

Speaker Abstracts - Thursday 6 December

Hallahan

From the field to the lab and back again – delivery of an entomopathogenic fungus for corn rootworm control

Hallahan, D*, Qi, S., Burns, R and Bruck, D.

Many plant-beneficial microbes are documented in the plant microbiome literature, but relatively few have made it into widespread use in agriculture. Most fall at one or other of the many hurdles between initial proof-of-concept and translation from lab to field. Technical failure modes include feasibility and cost of production and scaleup, formulation compatibility, and stability. Even if these obstacles are overcome, efficacy requires establishment in the environment or target site with appropriate timing and dose. Entomopathogenic fungi of the genus *Metarhizium* have well-characterized efficacy against a variety of insects. We describe progress in production, formulation and stability of this organism for the control of corn rootworm, *Diabrotica* spp., major pests of corn production in North America and Europe.