ALBAUGH IN ACTION

A POWERFUL ALTERNATIVE FOR ROOTWORN CONTROL IN CORN



David H. Long, Ph.D. Albaugh Seed Treatment Technical Manager

After talking to seed companies and reading recent web advisories, one would conclude that corn rootworm protection concerns are top of mind this season. Many are predicting heavy corn rootworm (CRW) damage due to conducive environmental conditions, the current effectiveness of available traits, and the impact of increasing the use of seed applied insecticides on the seed at planting.

Across the industry, there is agreement that the pyramided *Bt* trait packages that are used today have been challenged due to resistant CRW population ratios in certain microenvironments. Newer trait technologies that need these older traits (RNAi) to have optimum effectiveness have some limitations due to delays in CRW mortality after insect feeding. The use of higher rates of neonicotinoid insecticides have shown to be additive when combined with current trait technologies but can result in a greater potential for obsolescence seed issues.

The Albaugh Seed Treatment team has been working on a solution to enhance corn rootworm activity. In multi-year research, BIOsT[®] Nematicide 100 has shown to increase activity against corn rootworm by lowering root damage and maintaining yield potential when compared to using higher rates of neonic insecticides.

BIOST Nematicide 100 is biological nematicide and a soil dwelling insect product that is being used on approximately 20 million acres in the U.S. In a true IPM strategy, the BIOST Nematicide 100 is applied as a seed treatment in concert with lower rates of neonic



Standard F&I package 500 rate + BIOST Nematicide 100

insecticides on hybrids that have effective trait packages. This combination of control strategies, as well as agronomic tactics, has enhanced CRW protection on corn over a 1250 rate (high rate) of a neonic insecticide applied to a similar hybrid-trait package. The addition of BIOST Nematicide 100 not only increased CRW protection, but it also addressed corn nematode concerns without reducing the long-term germination issues associated with high neonic rates on corn seed.

In 2023, Albaugh established a number of CRW trials across, Iowa, Illinois, and Indiana on top of various trait packages. Our multi-year data indicates a 7 bu/A yield advantage over lower rate insecticide offers and similar yield to 1250 clothianidin- or thiamethoxam-treated seed. Furthermore, BIOST nematicide activity on corn nematodes is second to none, in that we typically observe yield increases over standard treatments in moderate-to-high pressure nematode fields at around 10 bu/A.

If you're evaluating your CRW management strategy for 2024, Albaugh's Seed Treatment team welcomes the opportunity to discuss how BIOST Nematicide 100 could benefit your seed treatment program.

