

INTEGRATED CROP MANAGEMENT

Cruiser 5FS insecticide labeled for corn seed treatment

Syngenta Crop Protection, Inc., recently received EPA approval for the use of Cruiser on corn seed (field, pop, seed, and sweet corn). The active ingredient in Cruiser, thiamethoxam, is a systemic insecticide in the neonicotinoid class of chemicals. Being a systemic insecticide, Cruiser is absorbed and distributed within the plant as it grows. An insect is exposed to a dose of insecticide when it feeds on the seed or young plant.

For field corn, pop corn, seed corn, and sweet corn the Cruiser label states: "To provide early season protection of seedlings against injury by wireworm, seedcorn maggot, southern corn leaf beetle, chinch bug, flea beetle, white grub, and suppression of cutworm, apply Cruiser at 1.28-5.1 fl oz/100 lb of seed. Do not apply less than 0.125 mg of thiamethoxam per kernel or more than 0.8 mg of thiamethoxam per kernel for use against these pests."

For field corn only the label states: "To provide corn rootworm protection in light-to-moderate infestations and suppression of cutworm, apply Cruiser at 5.1-9.0 fl oz/100 lb of seed. Do not apply less than 1.125 mg of thiamethoxam per kernel and do not exceed 1.4 mg of thiamethoxam per kernel."

The Cruiser label provides for "suppression" of cutworms at all rates of application. I have no data on Cruiser performance against cutworms. The label also claims control against "light-to-moderate" populations of corn rootworm larvae. Data from a single Iowa test this summer found that neither Force or Cruiser seed treatments were able to protect corn roots from a large population of corn rootworm larvae (Table 1). This result is not unexpectedly different from test results we have seen in previous years with seed treatments.

For more information on the use of Cruiser contact [Syngenta Crop Protection, Inc.](#) [1], P.O. Box 18300, Greensboro, NC 27419; phone 336-632-6000.

Table 1. Performance of Force and Cruiser for corn rootworm control (Ames, IA, 2002).

Treatment	Chemical	Placement ^a	Node-Injury ^{b,c} (1-3)	% Consistency ^{c,d}
Force 3G	Tefluthrin	T-band	0.27a	75a
Force ST 2.5FSe	Tefluthrin	Seed treatment	1.27 b	5b
Cruiser ST 5FS	Thiamethoxam	Seed treatment	1.44 b	0b

Untreated check	--	--	1.63 b	5b
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^a Planted May 6, 2002; root injury evaluated July 15, 2002.

^b Iowa State Node-Injury Scale [2] (0-3); Number of full or partial nodes completely eaten.

^c Values sharing a common letter do not differ significantly according to Ryan's Q test (P = 0.05).

^d Percent consistency = percentage of times node-injury rating was 0.25 (1/4 node eaten) or less.

^e Also known as ProShield.

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Source URL:

<http://www.ipm.iastate.edu/ipm/icm//ipm/icm/2002/11-18-2002/cruiser.html>

Links:

[1] <http://www.syngenta-us.com/>

[2] <http://www.ent.iastate.edu/pest/rootworm/nodeinjury/nodeinjury.html>

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