



Yield10 Bioscience Chief Science Officer Dr. Kristi Snell to Present on Advancements in Producing PHA Bioplastic in Camelina at the ISBP 2022 Conference

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WOBURN, Mass., Sept. 15, 2022 (GLOBE NEWSWIRE) -- Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today announced that its Chief Science Officer Dr. Kristi Snell will present during the International Symposium on Biopolymers ("ISBP") 2022 Conference. The event is taking place September 12 through September 16, 2022 in Sion, Switzerland.

Dr. Snell will make a presentation on Friday, September 16, during the session entitled "Industrial Feedstocks and Polymer Production" scheduled for 9:20 am to 11:00 am local time (3:20 am to 5:00 am ET). Her presentation entitled "Breakthroughs in Plant Based Polyhydroxybutyrate (PHB) Production" will describe the successful engineering of a bacterial pathway for producing PHB in the cytosol of Camelina seed.

Yield10 researchers are conducting a program intended to produce sustainable, low-cost PHA bioplastic materials in the seed of the Camelina plant. In a patent application filed in 2019, Yield10 described a new technology solution for deploying the PHB pathway in Camelina. Using this approach, Yield10 obtained Camelina plants showing up to 10.2 percent PHB in seed that had good emergence and survival in growth chambers. Subsequent field tests with prototype Camelina PHB containing lines have shown approximately six percent PHB in the seed in two consecutive years. In 2022, Yield10 planted PHB producing Camelina at acre-scale and has harvested the plants for PHB extraction, product prototyping, sampling and other business development activities. The development of elite PHA Camelina lines with yields in the 10 to 20 percent range is ongoing, as well as the engineering of PHA copolymers in Camelina.

"We have successfully demonstrated proof of concept for producing PHA bioplastics in Camelina seed by leveraging advanced tools in synthetic biology," said Kristi Snell, Ph.D., Chief Science Officer of Yield10 Bioscience. "This spring we grew prototype PHA Camelina at acre-scale. We have now harvested the crop and plan to extract the PHA from seed for business development purposes. We have also engineered PHA production in winter Camelina lines which we plan to test for the first time in our 2022/2023 winter field trial program. As we move this program forward, we are pursuing multiple strategies to achieve our goal of reaching PHA yields of 10 to 20 percent in Camelina seed in field grown plants."

Learn more about the ISBP 2022 on the conference [website](#). A copy of Dr. Snell's slide deck is available on the Yield10 Bioscience [investor relations website](#).

Background on PHA Bioplastics

Global plastic waste is estimated at 380 million metric tons per year. The largest market for plastics today is for packaging materials, and it accounts for nearly half of all plastic waste generated globally, where most of it is never recycled or incinerated. We believe there may be significant market opportunity for producing PHA biomaterials in Camelina in the future. PHA biomaterials (PHAs) are natural microbial high molecular weight polymeric storage polymers. These polymers are natural polyesters and can be recovered from the microbes that produce them and processed using standard plastics processing equipment into a range of product forms. The production of PHA bioplastics in Camelina could represent an entirely new market opportunity for farmers. This opportunity could provide economic returns for farmers to justify large acreage adoption of Camelina as a cover crop and enable the low-cost production of this product for new markets including water treatment and sustainable biodegradable plastics replacement applications.

About *Camelina sativa*

Camelina sativa, commonly known as Camelina or false flax, is an annual oilseed plant in the mustard family that is native to Europe. Camelina has the potential to replicate the development of modern canola from rapeseed on an accelerated timeline based on modern technologies, including genomics and genome editing. Additionally, Camelina grows on marginal lands, displays early maturation, has enhanced drought and cold tolerance, and requires fewer inputs than other oilseed crops. With social conscience and sustainability in mind, Yield10 is leveraging its innovations in Camelina to use it as a platform crop for producing low-carbon feedstock oil for renewable fuel; omega-3 nutritional oils; high-protein meal; and PHA bioplastic.

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 to produce biofuel feedstock oils, PHA bioplastics and omega-3 (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 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, the Company's plans with respect to Camelina business development and field testing; the Company's goals relating to PHA yields in Camelina seed; and the Company's beliefs about the market opportunity for PHA biomaterials and bioplastics, 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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