DiPel® DF
BIOLOGICAL INSECTICIDE

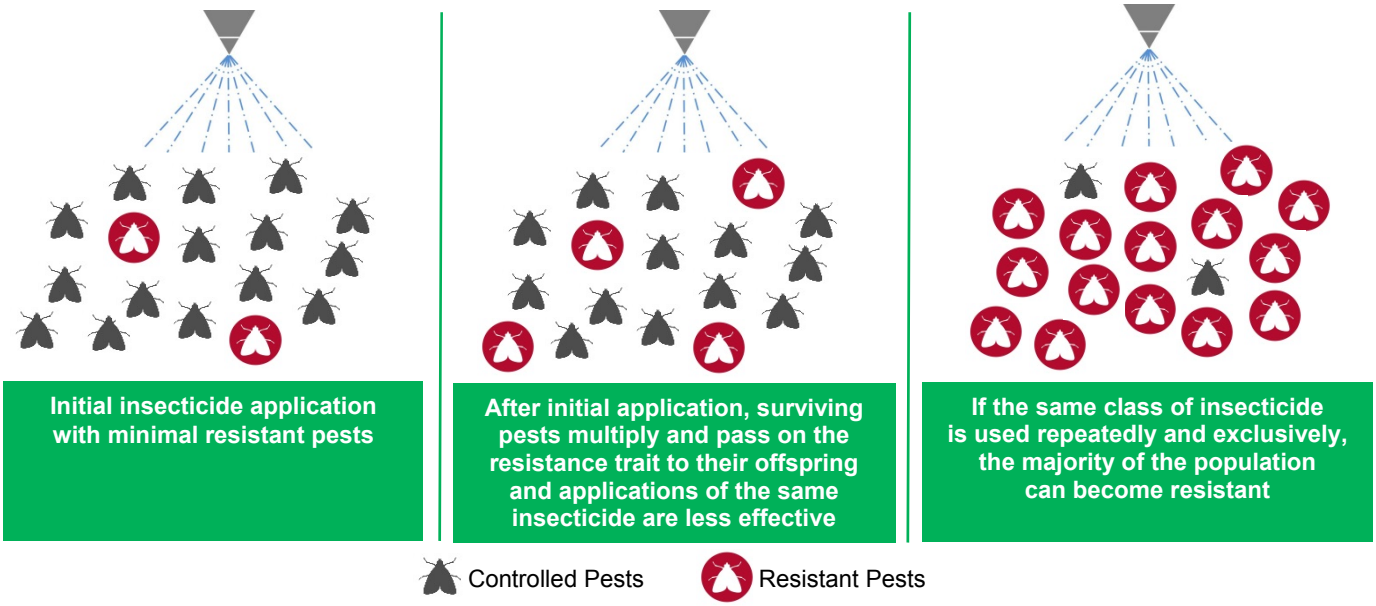
Resistance Management

Break the Insecticide Resistance Cycle

Adding **DiPel® DF Biological Insecticide** to your worm (lepidopterous larvae) control program breaks the resistance cycle, while also providing excellent control for greater return on investment. Group 28 chemistries like Coragen® are effective but can be costly and resistant populations have begun to develop (irac-online.org/content/uploads/DBM_Workshop_Diamide-_DBM_Resistance_Thailand.pdf). Rotating *DiPel* with other classes of chemistries promotes good resistance management practices that helps ensure other currently used modes of action continue to work efficiently.

How Insects Develop Resistance

Insects, such as worms, can be highly susceptible to developing resistance to insecticides when one class of insecticide is used exclusively and repeatedly. Surviving insects are left to form future resistant generations. Over the course of multiple generations and sprays, the insect populations move from predominately susceptible to predominately resistant, as shown in the illustrations below. By adding *DiPel* to your worm control program the cycle is broken so that not only are the worms controlled, but the effectiveness of conventional insecticides is maintained.



DiPel—Excellent Choice for Worm Control Programs

- Economical control of worm pests
- No harvest residue or MRL concerns because *DiPel* is exempt from tolerance
- Great rotational partner to reduce the potential of worms developing resistance to insecticides with other modes of action