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IBI Ag to develop AI-driven De Novo Protein design platform for bioinsecticides

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IBI Ag Ltd.Â , a leader in sustainable agricultural solutions, has announced the successful completion of its proof of concept (POC) for the AI-driven platform for de novo design of novel bioinsecticide proteins. This groundbreaking advancement marks a significant step forward in the quest for innovative, environmentally friendly pest control solutions.

The POC included the design of new proteins, successfully validated in insect bioassays, demonstrating their efficacy against key agricultural pests. By leveraging cutting-edge AI technology and proprietary biological data and IP, IBI Ag has developed a novel approach to computationally design bioinsecticide proteins that selectively and effectively target pests while aiming to minimize the impact on beneficial insects and the environment.

This innovative methodology represents a paradigm shift in the development of bioinsecticides, offering a faster and more efficient path to market. The de novo design opens up many new markets by targeting insect challenges that were previously unattainable with naturally occurring proteins, while also optimizing commercial aspects such as lower production costs, longer shelf life, stability, and resiliency.

"Completing this proof of concept is a major milestone for IBI Ag," said Arnon Heyman, CEO of IBI Ag. "To the best of our knowledge, this is the first ever de novo protein design platform for bioinsecticides. It is designed to leverage the company's proprietary IP for targets in insect control. This allows us to discover and validate new proteins based on vast amounts of data which we believe is a game-changer in the industry. This advancement not only demonstrates our commitment to sustainability but also supports farmers in achieving higher yields without compromising the health of ecosystems."

The successful discovery and validation of these new bioinsecticide proteins pave the way for significant expansion of IBI Ag's development pipeline, with plans for greenhouse and field trials in the coming growing seasons. IBI Ag is dedicated to

collaborating with agricultural partners and stakeholders to bring these innovative solutions to farmers worldwide.

IBI Ag is a pioneer in the agri-biotech industry, developing innovative and sustainable crop protection solutions. The company's proprietary nanobody technology provides a new mode of action for controlling a broad range of insect pests with minimal ecological footprint