

# USDA-APHIS Determines that Yield10 Bioscience's Omega-3 Camelina Varieties May Be Planted and Bred in the United States

March 21, 2024

- Yield10 achieves significant milestone enabling ramp-up to commercial scale production of omega-3 fatty acids in Camelina

-Omega-3 Camelina potentially represents a novel solution to the market need for omega-3 oils used in aquafeed for farmed fish and in human nutrition

WOBURN, Mass., March 21, 2024 (GLOBE NEWSWIRE) -- Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today announced that USDA-APHIS's Biotechnology Regulatory Services ("BRS") has determined that Yield10's Camelina sativa ("Camelina") varieties developed using genetic engineering (modified Camelina) to produce omega-3 fatty acids are not subject to the regulations under 7 CFR part 340, and may be grown and bred in the United States. The global markets for omega-3 fatty acids include aquafeed used for salmon and trout farming, pet feed, baby formula, nutraceutical and pharmaceutical products. Most omega-3 fatty acids are produced from ocean-caught fish. Production constraints and supply volatility of traditional fish oil sources are creating gaps in supply and driving the growing demand for new sources of omega-3. Utilizing Camelina as a land-based production platform has the potential to provide a new, reliable supply for omega-3 fatty acids. Yield10's submissions along with the USDA-APHIS BRS responses are posted on the USDA's website.

"This regulatory milestone represents a critical step for enabling the ramp-up of Camelina planting to commercial scale in the U.S for producing omega-3 oil for key markets including aquafeed and human nutrition," said Kristi Snell, Ph.D., Chief Science Officer of Yield10 Bioscience. "In 2024, we plan to focus on executing our development program, building seed inventory in anticipation of commercial scale planting, and engaging with potential commercial partners to enable future commercial sale of omega-3 oil and meal in target markets. Use of omega-3 oil and meal in target markets may still be subject to regulation from other regulatory authorities in target geographies."

In 2023 Yield10 submitted two Requests for Regulatory Status Review ("RSR") to the BRS under the SECURE Rule (see below). An RSR filed in July 2023 covers Camelina engineered to produce eicosapentaenoic acid ("EPA") where the engineered omega-3 Camelina produces oil containing approximately 16-20% EPA. An RSR filed in December 2023 covers producing both EPA and docosahexaenoic acid ("DHA") in which the engineered omega-3 Camelina produces oil containing approximately 10% EPA and 10% DHA, closely resembling the omega-3 EPA/DHA fatty acid profile of northern hemisphere fish oil. The responses from USDA-APHIS indicate that the agency does not consider the modified Camelina plants to be an increased plant pest risk as compared to unmodified Camelina and are therefore not subject to regulation under 7 CFR part 340 regulations.

## 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 serves as 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 a 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. In October of 2023 Yield10 announced it had exercised this option and plans to finalize the global commercial license with Rothamsted. Subsequently, Yield10 and BioMar Group, a global aquafeed producer, signed a Letter of Intent ("LOI") to form a long-term partnership to commercialize a Camelina crop containing enriched levels of EPA and DHA equal to fish oil.

In 2024, Yield10 plans to work with BioMar Group toward the signing of a partnership agreement. In addition, Yield10 plans to continue field testing and seed scale-up activities for its engineered omega-3 Camelina varieties to ramp-up seed inventory for future planting as well as to produce omega-3 oil for use in business development activities. Yield10 is also engineering second generation omega-3 Camelina lines with <a href="herbicide">herbicide</a> tolerance traits to enable weed control in large-scale commercial planting of the crop.

## 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 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 production of omega-3 oils for nutritional applications and partnering or licensing our advanced Camelina gene technologies to biofuel value chain partners to support their goals of meeting the growing demand for low-carbon intensity feedstock oil. 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 <a href="www.vield10bio.com">www.vield10bio.com</a>, or follow the Company on <a href="mailto:X.formerly Twitter">X.formerly Twitter</a>), <a href="mailto:Facebook">Facebook</a> and <a href="mailto:LinkedIn">LinkedIn</a>.

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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 being 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 and signing of an agreement with BioMar, 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 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.

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