

PRESS RELEASE

DATE 18 august 2025

INDUSTRY RELEASE

Corbion

Arkelsedijk 46 Gorinchem, 4206 AC ◆ PO Box 21 4200 AA Gorinchem The Netherlands

T +31183 695 695 **F** +31183 695 602

press@corbion.com www.corbion.com

Corbion and Kuehnle AgroSystems join forces to develop natural Astaxanthin from algae fermentation

Corbion, the Amsterdam-based global leader in sustainable ingredients, and US-based biotech company Kuehnle AgroSystems (KAS) have entered into a strategic partnership to develop and commercialize a high-quality, natural astaxanthin derived from non-GMO heterotrophic algae.

Astaxanthin is a powerful antioxidant and red-orange carotenoid pigment found in various aquatic organisms, including microalgae, salmon, and shrimp. It is widely recognized both for its human health benefits and as a key feed ingredient for salmon and other aquaculture species.

Currently, most commercially available astaxanthin is either chemically synthesized for aquaculture use or derived from the phototrophic microalgae Haematococcus for human health applications. Corbion and KAS aim to provide a natural, algae-derived alternative produced through controlled fermentation of non-GMO, heterotrophic Haematococcus, the primary natural source of astaxanthin.

The partnership will focus on developing an esterified form of astaxanthin, rich in the most bioavailable isomer, delivering superior antioxidant performance, enhanced stability, and fat solubility. Designed for both the human and animal nutrition markets, the product is particularly well-suited for nutraceuticals and aquaculture applications.

By combining KAS's advanced fermentation platform and proprietary non-GMO algae strains with Corbion's industrial production capabilities, regulatory and go-to-market expertise, the two companies aim to bring this innovation to market at scale.

"This partnership reinforces our commitment to sustainable, science-based solutions," said Robert Jan de Voogd, General Manager, Algae Ingredients North America at Corbion. "KAS' technology offers a strong foundation to deliver high-quality natural astaxanthin to customers looking for a clean-label alternative."

"We're proud to collaborate with Corbion to scale our technology and make premium algaederived antioxidants more accessible worldwide" said Claude Kaplan, CEO of KAS.

Development and technical transfer have already begun, with further updates to follow as the project progresses.



PRESS RELEASE

For more information, please contact:

Press.

Robert Jan de Voogd, General Manager, Algae Ingredients North America +1 913 608 6764

Analysts and investors: Alex Sokolowski, Head of Investor Relations +31(0)6 46941365

About Corbion

Corbion is a sustainable ingredients company dedicated to preserving what matters, including food and food production, health, and the planet. We specialize in lactic acid, lactic acid derivatives, food preservation solutions, functional blends, and algae ingredients, using our deep application and product knowledge to propel nature's ingenuity through science. With more than a century of experience, we continue working side-by-side with our customers to make our cutting-edge technologies work for them. Leveraging our advanced capabilities in fermentation and preservation technology, we help customers differentiate their products in diverse markets ranging from food and animal nutrition to home & personal care, pharmaceuticals, electronics, medical devices, and bioplastics. In 2024, Corbion generated annual sales of € 1,332.0 million with a workforce of 2,399 FTEs. Corbion is listed on Euronext Amsterdam. For more information: www.corbion.com

About KAS

Kuehnle AgroSystems (KAS), a biotechnology company based in Hawaii, is leading the way in sustainable innovation with its development of algae-derived natural products. Leveraging its patented "dark fermentation" process and proprietary non-GMO microalgal strains, KAS is successfully pioneering the production of natural astaxanthin — a powerful antioxidant prized in human nutrition and a vital component in aquafeed. With a commitment to sustainability, affordability, and scientific excellence, KAS's breakthrough fermentation technology offers a reliable and scalable alternative to traditional astaxanthin sources, opening new frontiers in both health and aquaculture sectors. For more information: www.kuehnleagro.com.