

2016 LATMC

DuPont™ Dermacor® X-100 Seed Treatment and other rice seed treatments

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Benefits of Insecticide Seed Treatments

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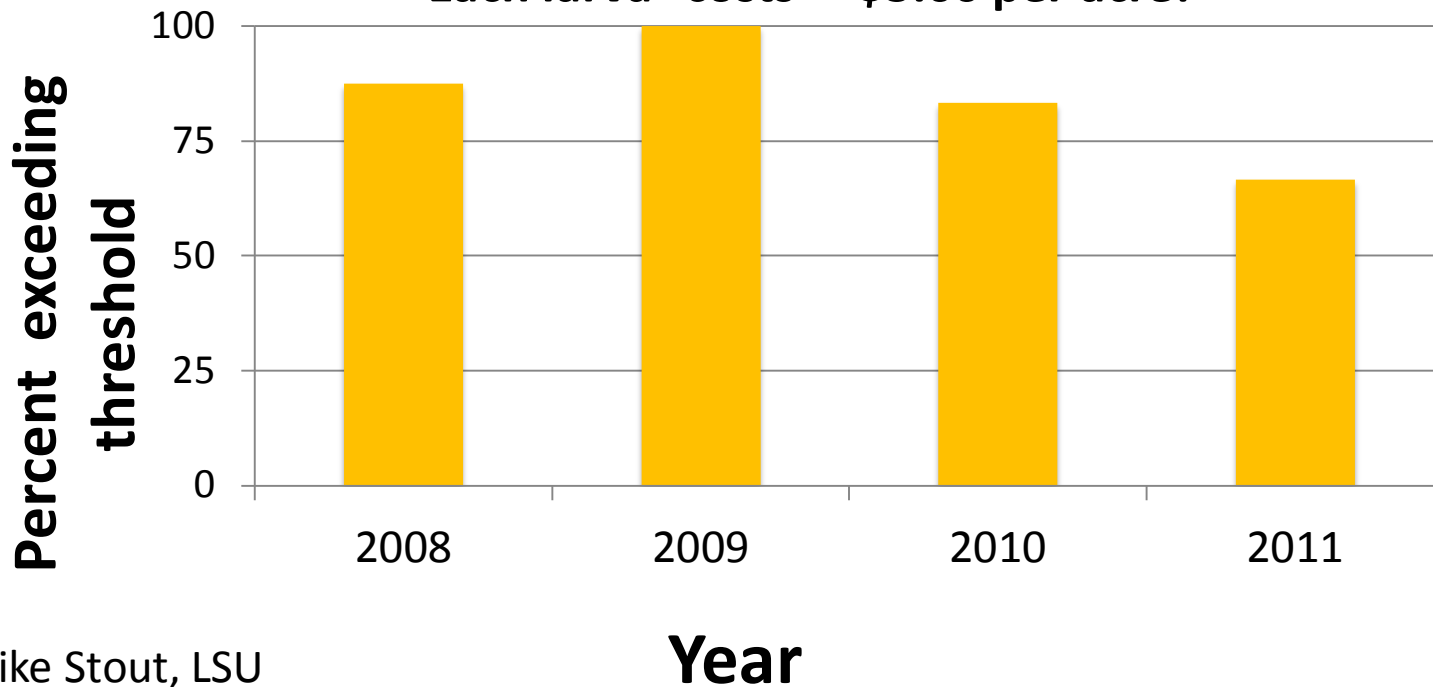
Proportion of untreated rice with weevil infestations that exceeded threshold, 2008-2011

Threshold = 3 larvae per core

Average weevil density = ~11

Each weevil larva causes ~0.7% yield loss

Each larva "costs" ~\$5.00 per acre!



Dr. Mike Stout, LSU

Seeding rate effect on seed treatment efficacies

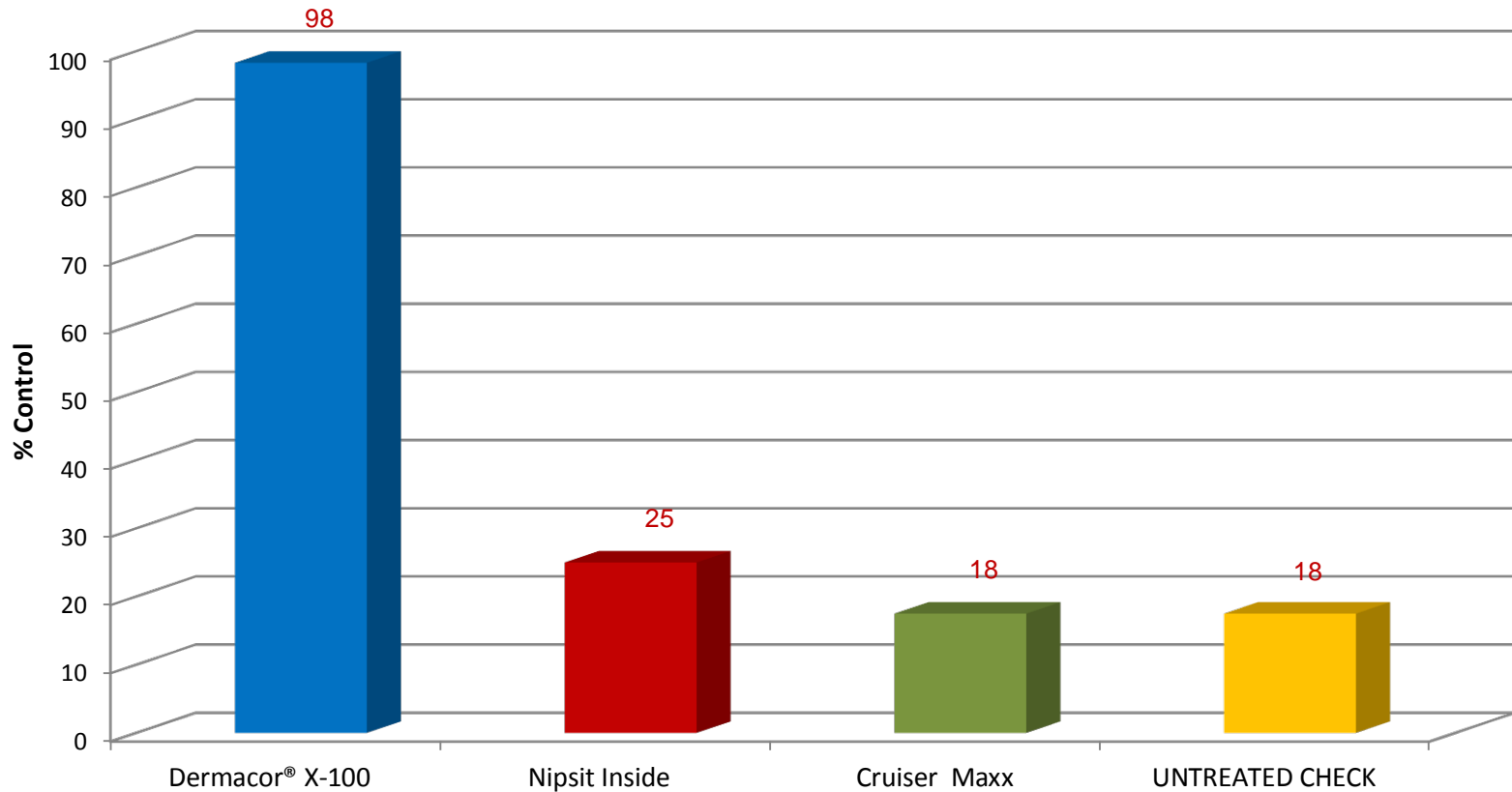
	% reduction in rice water weevil larvae at seeding rate:		
	30 lbs/A	60 lbs/A	90 lbs/A
Cruiser	27.2 %	32.9 %	41.4 %
Dermacor[®]	61.7 %	76.3 %	79.4 %

Data and presentation
from Dr. Mike Stout,
LSU

DuPont™ Dermacor® X-100 seed treatment

Fall Armyworm Control

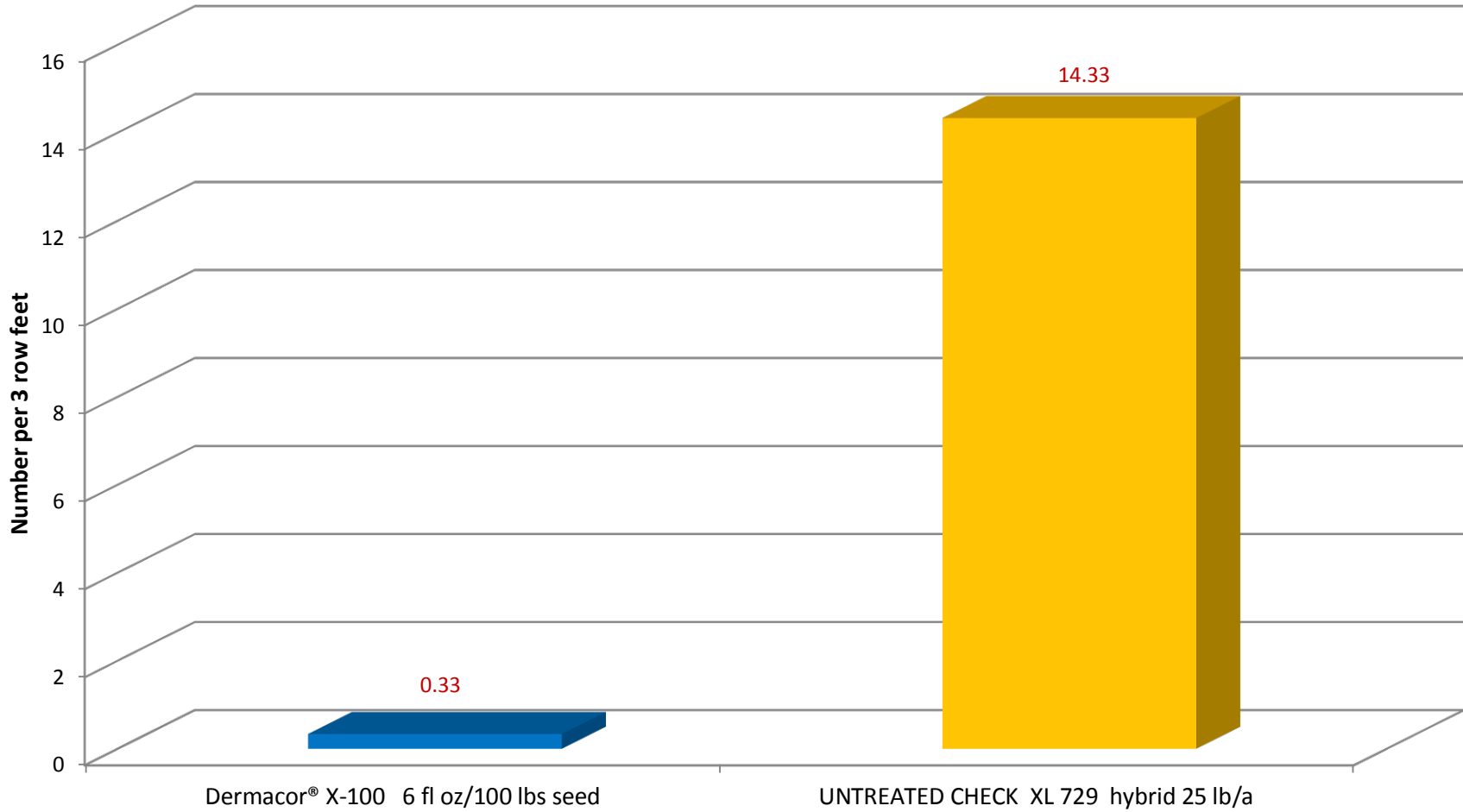
2013 LSU - Dr Mike Stout Lab Bioassay



Percentage mortality of fall armyworms in feeding assays by using neonates on foliage of plants treated as seeds with different insecticides. 2-week old plants (2-3 leaf stage) 6 days later - Larvae weighed 18% Natural Mortality in Check
 Trial No.: MTE-13-421 Dermacor X-100 25 micro gms/sd Nipsit 17 micro gms/sd Cruiser 33 micro gms/sd

DuPont™ Dermacor® X-100 seed treatment 2014 LSU - Rice Tec Strip Trial

Yellow Striped Armyworm Control McNeese State University



Trial No.: MTE-14-102

Let's Shift Focus to Hybrid Rice

- **Seeding rates of 21 – 23 lb/A vs. 65 – 100 for Clearfield and conventional varieties**
- **Seed treatments that do not vary treatment rate with seeding rate deliver lower ai/A rates of application (neonicotinoids)**
- **Seed treatments that do vary seed treatment rate with seeding rate provide a more uniform ai/A rate (Dermacor[®] X-100)**

Seeding rate effect on seed treatment efficacies

	% reduction in rice water weevil larvae at seeding rate:		
	30 lbs/A	60 lbs/A	90 lbs/A
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What about combinations of Dermacor[®] x-100 + neonicotinoid seed treatments?

- No evidence so far that these will help with weevil management (if Dermacor[®] is used, weevil control is almost always satisfactory)
- **Will increase spectrum of pests controlled**

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Why Dermacor® X-100 plus Neonicotinoid IST In Hybrid Rice?

- For enhanced control of rice water weevil at typically low hybrid seeding rates, compared to neonicotinoids only
- For control of armyworms and stem borers, which are not controlled by neonicotinoids
- For control of grape colapsis, chinch bugs, thrips, aphids, and black bug (Nipsit Inside only) controlled by neonicotinoids

Spectra of activity with Cruiser/Nipsit and Dermacor® X-100



Dr. Mike Stout, LSU

	CruiserMaxx	Dermacor[®] X-100	Nipsit INSIDE
Active Ingredient	Thiamethoxam	Chlorantraniliprole	Clothianidin
Class	Neonicotinoid	Anthranilic diamide	Neonicotinoid
Rate	7.0 fl oz/cwt	1.5 – 5.0 oz/cwt	1.92 fl oz/cwt
Insects on Label	Rice Water Weevil Grape Colaspis Chinch Bugs Thrips Aphids	Rice Water Weevil Mexican Rice Borer Rice Stalk Borer Sugarcane Borer Grape Colaspis 2(ee), Fall, Yellow-striped and True armyworms 2(ee)	Rice Water Weevil Grape Colaspis Chinch Bugs Thrips Aphids Black Bug
Planting Method	Not for use in water-seeded rice production Do not plant or sow by aerial application	Treated seed may be drilled or broadcast and incorporated into the soil, or broadcast into flooded rice fields 24(c)	Only in dry seeded rice production, cover planted seed thoroughly by soil

	CruiserMaxx	Dermacor [®] X-100 + Neonic	Nipsit INSIDE
Active Ingredient	Thiamethoxam	Chlorantraniliprole + thiamethoxam or clothianadin	Clothianidin
Class	Neonicotinoid	Anthranilic diamide + Neonicotinoid	Neonicotinoid
Rate	7.0 fl oz/cwt	5.0 oz/cwt + Labeled Rate	1.92 fl oz/cwt
Insects on Label(s)	Rice Water Weevil Grape Colaspis Chinch Bugs Thrips Aphids	Rice Water Weevil Mexican, Rice Stalk & Sugarcane Borer Grape Colaspis Armyworms, Chinch Bugs, Aphids, Thrips, Black Bug*	Rice Water Weevil Grape Colaspis Chinch Bugs Thrips Aphids Black Bug
Planting Method	Not for use in water-seeded rice production Do not plant or sow	Drilled or broadcast and incorporated into the soil. *Nipsit Inside Only	Only in dry seeded rice production, cover planted seed

	CruiserMaxx	Dermacor[®] X-100	Nipsit INSIDE
Active Ingredient	Thiamethoxam	Chlorantraniliprole	Clothianidin
Class	Neonicotinoid	Anthranilic diamide	Neonicotinoid
Rate	7.0 oz/cwt/(~\$30)	1.5 – 5.0 oz/cwt	1.92 oz/cwt/(~\$20)
Insects on Label	Rice Water Weevil Grape Colaspis Chinch Bugs Thrips Aphids ~\$6.31/A for 21 lb/A seeding rate* *2016 survey	Rice Water Weevil Mexican Rice Borer Rice Stalk Borer Sugarcane Borer Grape Colaspis (ee) Fall, Yellowstripe and True Armyworms 2(ee) ~\$12.70/A for 21 lb/A seeding rate*	Rice Water Weevil Grape Colaspis Chinch Bugs Thrips Aphids Black Bug ~\$4.20/A for 21 lb/A seeding rate*
Planting Method	Not for use in water-seeded rice production Do not plant on cow	Drilled or broadcast and incorporated into the soil, or broadcast treated seed into flooded rice	Only in dry seeded rice production, cover planted seed through top soil

THANK YOU!

Always read and follow all label directions and precautions for use.

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Cruiser[®] & Cruiser Maxx[®] (Syngenta), Nipsit INSIDE[®] (Valent), Clearfield (BASF)