

# Rethinking agricultural microbial products to meet farmer needs and societal expectations

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## Abstract

The business of feeding the world in a sustainable and regenerative way has never been more critical; consumers and our planet are demanding additional sustainable practices in agriculture and other sectors to make real impact to address food security, climate change, extreme weather events, and challenging pest and disease outbreaks. In response to these critical needs, policy actions have increased scrutiny of traditional practices, and significant technology advancements are occurring across the entire agriculture supply chain. But, what about farmers' needs? As a society, we are asking farmers to produce more, cheap, healthier food with more consistency in the face of emerging and evolving pests, diseases, and weather patterns. And we ask farmers to do this on smaller amounts of land, with inputs that are deemed acceptable by consumers, yet are increasing in cost and complexity. How can we support farmers to do all of that? As scientists and technology providers, we must arm them with tools that enable them. To date, agricultural microbial products have been designed and delivered to farmers using a playbook designed for traditional synthetic chemistry-based tools; this has resulted in suboptimal efficacy and consistency of these biological products. Farmers will adopt tools that perform consistently, which will expand their toolbox. Jord BioScience proposes a new playbook that utilizes the biology of the microbiome to deliver better performing biological products for farmers, so that farmers are enabled and empowered to feed the world and meet production challenges head-on.

**Key words:** sustainability, regenerative agriculture, microbiome, biologicals, microbial products