Agronomic and Cultural Information

Planting: Drill-planted Cocodrie @ 90 lb/A into League soil (pH 5.5, sand 3.2%, silt 32.4%, clay 64.4%, and organic matter 3.8 - 4.8%) on Apr 22
Plot size = 7 rows, 7 in. row spacing, 18 ft long with metal barriers around plots
Emergence on May 4

Irrigation: Flushed blocks (temporary flood for 48 hours, then drain) on Apr 22
Note: Plots were flushed as needed from emergence to permanent flood
Permanent flood on May 27

Fertilization: All fertilizer (urea) was distributed by hand.
56.7 lb N/acre (⅓ of 170) on Apr 22 at planting
56.7 lb N/acre (⅓ of 170) on May 27 at permanent flood
56.7 lb N/acre (⅓ of 170) on Jun 10 at panicle differentiation
40 lb N/acre on Jun 30 at late boot/heading
(Total season N/acre = 210 lb N/acre)

Herbicide: Stam 80EDF @ 2.0 lb, Basagran @ 0.75 lb, Facet 75DF @ 0.25 lb and Ordram @ 2.0 lb (AI)/acre and Agri-Dex @ 1.0 pt/acre with a 2-person hand-held spray boom (13- 80015 nozzles, 50 mesh screens, 21 gpa final spray volume) on May 20

Treatments: See Table 1 for treatment descriptions and rates.
MTI-500 (1.5%) granular applied by hand immediately before flood (BF) on May 27
Karate Z applied BF with a hand-held CO2-pressurized spray boom (3-800067 nozzles, 50 mesh screens, 26 gpa) on May 27
MTI-500 (1.5%) and MTI-500 Form. 2, 3 and 4 granulars applied 2 days after flood (DAF) on May 29
Note: Granular material dispersed well and sunk to bottom immediately.

Sampling: Adult RWW feeding scars from 5 random plants per plot 7 DAF on Jun 3
Rice water weevil (RWW) cores (5 cores per plot, each core 4 in. diameter, 4 in. deep, containing at least one rice plant) were collected on Jun 17 and 28, washed through 40-mesh screen buckets and immature RWW counted.
Note: Prior to analysis RWW core data transformed using $\sqrt{x + 0.5}$

Harvest: Harvested plots on Aug 26
Size harvested plot = 7 rows, 7 in. row spacing, 18 ft long
Yields converted to lb/acre adjusted to 12% moisture
Note: All data analyzed using ANOVA and LSD
**Effect of Etofenprox Formulations on Rice Water Weevil Control. Beaumont, TX. 2005**

**Discussion**

All MTI-500 formulations performed similarly relative to adult RWW feeding scars (Table 1). All post-flood applications, regardless of formulation, gave good control of immature RWW on both sample dates. However, the pre-flood application of MTI-500 1.5% performed as well as Karate Z applied pre-flood. Immature RWW populations in the untreated were very high on both sample dates (the economic injury level is about 15 immature RWW/5 cores). All treatments produced excellent yield responses. MTI-500 1.5% applied 2 days after flood out-yielded the untreated 1500 lb/acre.

**Table 1. Effect of etofenprox formulations on rice water weevil (RWW) control. Bmt., TX. 2005**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Rate</th>
<th>Timing</th>
<th>No. adult RWW feeding scars/plant</th>
<th>No. immature RWW/5 cores</th>
<th>Yield (lb/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>g (AI)/ha</td>
<td></td>
<td>Jun 17</td>
<td>Jun 28</td>
<td></td>
</tr>
<tr>
<td>MTI-500 1.5%</td>
<td>200</td>
<td>2 DAF</td>
<td>10 a</td>
<td>15 b</td>
<td>7 b</td>
</tr>
<tr>
<td>MTI-500 Form. 2</td>
<td>200</td>
<td>2 DAF</td>
<td>9 a</td>
<td>9 b</td>
<td>7 b</td>
</tr>
<tr>
<td>MTI-500 Form. 3</td>
<td>200</td>
<td>2 DAF</td>
<td>12 a</td>
<td>12 b</td>
<td>7 b</td>
</tr>
<tr>
<td>MTI-500 Form. 4</td>
<td>200</td>
<td>2 DAF</td>
<td>10 a</td>
<td>11 b</td>
<td>9 b</td>
</tr>
<tr>
<td>MTI-500 1.5%</td>
<td>200</td>
<td>BF</td>
<td>12 a</td>
<td>3 a</td>
<td>1 a</td>
</tr>
<tr>
<td>Karate Z</td>
<td>34</td>
<td>BF</td>
<td>6 a</td>
<td>2 a</td>
<td>2 a</td>
</tr>
<tr>
<td>Untreated</td>
<td>---</td>
<td>---</td>
<td>22 b</td>
<td>92 c</td>
<td>37 c</td>
</tr>
</tbody>
</table>

*a DAF = days after flood

*b BF = immediately before flood

Means followed by the same letter are not significantly different at the 5% level (ANOVA, LSD). Yields, however, were significantly different only at the 15% level.