 15 through June 18, 2021.

Dr. Snell will present at the conference on Wednesday, June 16 at 10:55 am PDT (1:55 pm EDT) during Session 4: *Synthetic Biology for Agriculture, Food and Personal Care*. Her presentation, entitled "*Breakthroughs in Plant Based PHB Production*," will describe how Yield10 researchers programmed prototype plants with microbial genes based on a [patent filed for new technology](#) developed to produce Camelina seed containing high levels of PHA bioplastic suitable for field production.

In 2020, several Camelina lines were grown in small plots at field test sites in the U.S. and Canada. Compared to control plants, the engineered PHA Camelina lines emerged and matured later, but once established exhibited good vigor, branching, flowering and seed set. The [results showed](#) that the levels of PHA produced in seed measured up to 6 percent PHA of mature seed weight depending on the plant line tested, demonstrating proof-of-concept for field production of PHA in *Camelina sativa* using the new technology.

"These results mark a significant step towards commercial production of PHA in plants, enabling a direct link between low-cost large scale agricultural production of this exciting biodegradable plastic, and the single use packaging and foodservice segment of the 350 million ton per year global plastics market," said Kristi Snell, Ph.D., Chief Science Officer of Yield10 Bioscience. "We are continuing to work to make improvements to the technology to bring the PHA levels up to the 10-20% range and remain on track for seed scale up in the 2021 and 2022 growing seasons to produce meaningful quantities of PHA, oil and meal for customer sampling."

PHAs are natural polymers, prevalent in nature and fully biodegradable in the environment. Currently produced by fermentation of engineered microbes, PHA polymers have commercial applications as bioplastics to replace petroleum resins, in water treatment where they act as a zero-waste solution to nitrate pollution, as well as in animal feed ingredients. Yield10 has a long history with and deep knowledge of PHA bioplastics and believes that direct production of PHA in seed as a co-product with oil and protein meal will enable low-cost commodity scale production. By eliminating the feedstock inefficiency, capital, and operating costs inherent in fermentation processes, the direct production in Camelina seed has the potential to enable commercialization of PHA bioplastics on an agricultural scale at costs in line with commodity vegetable oils. This process would ultimately support Yield10's vision of driving large-scale adoption in the plastics markets to manufacture a wide range of fully biodegradable consumer products.

Learn more about the 2021 Synthetic Biology: Engineering, Evolution & Design (SEED) conference on the [conference website](#). On June 16, a copy of Dr. Snell's slide deck will be available on the Yield10 Bioscience [investor relations website](#).

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 to produce 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 to produce feedstock oils, nutritional oils, and PHA bioplastics, 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 an Oilseeds Center of Excellence in Saskatoon, Canada.

For more information about the company, please visit www.yield10bio.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, that the results of PHA levels in Camelina plants mark a significant step towards commercial production of PHA in plants and enable a direct link between low-cost large scale agricultural production and the packaging and foodservice segment; that direct production of PHA in seed as a co-product with oil and protein meal has the potential to enable commercialization of PHA bioplastics on an agricultural scale at costs in line with commodity vegetable oils; that production and commercialization of PHA bioplastics would support Yield10's vision of driving large-scale adoption in the plastics markets; and that PHA bioplastics could ultimately be used to manufacture a wide range of fully biodegradable consumer products, 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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