



Quercus Biosolutions closes oversubscribed \$5 Mn seed round to build new category of AI-designed crop protection

31 July 2026 | News

AI-designed mini-proteins engineered to match chemistry on cost and efficacy, with a cleaner environmental and regulatory profile



Quercus Biosolutions, an agricultural biotechnology company using generative AI to build a new class of crop protection compounds, today announced the close of its oversubscribed \$5 million seed financing. The round was led by Serra Ventures, with participation from Starshot Capital, Grantham Foundation for the Protection of the Environment, Flyover Capital, Rootstock Capital, Iowa Corn Opportunities Fund, Agricap Fund, Kentucky Corn Plus, Ag Ventures Alliance, Ag Startup Engine, and others.

The syndicate was assembled deliberately, pairing investors who can judge the technology with investors who answer to the growers who will use it. On one side are technology and climate funds with experience in AI-enabled platforms and science-based ventures. On the other are producer-backed funds that represent the voice of the farmer and the commercial reality of what growers need in the field. The financing follows the company's emergence from stealth in March 2025.

Crop protection is a roughly \$80 billion global market on track to exceed \$100 billion by 2030. Herbicides are its largest segment, more than 40 percent of the total, and weed control is where resistance pressure has advanced furthest. Growers in major row crop systems have watched their most dependable options narrow season by season, while the alternatives that promise a cleaner profile have not consistently matched the efficacy legacy tools have delivered. That gap, between the performance growers expect and what regulators and food markets increasingly require, is where Quercus has chosen to start, on a platform built to extend across crop protection. Owing to the practices at the center of regenerative agriculture -

cover cropping and no-till among them - depend on reliable weed control, closing it carries consequences well beyond the farm gate.

Quercus designs its compounds using generative AI, engineering mini-proteins to bind validated biological targets with the efficacy and cost structure of chemistry. These designed mini-proteins are a new class of crop protection compounds, and they are the basis for the category the company is building.

The generative design platform behind them carries a track record from well beyond agriculture: more than \$30 million of development investment to date, and validated mini-proteins produced across multiple industries and applications. Because the active ingredient is a protein, it is designed to break down in the environment and to carry a favorable regulatory profile; and because the compounds are a fundamentally new modality, they can be directed at targets that fall outside existing resistance groups, giving growers a way to stay ahead while sitting alongside the chemistry already in their programs.

The seed capital gives Quercus room to advance on several fronts at once, including regulatory and field work across a portfolio that now includes more than five active programs, and building toward what it intends to be the platform of choice for designed crop protection. It plans to pursue multiple routes to market, and the financing provides the powder to establish a series of strategic partnerships, beginning with pilot programs alongside major strategics in the herbicide category.

"Growers are facing steady resistance pressure across the tools they depend on, and they need new modes of action to stay ahead of it," said Dr. Jon Lightner, CEO and Co-Founder of Quercus Biosolutions. "We are not asking them to make tradeoffs. We are developing products to perform at the level of the best chemistry on cost and in the field, with a favorable environmental and regulatory profile. The need is real, and we are building fast to meet it."

"We led this round due to the rare combination of a genuinely differentiated platform, a significant market opportunity desperate for innovation, a team that has built and scaled high-value enterprises in this space before, and an advisory bench as strong as any we have seen at this stage," said Rob Schultz, Managing Partner at Serra Ventures.

"So far, most of the value created by AI has stayed on a screen," said Dan Kerr, Managing Partner at Flyover Capital. "Quercus takes generative design into the field and turns it into a physical product a grower can put on an acre. The advantage compounds: every program sharpens the platform and adds to the IP behind it, which makes it far harder to copy than software. That is where the next generation of durable AI companies gets built, and Quercus is at the leading edge of it."

"Every so often, a technology redefines what's possible," said Matt Crisp, Executive Chairman and Co-Founder of Quercus Biosolutions. "We believe this platform is one of those rare inflection points for agriculture. As it compounds with every program, it creates the kind of enduring advantage that gives rise to an entirely new category."