

Agmatix and BASF partner to develop Soybean Cyst Nematode detection tool

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Agmatix, a leading provider of AI-powered agronomic solutions, announced a strategic collaboration with BASF, one of the world's largest chemical and agricultural solutions companies, to develop a cutting-edge digital solution for detecting and predicting the presence of soybean cyst nematode (SCN). This collaboration started through AgroStart, an open innovation and partnership platform by BASF, that aims to empower soybean growers with real-time, scalable insights to mitigate yield losses caused by SCN, one of the most damaging and often invisible soybean pests.

By providing accurate, predictive data on SCN infestations, the Agmatix-BASF collaboration paves the way for future innovations in pest management and digital agriculture. The joint effort represents a significant leap forward in integrating digital agriculture with crop protection strategies, demonstrating how advanced analytics can drive on-farm decision-making and improve agronomic outcomes.

A Unique, Data-Driven Approach

At the heart of this initiative is Axiom, an advanced AI technology engine developed by Agmatix, which transforms vast amounts of raw agronomic data into highly standardized and enriched datasets. This rigorous data process enables the development of a robust machine-learning model capable of detecting and predicting SCN infestations with unprecedented accuracy and scalability.

Dr. Shai Sela, Chief Scientist at Agmatix. "By harmonizing and enriching SCN field trial data through our AI driven platform, we can ensure consistent, reliable outputs regardless of region, soil type or cropping conditions. It's a novel approach

that dramatically increases the model's predictive power, putting actionable insights directly into the hands of growers.

Combining Expertise for Scalable Impact

Developed through AgroStart by BASF, this initiative combines Agmatix's AI-driven agronomic platform with the deep expertise of BASF in seed and crop protection solutions and will foster the development of a scalable, user-friendly digital model. The tool will integrate with existing farm management practices, enabling users to access near real-time SCN risk assessments and tailor their pest management strategies accordingly.

"Collaborating with companies like Agmatix allows us to leverage advanced digital technologies and artificial intelligence in parallel with our existing seed and trait, seed treatment and crop protection solutions," said Mika Eberl, Head of AgroStart and Digital Officer at BASF Agricultural Solutions. "This collaboration not only enhances our current offerings but also complements our future innovations like Nemasphere, providing growers with a comprehensive, proactive approach to safeguard their soybean yields against SCN."

Addressing the Most Destructive Threat to Soybean Growers

SCN remains the leading pest in soybeans, with infestations frequently going undetected until yields are significantly affected. Traditional detection methods, such as soil sampling or mid-season root digs, are time-consuming, labor-intensive and not widely adopted. A digital tool could help create awareness and compliment these traditional methods.

Ron Baruchi, President & CEO at Agmatix said "By digitizing large volumes of field trial data within Axiom, we believe our machine learning model will give growers the power to act before SCN causes irreversible damage." With planting-time decisions crucial for effective SCN control, growers need a more efficient, scalable solution to detect and forecast pest pressure.

With \$919 million in 2024, BASF's Agricultural Solutions division invests in a strong R&D pipeline, combining innovative thinking with practical action. For farmers, growers, and our other stakeholders along the value chain, BASF solutions help deliver the best possible outcomes by connecting seeds, traits, crop protection products, digital tools, and sustainability approaches.