

New Zealand's BioLumic scales first UV Light Technology for Corn and Soybeans

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New Zealand and U.S.-based agricultural biotech company, BioLumic and North America's largest independently owned contract seed production company, Gro Alliance LLC have entered a strategic partnership to deploy BioLumic's proprietary ultraviolet (UV) light seed treatment technology for corn and soybean seed production.

Partnership aims to propel commercial-scale entry of UV light technology into the global row-crop seed industry. The collaboration will bring to farmers a new category of seed treatment with improved crop performance programmed into

seeds with light.

Based on 20 years of science and seven years of large-scale field validation, BioLumic's light treatment technology unlocks the natural genetic potential of plants by regulating their genetic expression to improve yield, crop quality, root growth and plant resilience across specific cultivars. Since 2021, BioLumic has tested light-treated corn and soybeans seeds on more than 3,000 United States field plots, averaging yield increases of 15% in corn and 12% in soybeans.

"UV light signaling is the next frontier in plant science, changing the paradigm of crop production gains without solely relying on genetic modification, chemical inputs or time-intensive breeding programs," said Steve Sibulkin, CEO of BioLumic.

Rapidly deploying light-activated seeds increases farmer profitability and contributes to a more sustainable global food production system.

BioLumic's UV Light Signal Recipe platform combines plant genetic insights, wide-ranging plant response data and a software and hardware platform that can deploy trillions of short duration light recipes. BioLumic's Light Recipes are a targeted, programmed sequence of light spectrum exposure which activate positive growth responses in seeds and young plants.

BioLumic's Light Recipe in-seed treatment process takes just seconds to complete, does not impact other seed

treatment applications or require farmers to change their growing practices and is completed in seed production facilities prior to shipment to seed dealers or growers.

The partnership will deploy BioLumic's light treatments platform in Gro Alliance's corn and soybean seed production facilities. Gro Alliance is North America's largest independently-owned contract corn and soybean seed producer, supplying seed production and breeding services for more than 100 different organizations around the world.

Jim Schweigert, president of Gro Alliance says "This innovation enables farmers to improve their financial and environmental performance, helps seed companies deliver on their ESG goals and creates more climate-resilient crops."

The partnership will start at Gro Alliance's Mt. Pulaski, Illinois production facility and expansion across the Midwest starting in 2025. Later this year, select seed companies will be given access to BioLumic Light Treatments for their cultivars and the in-seed treatment will be commercially available to the broader market in 2024.