New Pesticides Labeled in Forages, Corn, Grain Sorghum, Small Grains, and Stored Grain

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The past few years, I have been eliminating insecticides from my IPM recommendations, as EPA registrations have been cancelled.

This year is different. I have added a number of chemicals that now have labels on certain forage, grain, or stored grain crops. There may be other crop registrations for each insecticide, but I am just mentioning the ones in my areas of responsibility. The labels are included with this e-timely as PDF files, so you can look at each one of them.

Here is a quick overview:

Diatomaceous earth, DRYACIDE (Agriliance), is labeled on many stored grains. This compound abrasives the exoskeleton of insects and causes them to dry out. LD$_{50}$ is 3160 mg/kg.\(^1\)

Diflubenzuron, DIMILIN 2L (Uniroyal), is now labeled for pastures for grasshoppers. It also works on fall armyworm. The trick is to apply it when the insects are small, because it is an insect growth regulator. The insects die when they molt to the next size. Fall armyworm does almost all its damage in the last instar. Dimilin will need to be applied before they molt into this stage. Harvest restriction is 1 day, grazing is 0 days. LD$_{50}$ is 4640 mg/kg.

Indoxacarb, STEWARD (DuPont), is registered on alfalfa. It should be useful for controlling alfalfa weevils and caterpillars. Grazing and harvest restriction is 7 days. LD$_{50}$ is 268 mg/kg.

Methoxyfenozide, INTREPID (Dow), can now be used on field corn. It is a very specific insecticide. It works only against Lepidopteran larvae (caterpillars of butterflies and moths). Caterpillars that eat the material stop feeding, but will stay alive until the next molt. See enclosed labels for plant-back restrictions. LD$_{50}$ is 5000 mg/kg.

Methoprene, DIACON II (Wellmark International), is an insect growth regulator registered on many stored grains. It will be effective on larvae that are in or that hatch out in the grain mass. It does not control adult stored grain pests. LD$_{50}$ is 34,600 mg/kg.

Zeta-cypermethrin, FURY (FMC), is a pyrethroid insecticide with a broad range of activity. It is now labeled on corn, wheat, alfalfa, field corn, sorghum, and wheat. LD$_{50}$ is 106 mg/kg.
Pesticides that are no longer labeled have been removed. There are minor changes in each crop. Here a few of them.

Wheat
PENNCAP-M, PHORATE, THIMET, GAUCHO 600 (replaced by GAUCHO 480)

Corn
FORTRESS

For non-cropland, there is only one formulation of diazinon that still has a label, and that may change soon.

\(^1\)LD\(_{50}\)'s taken from Thomson, W.T. 2001. Agricultural Chemicals Book I. Thomson Publications, Fresno, CA