



**DuPont™ Dermacor® X-100
plus Neonicotinoid Insecticide
Seed Treatment Strip Trials on
Hybrid Rice -- 2016**

Why the Focus on combined IST on Hybrid Rice?

- **Potential for improved efficacy on target pests at low seeding rates, particularly rice water weevil, armyworm & stem borer, compared to current programs**
- **Low seeding rate -- with constant neonicotinoid loading rate -- provides the most economically feasible option for the inclusion of DuPont™ Dermacor® X-100**

Dermacor® X-100 plus Neonicotinoid IST Strip Trials on Hybrid Rice -- 2016

**Five Consultant/Grower Trials
One University Trial**

Trial Locations & Cooperators

Lake Village, AR—Jim Jagers

Crawfordsville, AR—Chuck Farr

U of AR—Drs. Gus Lorenz/Jared Hardke

Jones, LA—Justin Turner

Belzoni, MS--Trey Koger

Merigold, MS—Justin George*

*Data not reported due to excessive differences in seeding rates

Hybrids, Seeding Rates & Plot Sizes

- Hybrids: RiceTec XL 729, 745 & 753
- Seeding Rates: 21 – 25 lb/A
- Plot Size (consultants): 20+ A
- Plot Size (university) : 0.25 A

Insecticide Seed Treatments Compared

1. DuPont™ Dermacor® X-100 seed treatment
5.0 oz/cwt + CruiserMaxx Rice™ (Syngenta
Crop Protection)* 7.0 oz/cwt or Nipsit INSIDE®
(Valent USA)** 1.92 oz/cwt

2. CruiserMaxx Rice 7.0 oz/cwt **or** Nipsit INSIDE
1.92 oz/cwt

*CruiserMaxx Rice is referenced at Cruiser in tables for brevity

**Nipsit INSIDE is referenced as Nipsit in tables for brevity

Variables Measured

Stand Establishment

Seedling Vigor

Grape Colaspis Larval Populations Pre Flood

Rice Water Weevil Larval Populations Post Flood

Rough Rice Yields

Milling Data

Stand Establishment 7 - 14 DAE

Seedlings/ft.

Cooperator	Dermacor® X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	1.17	0.75	+56.0%*
Jaggers	1.75	1.83	-4.4%
Koger	NA	NA	-----
Farr	6.63	4.46	+48.7%
Univ. of AR	NA	NA	-----
Average Stand Impact from Dermacor® X-100			+33.4%

*Armyworm infestation that required spraying in neonic only treatment

Stand Establishment 14 - 21 DAE

Seedlings/ft.

Cooperator	Dermacor [®] X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	1.92	1.25	+53.6%*
Jaggers	1.83	1.58	+15.8%
Koger	9.25	7.50	+23.3%
Farr	5.59	4.67	+19.7%
Univ. of AR	4.20	4.8	-12.5%

Average Stand Impact from Dermacor[®] X-100 +20.0%

*Armyworm infestation that required spraying in neonic only treatment

Seedling Vigor Ratings*

7 - 14 DAE

Cooperator	Dermacor® X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	5.25	4.00	+1.25
Jaggers	4.25	4.25	+0.00
Koger	8.50	7.50	+1.00
Farr	9.88	8.63	+1..25
Univ. of AR	NA	NA	-----
Vigor Impact from Dermacor® X-100 (Avg.)			+0.88

*1 = very low vigor; 10 = excellent vigor

Seedling Vigor Ratings*

14 - 21 DAE

Cooperator	Dermacor® X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	6.25	5.25	+1.00
Jaggers	5.50	5.75	-0.25
Koger	8.25	7.50	+1.0
Farr	9.75	9.25	+0.50
Univ. of AR	NA	NA	-----
Vigor Impact from Dermacor® X-100 (Avg.)			+0.56

*1 = very low vigor; 10 = excellent vigor

Seedling Vigor Ratings*

28 - 35 DAE

Cooperator	Dermacor® X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	7.0	5.75	+1.25
Jaggers	8.25	7.75	+0.50
Koger	8.25	7.75	+0.50
Farr	9.75	9.75	+0.0
Univ. of AR	NA	NA	-----
Vigor Impact from Dermacor® X-100 (Avg.)			+0.56

*1 = very low vigor; 10 = excellent vigor

Rice Water Weevil Larvae -- Postflood Avg. #/Core

Cooperator	Dermacor® X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	1.7	9.8	-82.7%
Jaggers	7.8	26.3	-69.5%
Koger	0.0	0.5	-100%
Farr	0.9	4.5	-80.0%
Univ. of AR	10.1	9.6	+5.2%
Impact of Dermacor® X-100 on RRW Larvae Counts (Avg.)			-65.4%

Rough Rice Yields bu/A

Cooperator	Dermacor [®] X-100 + Nipsit or Cruiser	Nipsit or Cruiser	+/-
Turner	NA	NA	-----
Jaggers	187	181	+6 bu/A
Koger	233	230	+3 bu/A
Farr	256	255	+1 bu/A
Univ. of AR	189	175	+14 bu/A
Yield Response to Dermacor [®] (Avg.)			+6 bu/A

Summary

- **Dermacor[®] X-100 improved stand counts by averages of 33% at 7 – 14 DAE and 20% at 14 – 21 DAE**
- **Dermacor[®] X-100 improved seedling vigor by averages of 14.3% at 7 – 14 DAE, 10.1% at 14 – 21 DAE, and 7.2% at 28 – 35 DAE**
- **Dermacor[®] X-100 did not impact grape colaspis larval counts preflood (reported from two trials only)**
- **Dermacor[®] X-100 reduced rice water weevil larval counts in 4 of 5 trials, by an average of 65.4% or 6 larvae per core**
- **Dermacor[®] X-100 increased rough rice yield in all reporting trials, averaging +6.0 bu/A or 2.85% (216 bu/A vs. 210 bu/A)**

Proprietary Information & Disclaimers

Dermacor[®] X-100 may not be registered for sale or use in all states. Contact your local DuPont retailer or representative for details and availability in your state.

This presentation is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use, and product warranty and liability limitations, which must be read before using the product(s). Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank-mix combinations.

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Nipsit INSIDE[®] (Valent); CruiserMaxX Rice[®] (Syngenta)



THANK YOU

