



Yield10 Bioscience Files Request for Regulatory Status Review with USDA-APHIS for Camelina Designed to Produce the EPA and DHA Components of Omega-3 Oil

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Advanced technology enables the land-based production of omega-3 (EPA+DHA) in Camelina potentially representing a novel solution to the market need for omega-3 oils used in aquafeed for farmed fish and in human nutrition

WOBURN, Mass., Jan. 08, 2024 (GLOBE NEWSWIRE) -- Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today announced that the Company recently filed a request for a Regulatory Status Review ("RSR") with USDA-APHIS Biotechnology Regulatory Services ("BRS") under the Sustainable, Ecological, Consistent, Uniform, Responsible, Efficient ("SECURE") Rule for proprietary elite *Camelina sativa* ("Camelina") varieties designed to produce seed oil containing both essential omega-3 fatty acids eicosapentaenoic acid ("EPA") and docosahexaenoic acid ("DHA"). The genetic pathway deployed in the omega-3 Camelina DHA1 line described in the Company's RSR submission produces oil containing approximately 10% EPA and 10% DHA, closely resembling the omega-3 EPA/DHA fatty acid profile of northern hemisphere fish oil. Yield10 is making plans to conduct field work with omega-3 (EPA+DHA) Camelina with the goal to begin the ramp-up of seed inventory for future planting as well as to produce omega-3 oil for use in business development activities.

"Based on the scientific work published by the Rothamsted Institute, including salmon feeding and human clinical trials, we believe the Camelina omega-3 technology represents an ideal platform for the sustainable, land-based production of high value, omega-3 oils to address the significant potential opportunity in the global aquafeed and human nutrition markets," said Kristi Snell, Ph.D., Chief Science Officer of Yield10 Bioscience. "We believe Camelina-based production of omega-3 oil containing EPA and DHA is a promising solution to address the ongoing shortfalls in supply of omega-3 oil from fish oil and sustainably meet the projected increase in global demand for omega-3 oil in the years to come. We are focused on advancing our omega-3 oil producing Camelina along the regulatory path, building seed inventory and engaging with potential commercial partners."

Background on Yield10's Omega-3 Camelina Program

Currently, the primary source of the essential fatty acids EPA and DHA is ocean-caught fish, where omega-3 oil produced from anchovy harvest is the industry benchmark. Producing omega-3 fatty acids in Camelina represents a potential way to enable a reliable supply of high-quality omega-3 oils to meet the global demand for EPA and DHA. In 2020, Yield10 signed an exclusive collaboration agreement with Rothamsted to support Rothamsted's Flagship Program to develop omega-3 oils in Camelina. As part of the collaboration agreement, the Company received an exclusive option to sign a global, exclusive license agreement for the technology. Yield10 recently announced it had exercised this option and plans to [finalize](#) the global exclusive license with Rothamsted. Yield10 prioritized development and scale-up of EPA omega-3 Camelina and [filed an RSR](#) for approval of this line for production in the United States with USDA-APHIS in 2023. Yield10 planted omega-3 (EPA) Camelina at acre-scale in Chile during the fourth quarter of 2023 to begin the ramp-up of seed inventory for future planting, as well as to produce omega-3 (EPA) oil samples for business development activities. Following immediately behind the EPA Camelina, Yield10 is scaling up an omega-3 Camelina line to produce oil containing both EPA and DHA fatty acids. This line has been extensively tested by Rothamsted and published aquafeed studies have shown that the EPA + DHA oil produced in Camelina has the potential to serve as a drop-in replacement for fish oil. Furthermore, published human clinical studies have shown this oil to be an effective alternative to fish oil in the human diet.

About the SECURE Rule

The SECURE 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 reduces 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. Camelina plants containing omega-3 traits are subject to regulation by the U.S. Food and Drug Administration.

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 bioplastics for use as biodegradable bioplastics. 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](#).

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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, statements regarding the ability of omega-3 Camelina and the technology developed to provide sustainable alternatives to existing means of omega-3 oil production, expectations regarding regulatory approval for commercial production of Yield10's Camelina product lines, the reliability, scalability and addressable market of omega-3 oils produced from omega-3 Camelina, and collaborations with potential strategic partners, including the planned completion of the global commercial license under the agreement with Rothamsted, 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 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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