Disease Investigations on 
COTTON
RICE
SOYBEAN
in the Mississippi Delta
March 2004 – March 2005
DISEASE INVESTIGATIONS

ON COTTON, RICE, AND SOYBEAN

IN THE

MISSISSIPPI DELTA

March 2004-March 2005

Delta Research and Extension Center
Mississippi Agricultural and Forestry Experiment Station
Delta Branch Experiment Station
Stoneville, Mississippi

Gabriel L. Sciumbato
Plant Pathologist

with

A. Blessitt, Research Assistant
B. Blessitt, Research Assistant
B. Cook, Research Assistant
K. Stetina, Research Assistant
L. Holmes, Laboratory Technician
G. Morlino, Agricultural Technician

Published by the Department of Information Services, Division of Agriculture, Forestry, and Veterinary Medicine, Mississippi State University. Edited by Robyn Hearn, Publications Coordinator. Cover designed by Betty Mac Wilson, Artist.
### Table of Contents

List of Fungicides, Herbicides, Insecticides, and Adjuvants .................................................. V

**2004 Cotton Annual Report**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>C2</td>
</tr>
<tr>
<td>2004 Cotton Beltwide Seed Treatment Inoculation Trial</td>
<td>C6</td>
</tr>
<tr>
<td>2004 Cotton Syngenta Seed Treatment Trial</td>
<td>C11</td>
</tr>
<tr>
<td>2004 Cotton In-furrow Spray Trial</td>
<td>C17</td>
</tr>
<tr>
<td>2004 Cotton Hopper Box Reduced Rate In-furrow Spray Trial</td>
<td>C21</td>
</tr>
<tr>
<td>2004 Cotton Hopper Box Experimentals Trials</td>
<td>C25</td>
</tr>
<tr>
<td>2004 Cotton Extension Demonstration Trial</td>
<td>C29</td>
</tr>
<tr>
<td>2004 Cotton Syngenta Nematicide Trial 1–Variety DP 451 B/RR</td>
<td>C35</td>
</tr>
<tr>
<td>2004 Cotton Syngenta Nematicide Trial 2– Variety ST 5599 BR</td>
<td>C38</td>
</tr>
<tr>
<td>2004 Cotton Syngenta Nematicide-Sidedress Trial 1– DP 444 BG/RR</td>
<td>C41</td>
</tr>
<tr>
<td>2004 Cotton Syngenta Nematicide-Sidedress Trial 2– DP 451 B/RR</td>
<td>C45</td>
</tr>
<tr>
<td>2004 Cotton Syngenta Nematicide-Sidedress Trial 3– ST 5599 BR</td>
<td>C49</td>
</tr>
<tr>
<td>2004 Cotton Tight-lock Fungicide Trial</td>
<td>C55</td>
</tr>
<tr>
<td>2004 Cotton Tight-lock Experimental Fungicide Trial</td>
<td>C59</td>
</tr>
<tr>
<td>2004 Cotton Reniform Tolerance Variety Trial</td>
<td>C62</td>
</tr>
</tbody>
</table>
2004 Rice Annual Report

2004 Rice URRN Trial ........................................ R4
2004 Rice Dynasty Seed Treatment Trial ..................... R15
2004 Rice Foliar Fungicide Trial One–Experimentals ....... R17
2004 Rice Foliar Fungicide Trial Two–Stratego Timing ...... R19
2004 Rice Foliar Fungicide Trial Three–Quadris-Rate Timing .. R23
2004 Rice Foliar Fungicide Trial Four–Inoculation Timing ..... R26
2004 Rice Foliar Fungicide Trial Five–Salvage Treatments .... R29
2004 Rice Hybrid Variety–Sheath Blight Trial ............... R31
2004 Rice Early Season Variety–Sheath Blight Trial .......... R36
2004 Rice Midseason Variety–Sheath Blight Trial ............ R42
2004 Rice Late Season Variety–Sheath Blight Trial .......... R56

2005 Soybean Annual Report

2004 Soybean Syngenta Seed Treatment Trials ............... S3
2004 Soybean Syngenta Seed Treatment-Fungicide-Insecticide Trials ... S5
2004 Soybean Seed Treatment Trials ............................ S7
2004 Soybean Foliar Fungicide Timing–Purple Leaf Stain Trial ..... S10
2004 Soybean Experimental Foliar Fungicide Trial ............ S13
2004 Soybean Foliar Fungicide–Quadris Thiophanate-Methyl Rate ... S16
2004 Soybean One Row Stem Canker, Frogeye, and Purple Stain Trial ............................... S19

2004 Soybean Yield– Variety Fungicide Trials ................................. S53
List of Fungicides, Herbicides, and Insecticides

**Apron FL, Apron 350 S**

**Apron FL**

**Apron TL**
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester. Wilbur-Ellis.

**Arrosolo 3-3E**
S-ethyl hexahydro-1H-azepine-1-carbothioate. N-(3,4-dichlorophenyl) propanamide. Zeneca Ag Products.

**Baytan**
Beta-4(Chlorophenoxy)-alpha-(1,1-dimethylethyl)-1H-1,2-4-triazole-1-ethanol. Gustafson, Inc.

**Beam**
5-methyl-1,2,4-triazole (3,4-b) benzothiazole. Eli Lilly.

**Benlate**
Benomyl Methyl 1-(butylcarbamoyl)-2-benzimidazolecarbamate. E. I. DuPont Nemours and Co., Inc.

**Bolero 8 E**

**Cotoran**
Fluometuron: 1,1-dimethyl-3-(alpha, alpha, alpha-trifluro-m-tolyl)urea. Novartis.

**Delta-Coat AD**
Chloroneb: 1,4-dichloro-2,5-dimethoxybenzene
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester.
Wilbur-Ellis.

Di-Syston
Disulfoton, O,O-Diethyl S-[2-(ethylthio)ethyl]phosphorodithioate. Miles.

Facet 50 WP
3,7-dichloro-8-quinolinecarboxylic acid. BASF.

ICI5504 80WG
See Quadris

Londax

Lorsban 30 FL

Moncut
Alpha, alpha, alpha-trifluoro-3'-isopropoxy-2-toluane. Nor-am.

Nuflow AD
Chloraneb 1,4-Dichloro-2,5-dimethoxybenzene
N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester/Metaxyl.
Wilbur-Ellis.

Nuflow ND
Chloroneb 1,4-dichloro-2,5-dimethoxybenzene 2-(thiocyanomethylthio) benzothiazole. Wilbur-Ellis.

Nusan 30 EC
2-(thiocyanomethylthio)benzothiazole. Wilbur-Ellis.

Orthene
Acephate (O, S-Dimethyl acetylphosphoramidothioate). Valent USA Corporation.
PCNB
Pentachloronitrobenzene. Olin.

Prevail
Carboxin: (5,6- dihydro-2-methyl-N-phenyl-1,4-oxathiin-3-carboxamide)
Pentachloronitrobenzene Metalaxyl. Trace Chemical.

Quadris
Methyl (E)-2-{2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl}-3-
methoxyacrylate. Zeneca Ag Products.

Ridomil 2 EC
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester.
Novartis.

Ridomil PC 11G
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester
Pentachloronitrobenzene (PCNB). Novartis.

Rovral 4 F, Rovral 50 WAG
Iprodione: 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2-4-dioxo-1-
imidazolidinecarboxamide. Rhone-Poulenc Ag Company.

RTU-Baytan-Thiram-Apron FL
Beta-(4-chlorophenoxy)-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-
ethanol
Thiram: Tetramethylthiuram disulfide. Gustafson, Inc. Apron FL:
Metalaxyl:
N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-alanine methyl ester.

RTU-PCNB
Quintozene Pentachloronitrobenzene. Gustafson, Inc.

Stam
Propanil: 3',4'-dichloropropionanilide. Rohm and Haas Company.

Start
Aluminum tris (O-ethyl phosphanate)
3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-
imidazolidinecarboxamide. Rhone-Poulenc Ag Company.

Temik 15 G
Aldicarb [2-methyl-2-(methylthio) propionaldehyde 0-(methylcarbamoyl)oxime]. Rhone-Poulenc Ag Company.

Terraclor Super X
Pentachloronitrobenzene (PCNB) 5-Ethoxy-3-(trichloromethyl)-1,2,4-thiadiazole. Uniroyal Chemical Company.

Terraclor 4 F
Pentachloronitrobenzene (PCNB). Uniroyal Chemical Company, Inc.

Terrazole 4 EC, Terrazole 4 F
5-ethoxy-3-(trichloromethyl)-1,2,4-thiasiazole. Uniroyal Chemical Company, Inc.

Thiram 42 S
Bis(dimethylthiocarbamoyl)disulfide. Gustafson, Inc.

Tilt
Propiconazole: 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole. Novartis.

Topsin M
Thiophanate-methyl (dimethyl [1,2-phenylene)-bis(iminocarbonothioyl)]bis[carbamate]). ISK Biotech.

Treflan

Vitavax
Carboxin: (5,6-dihydro-2-methyl-N-phenyl-1,4-oxathiin-3-carboxamide). Uniroyal Chemical Company, Inc.

Vitavax-PCNB
5,6-dihydro-2-methyl-N-phenyl-1,4-oxathiin-3-carboxanilide
Pentachloronitrobenzene. Gustafson, Inc.

Zorial 80 WP
Norflurazon [4-chloro-5-(methylamino)-2-(alpha, alpha, alpha-trifluoro-m-tolyl)-3(2H)-pyridazinone]. Novartis.
NOTICE TO USER

This Mississippi Agricultural and Forestry Experiment Station Information Bulletin is a summary of research conducted under project number MIS-171430 at Stoneville, Mississippi, and is intended for the use of colleagues, cooperators, and sponsors. The interpretation of data presented herein may change after additional experimentation. Information included here is not to be construed either as a recommendation for use or as an endorsement of a specific product by Mississippi State University or the Mississippi Agricultural and Forestry Experiment Station.

This report contains data generated as part of the Mississippi Agricultural and Forestry Experiment Station research program. Joint sponsorship by the following organizations is gratefully acknowledged: Mississippi Soybean Promotion Board, Mississippi Rice Promotion Board, Amvac, Bayer, Dow, Govan, Gustafson, Novartis Corporation, Syngenta, Trace Chemical Company, Uniroyal Chemical Company, U.S. Department of Agriculture, and Wilber-Ellis Company.

Trade names of commercial products used in this report are included only for clarity and understanding. All available names (i.e. trade names, experimental product code names or numbers, chemical names, etc.) of products used in this research project appear in the “LIST OF FUNGICIDES, HERBICIDES, AND INSECTICIDES” beginning on page vi of this information bulletin. Experimental products were used in accordance with EPA Experimental Use Regulations [40 CFR 172.3 (Section 5) of FIFRA].
Mention of a trademark or proprietary product does not constitute a guarantee or warranty of the product by the Mississippi Agricultural and Forestry Experiment Station and does not imply its approval to the exclusion of other products that also may be suitable.