



1 9 8 9
Regional
Cotton
Fusarium
Wilt
Report

Agronomy and Soils Departmental Series No. 144
March 1990
Alabama Agricultural Experiment Station
Auburn University
Lowell T. Frobish, Director
Auburn University, Alabama

1989 REGIONAL COTTON FUSARIUM WILT REPORT¹

W.C. Johnson²

Cotton cultivars and elite breeding lines submitted by 26 cooperators were evaluated for fusarium wilt resistance under field conditions at the Plant Breeding Unit, Tallahassee, Alabama. These entries were grown on an Independence loamy fine sand highly infested with both the fusarium wilt fungus (Fusarium oxysporum) Schlecht. f. vasinfectum [Atk.] Snyder & Hans.) and root-knot nematodes (Meloidogyne spp.).

Plots were 40-inch-wide bedded rows, 30 feet in length, separated by 6-foot alleys. Four replications of the test entries and checks, arranged in a block design, were evaluated. Both susceptible (Rowden) and resistant (McNair 235) cultivars were included as checks. Rowden was planted in row 5 and every tenth row thereafter (15, 25, ..., 285) and McNair 235 in row 10 and every tenth row thereafter (20, 30, ..., 280) throughout the test. Plots were planted May 11. Initial plant counts were made on June 29. Wilted plants were also counted and removed on that date. Later, wilted plants were counted and removed on July 17, July 31, August 14, and August 29. The remaining live plants were also counted and recorded on August 30. Percent wilted plants were then determined and mean wilting for a given entry calculated.

¹This report is a joint contribution between USDA-ARS, Crop Science Research Laboratory, Mississippi State, Mississippi, and the Alabama Agricultural Experiment Station, Auburn University, Alabama.

²Professor of Agronomy and Soils

Average wilting percentages of the susceptible Rowden were 81.6, 77.8, 88.4, and 89.1 for the four replications. Wilt percentages for the resistant check, McNair 235, were 23.0, 18.5, 31.0, and 42.5 for the four replications. Critical evaluation of a given entry should be made relative to the checks closest to the entry within each replication. Evaluation of breeding progress or evaluation of entries over years should be made only between the relative value of this entry and that of the closest susceptible check rows for each year.

Wilt resistance of McNair 235 has become erratic and in general is less than in former years. Consideration is being given to selecting another variety as the resistant check that would at least be more consistent.

Entries submitted by W.C. Johnson are commonly grown cultivars or advanced commercial materials. Thus, these entries are listed by name. Entries submitted by other cooperators are listed by their coded numbers. Additional information regarding the genetic background of a specific coded entry should be obtained from the named cooperator.

ACKNOWLEDGMENT

The author expresses appreciation to A. J. Kappelman, Jr., retired, for advice and technical assistance in conducting the test and preparing this report.

Information contained herein is available to all persons without regard to race, color, sex, or national origin.

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | | |
|---|-----------------------------|----|-----|-----|------|----|
| | 1 | 2 | 3 | 4 | Mean | |
| 1 Keith R. Jones, DPL, P. O. Box 157, Scott, MS 38772 | | | | | | |
| 001 | DPL 1..... | 42 | 37 | 3 | 22 | 26 |
| 002 | DPL 2..... | 32 | 29 | 31 | 31 | 31 |
| 003 | DPL 3..... | 33 | 70 | 43 | 38 | 46 |
| 004 | DPL 4..... | 64 | 100 | 55 | 100 | 80 |
| 005 | ROWDEN..... | 37 | 100 | 96 | 99 | 83 |
| 006 | DPL 5..... | 12 | 16 | 12 | 19 | 15 |
| 007 | DPL 6..... | 11 | 80 | 24 | 73 | 47 |
| 008 | DPL 7..... | 9 | 56 | 13 | 12 | 22 |
| 009 | DPL 9..... | 1 | 3 | 8 | 16 | 7 |
| 010 | McNAIR 235..... | 1 | 35 | 31 | 61 | 32 |
| 2 John Green, Seed Source Inc., 106 E. 4th St., Leland, MS 38756 | | | | | | |
| 011 | SS-1..... | 2 | 15 | 5 | 7 | 7 |
| 012 | SS-2..... | 26 | 100 | 73 | 85 | 71 |
| 013 | SS-3..... | 22 | 88 | 66 | 66 | 60 |
| 014 | SS-4..... | 5 | 25 | 28 | 28 | 20 |
| 015 | ROWDEN..... | 83 | 100 | 100 | 77 | 90 |
| 016 | SS-5..... | 7 | 16 | 14 | 16 | 12 |
| 017 | SS-6..... | 3 | 24 | 11 | 7 | 11 |
| 018 | SS-7..... | 4 | 14 | 7 | 0 | 6 |
| 019 | SS-8..... | 6 | 78 | 6 | 73 | 41 |
| 020 | McNAIR 235..... | 10 | 44 | 12 | 35 | 25 |
| 3 Richard Sheetz, Cargill Hybrid Seed, Box 2, Aiken, TX 79221 | | | | | | |
| 021 | 1..... | 8 | 9 | 2 | 35 | 14 |
| 022 | 2..... | 13 | 34 | 6 | 2 | 14 |
| 023 | 3..... | 4 | 44 | 3 | 43 | 24 |
| 024 | 4..... | 35 | 95 | 47 | 62 | 60 |
| 025 | ROWDEN..... | 80 | 95 | 61 | 59 | 74 |
| 026 | 5..... | 13 | 49 | 21 | 41 | 31 |
| 027 | 6..... | 35 | 26 | 16 | 38 | 29 |
| 028 | 7..... | 26 | 63 | 25 | 33 | 38 |
| 029 | 8..... | 10 | 13 | 1 | 9 | 8 |
| 030 | McNAIR 235..... | 12 | 10 | 7 | 7 | 9 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | | |
|---|-----------------------------|----|----|-----|------|----|
| | 1 | 2 | 3 | 4 | Mean | |
| 4 Bobby Phipps, GroAgri Seed Co., P.O. Box 1656, Lubbock TX 79408 | | | | | | |
| 031 | 1..... | 7 | 11 | 1 | 2 | 5 |
| 032 | 2..... | 4 | 17 | 9 | 4 | 8 |
| 033 | 3..... | 16 | 34 | 41 | 22 | 28 |
| 034 | 4..... | 13 | 7 | 28 | 5 | 13 |
| 035 | ROWDEN..... | 82 | 94 | 100 | 73 | 87 |
| 036 | 5..... | 52 | 6 | 16 | 14 | 22 |
| 037 | 6..... | 7 | 4 | 6 | 25 | 10 |
| 038 | 7..... | 8 | 23 | 31 | 16 | 20 |
| 039 | 8..... | 3 | 10 | 20 | 11 | 11 |
| 040 | McNAIR 235..... | 11 | 19 | 46 | 51 | 32 |
| 5 Mason Hawkins, Ranger Seed Co., Box 1288, Tahoka, TX 79373 | | | | | | |
| 041 | RSC-1..... | 17 | 15 | 25 | 20 | 19 |
| 042 | RSC-2..... | 12 | 5 | 17 | 22 | 14 |
| 043 | RSC-3..... | 5 | 10 | 3 | 28 | 12 |
| 044 | RSC-4..... | 17 | 15 | 29 | 65 | 32 |
| 045 | ROWDEN..... | 54 | 85 | 79 | 89 | 77 |
| 046 | RSC-5..... | 30 | 34 | 0 | 80 | 36 |
| 047 | RSC-6..... | 19 | 66 | 32 | 83 | 50 |
| 048 | RSC-7..... | 10 | 9 | 22 | 56 | 24 |
| 049 | RSC-8..... | 10 | 4 | 13 | 27 | 14 |
| 050 | Mc NAIR 235..... | 13 | 6 | 22 | 60 | 25 |
| 6 Lynn McDonald, Stoneville Pedigreed Seed Co., P.O. Box 167, Stoneville, MS 38776 | | | | | | |
| 051 | St 1..... | 10 | 8 | 32 | 73 | 31 |
| 052 | St 2..... | 5 | 35 | 48 | 100 | 47 |
| 053 | St 3..... | 14 | 28 | 63 | 84 | 47 |
| 054 | St 4..... | 5 | 15 | 54 | 84 | 40 |
| 055 | ROWDEN..... | 73 | 76 | 84 | 100 | 83 |
| 056 | St 5..... | 11 | 8 | 62 | 68 | 37 |
| 057 | St 6..... | 74 | 12 | 50 | 95 | 58 |
| 058 | St 7..... | 10 | 32 | 79 | 87 | 52 |
| 059 | St 8..... | 16 | 6 | 10 | 75 | 27 |
| 060 | McNAIR 235..... | 8 | 9 | 16 | 47 | 20 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | |
|------------------------|-----------------------------|---|---|---|------|
| | 1 | 2 | 3 | 4 | Mean |

7 C. C. Green, Cotton Production Res. Unit, P.O. Box 2131, Florence, SC 29503

| | | | | | | |
|-----|-----------------|----|----|----|----|----|
| 061 | 1..... | 9 | 37 | 29 | 89 | 41 |
| 062 | 2..... | 26 | 7 | 4 | 64 | 25 |
| 063 | 3..... | 18 | 6 | 26 | 76 | 32 |
| 064 | 4..... | 48 | 77 | 90 | 96 | 78 |
| 065 | ROWDEN..... | 50 | 49 | 90 | 98 | 72 |
| 066 | 5..... | 49 | 21 | 46 | 89 | 51 |
| 067 | 6..... | 64 | 10 | 48 | 84 | 52 |
| 068 | 7..... | 69 | 25 | 35 | 76 | 51 |
| 069 | 8..... | 3 | 3 | 24 | 93 | 31 |
| 070 | McNAIR 235..... | 5 | 21 | 7 | 38 | 18 |

8 Fred Bourland, Dept. of Agron., Univ. of Arkansas, Fayetteville, AR 72701

| | | | | | | |
|-----|-----------------|-----|----|----|----|----|
| 071 | FB-1..... | 22 | 75 | 42 | 89 | 57 |
| 072 | FB-2..... | 8 | 15 | 7 | 53 | 21 |
| 073 | FB-3..... | 33 | 30 | 6 | 40 | 27 |
| 074 | FB-4..... | 32 | 53 | 10 | 47 | 36 |
| 075 | ROWDEN..... | 100 | 98 | 85 | 88 | 93 |
| 076 | FB-5..... | 6 | 46 | 3 | 14 | 17 |
| 077 | FB-6..... | 38 | 77 | 10 | 44 | 42 |
| 078 | FB-7..... | 73 | 0 | 26 | 16 | 29 |
| 079 | FB-8..... | 95 | 31 | 4 | 17 | 37 |
| 080 | McNAIR 235..... | 16 | 92 | 5 | 31 | 36 |

9 Peggy M. Thaxton, Dept. of Soil & Crop Sci., Texas A & M Univ., College Station, TX 77843-2132

| | | | | | | |
|-----|-----------------|----|----|----|----|----|
| 081 | PMT-1..... | 54 | 84 | 41 | 39 | 54 |
| 082 | PMT-2..... | 15 | 51 | 27 | 23 | 29 |
| 083 | PMT-3..... | 48 | 24 | 25 | 12 | 27 |
| 084 | PMT-4..... | 10 | 39 | 2 | 24 | 19 |
| 085 | ROWDEN..... | 76 | 98 | 79 | 41 | 74 |
| 086 | PMT-5..... | 25 | 17 | 8 | 14 | 16 |
| 087 | PMT-6..... | 3 | 8 | 33 | 3 | 12 |
| 088 | PMT-7..... | 39 | 49 | 19 | 8 | 29 |
| 089 | PMT-8..... | 36 | 78 | 15 | 1 | 32 |
| 090 | McNAIR 235..... | 23 | 58 | 16 | 8 | 26 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | |
|---------------------------|-----------------------------|---|---|---|------|
| | 1 | 2 | 3 | 4 | Mean |

| | | | | | | |
|-----|---|----|----|----|----|----|
| 10 | Kamal M. El-Zik, Dept. of Soil & Crop Sci., Texas A & M Univ., College Station, TX 77943-2132 | | | | | |
| 091 | KME-1..... | 25 | 46 | 9 | 20 | 25 |
| 092 | KME-2..... | 35 | 53 | 76 | 36 | 50 |
| 093 | KME-3..... | 8 | 2 | 11 | 26 | 12 |
| 094 | KME-4..... | 39 | 44 | 19 | 7 | 27 |
| 095 | ROWDEN..... | 40 | 86 | 76 | 83 | 71 |
| 096 | KME-5..... | 21 | 72 | 32 | 3 | 32 |
| 097 | KME-6..... | 13 | 24 | 13 | 11 | 15 |
| 098 | KME-7..... | 14 | 60 | 14 | 33 | 30 |
| 099 | KME-8..... | 16 | 25 | 59 | 25 | 31 |
| 100 | McNAIR 235..... | 9 | 7 | 23 | 38 | 19 |

| | | | | | | |
|-----|---|----|----|----|----|----|
| 11 | W. P. Sappenfield, P.O. Box 160, Portageville, MO 63873 | | | | | |
| 101 | 1..... | 2 | 2 | 22 | 3 | 7 |
| 102 | 2..... | 2 | 0 | 25 | 22 | 12 |
| 103 | 3..... | 14 | 10 | 15 | 11 | 12 |
| 104 | 4..... | 3 | 2 | 3 | 3 | 3 |
| 105 | ROWDEN..... | 82 | 39 | 78 | 98 | 74 |
| 106 | 5..... | 1 | 1 | 4 | 6 | 3 |
| 107 | 6..... | 1 | 4 | 9 | 1 | 4 |
| 108 | 7..... | 3 | 4 | 15 | 2 | 6 |
| 109 | 8..... | 1 | 1 | 10 | 5 | 4 |
| 110 | McNAIR 235..... | 9 | 11 | 19 | 12 | 13 |
| 111 | 9..... | 0 | 1 | 6 | 0 | 2 |
| 112 | 10..... | 4 | 3 | 11 | 2 | 5 |
| 113 | 11..... | 13 | 7 | 13 | 13 | 12 |
| 114 | 12..... | 7 | 1 | 7 | 7 | 6 |
| 115 | ROWDEN..... | 66 | 81 | 72 | 99 | 80 |
| 116 | 13..... | 10 | 1 | 1 | 5 | 5 |
| 117 | 14..... | 17 | 0 | 3 | 24 | 12 |
| 118 | 15..... | 7 | 4 | 5 | 28 | 11 |
| 119 | 16..... | 23 | 9 | 4 | 67 | 25 |
| 120 | McNAIR 235..... | 31 | 5 | 3 | 29 | 17 |

| | | | | | | |
|-----|---|----|----|----|-----|----|
| 12 | Rex Dunn, Dunn Seed Farms Inc., Rt. 4, Box 431, Seminole, TX, 79360 | | | | | |
| 121 | 1..... | 17 | 9 | 17 | 34 | 19 |
| 122 | 2..... | 47 | 64 | 60 | 99 | 68 |
| 123 | 3..... | 15 | 11 | 18 | 97 | 35 |
| 124 | 4..... | 17 | 9 | 39 | 100 | 41 |
| 125 | ROWDEN..... | 94 | 68 | 95 | 100 | 89 |
| 126 | 5..... | 5 | 1 | 82 | 72 | 40 |
| 127 | 6..... | 12 | 7 | 13 | 88 | 30 |
| 128 | 7..... | 3 | 3 | 10 | 54 | 18 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | |
|--|-----------------------------|-----|----|-----|------|
| | 1 | 2 | 3 | 4 | Mean |
| 13 Gary L. Rea, Big Crop Seed Inc., P.O. Box 5899, Lubbock, TX, 79417 | | | | | |
| 129 Jerez..... | 21 | 14 | 50 | 100 | 46 |
| 130 McNAIR 235..... | 28 | 4 | 35 | 83 | 38 |
| 14 Steve Stringer, Univ. of Arkansas, P.O. Box 789, Marianna, AR, 72360 | | | | | |
| 131 SS-1..... | 7 | 3 | 0 | 93 | 26 |
| 132 SS-2..... | 36 | 6 | 53 | 100 | 49 |
| 133 SS-3..... | 4 | 8 | 16 | 63 | 23 |
| 134 SS-4..... | 83 | 10 | 86 | 92 | 68 |
| 135 ROWDEN..... | 100 | 71 | 77 | 96 | 86 |
| 136 SS-5..... | 54 | 20 | 36 | 81 | 48 |
| 137 SS-6..... | 41 | 11 | 23 | 98 | 43 |
| 138 SS-7..... | 79 | 0 | 31 | 96 | 52 |
| 139 SS-8..... | 91 | 4 | 29 | 89 | 53 |
| 140 McNAIR 235..... | 45 | 3 | 14 | 73 | 34 |
| 15 David Howle, Northrup King Seed, Rt. 1, Box 40, Leland, MS, 38756 | | | | | |
| 141 KC-1..... | 58 | 19 | 90 | 100 | 67 |
| 142 KC-2..... | 16 | 9 | 9 | 34 | 17 |
| 143 KC-3..... | 21 | 8 | 21 | 42 | 23 |
| 144 KC-4..... | 31 | 10 | 19 | 77 | 34 |
| 145 ROWDEN..... | 89 | 82 | 99 | 100 | 92 |
| 146 KC-5..... | 74 | 32 | 17 | 65 | 47 |
| 147 KC-6..... | 76 | 78 | 17 | 55 | 56 |
| 148 KC-7..... | 55 | 29 | 12 | 56 | 38 |
| 149 KC-8..... | 75 | 44 | 24 | 71 | 53 |
| 150 McNAIR 235..... | 92 | 4 | 45 | 21 | 40 |
| 16 C. Wayne Smith, Dept. of Soil & Crop Sci., Texas A & M Univ., College Station, TX 77843 | | | | | |
| 151 CIL 1..... | 73 | 50 | 30 | 39 | 48 |
| 152 CIL 2..... | 67 | 88 | 57 | 57 | 67 |
| 153 CIL 3..... | 56 | 71 | 11 | 55 | 48 |
| 154 CIL 4..... | 41 | 80 | 65 | 52 | 60 |
| 155 ROWDEN..... | 95 | 100 | 99 | 68 | 90 |
| 156 CIL 5..... | 31 | 92 | 12 | 52 | 47 |
| 157 CIL 6..... | 30 | 44 | 42 | 30 | 36 |
| 158 CIL 7..... | 36 | 56 | 32 | 41 | 41 |
| 159 CIL 8..... | 36 | 86 | 73 | 13 | 52 |
| 160 McNAIR 235..... | 6 | 42 | 27 | 13 | 22 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | |
|--|-----------------------------|----|----|----|------|
| | 1 | 2 | 3 | 4 | Mean |
| 17 Laval M. Verhalan, Dept. of Agron., Oklahoma State Univ., Stillwater, Ok 74078 | | | | | |
| 161 OKLA-1..... | 43 | 65 | 25 | 4 | 34 |
| 162 OKLA-2..... | 11 | 36 | 14 | 6 | 17 |
| 163 OKLA-3..... | 48 | 83 | 9 | 34 | 44 |
| 164 OKLA-4..... | 12 | 31 | 50 | 51 | 36 |
| 165 ROWDEN..... | 67 | 71 | 67 | 90 | 74 |
| 166 OKLA-5..... | 37 | 28 | 57 | 37 | 40 |
| 167 OKLA-6..... | 17 | 17 | 12 | 49 | 24 |
| 168 OKLA-7..... | 33 | 30 | 37 | 36 | 34 |
| 169 OKLA-8..... | 50 | 17 | 17 | 35 | 30 |
| 170 McNAIR 235..... | 23 | 17 | 44 | 18 | 26 |
| 18 R. L. Shepherd, CSRS, USDA-ARS, P.O. Box 5367, Mississippi State, MS 39762 | | | | | |
| 171 1..... | 17 | 10 | 17 | 13 | 14 |
| 172 2..... | 26 | 7 | 9 | 11 | 13 |
| 173 3..... | 12 | 7 | 34 | 17 | 18 |
| 174 4..... | 3 | 1 | 20 | 10 | 8 |
| 175 ROWDEN..... | 90 | 74 | 95 | 78 | 82 |
| 176 5..... | 9 | 0 | 6 | 1 | 4 |
| 177 6..... | 3 | 1 | 10 | 2 | 4 |
| 178 7..... | 9 | 4 | 6 | 11 | 8 |
| 179 9..... | 4 | 27 | 53 | 38 | 30 |
| 180 McNAIR 235..... | 10 | 4 | 27 | 20 | 15 |
| 19 R. R. Bridge, Delta Branch Exp. Sta., P.O. Box 197, Stoneville, MS 38775 | | | | | |
| 181 RRB-1..... | 12 | 10 | 69 | 17 | 27 |
| 182 RRB-2..... | 1 | 52 | 42 | 33 | 32 |
| 183 RRB-3..... | 6 | 9 | 78 | 13 | 26 |
| 184 RRB-4..... | 7 | 8 | 45 | 26 | 22 |
| 185 ROWDEN..... | 81 | 68 | 94 | 97 | 85 |
| 186 RRB-5..... | 4 | 3 | 11 | 39 | 14 |
| 187 RRB-6..... | 12 | 5 | 19 | 25 | 15 |
| 188 RRB-7..... | 5 | 1 | 20 | 68 | 24 |
| 189 RRB-9..... | 14 | 0 | 3 | 17 | 8 |
| 190 McNAIR 235..... | 15 | 4 | 9 | 58 | 22 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | |
|--|-----------------------------|----|-----|-----|------|
| | 1 | 2 | 3 | 4 | Mean |
| 20 Jack E. Jones, Dept. of Agron., Louisiana State Univ., Baton Rouge, LA 70803-2110 | | | | | |
| 191 JJ 1..... | 9 | 3 | 2 | 14 | 7 |
| 192 JJ 2..... | 6 | 5 | 2 | 33 | 12 |
| 193 JJ 3..... | 8 | 0 | 7 | 19 | 8 |
| 194 JJ 4..... | 1 | 0 | 2 | 81 | 21 |
| 195 ROWDEN..... | 100 | 88 | 100 | 99 | 97 |
| 196 JJ 5..... | 1 | 27 | 12 | 99 | 35 |
| 197 JJ 6..... | 2 | 1 | 67 | 100 | 42 |
| 198 JJ 7..... | 4 | 4 | 85 | 77 | 42 |
| 199 JJ 8..... | 38 | 11 | 77 | 100 | 57 |
| 200 McNAIR 235..... | 13 | 3 | 67 | 80 | 41 |
| 201 JJ 9..... | 37 | 20 | 37 | 100 | 48 |
| 202 JJ 10..... | 14 | 4 | 32 | 71 | 30 |
| 21 Ron Thorp, Stoneville Seed Co., 1180 Avenida Ellenna, Cassa Grande, AZ 72160 | | | | | |
| 203 1..... | 22 | 24 | 33 | 99 | 44 |
| 204 2..... | 18 | 3 | 51 | 78 | 38 |
| 205 ROWDEN..... | 95 | 80 | 98 | 99 | 93 |
| 206 3..... | 75 | 10 | 29 | 98 | 53 |
| 207 4..... | 86 | 3 | 56 | 85 | 58 |
| 22 Curtis Williams, Jacob Hartz Seed Co., P.O. Box 946, Stuttgart, AR 72160 | | | | | |
| 208 1..... | 100 | 99 | 100 | 100 | 100 |
| 209 2..... | 22 | 4 | 11 | 17 | 14 |
| 210 McNAIR 235..... | 75 | 1 | 31 | 78 | 46 |
| 211 3..... | 100 | 51 | 98 | 100 | 87 |
| 212 4..... | 98 | 98 | 100 | 100 | 99 |
| 213 5..... | 100 | 58 | 100 | 100 | 90 |
| 214 6..... | 96 | 12 | 99 | 100 | 77 |
| 215 ROWDEN..... | 98 | 76 | 98 | 96 | 92 |
| 216 7..... | 97 | 71 | 82 | 98 | 87 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | |
|------------------------|-----------------------------|---|---|---|------|
| | 1 | 2 | 3 | 4 | Mean |

23 Shelby H. Baker, Coastal Plains Exp. Sta., P.O. Box 748, Tifton, GA 31793-0748

| | | | | | | |
|-----|-----------------|-----|----|----|----|----|
| 217 | GA 1..... | 27 | 9 | 53 | 56 | 36 |
| 218 | GA 2..... | 21 | 18 | 27 | 51 | 29 |
| 219 | GA 3..... | 39 | 27 | 44 | 62 | 43 |
| 220 | McNAIR 235..... | 59 | 35 | 50 | 66 | 53 |
| 221 | GA 4..... | 24 | 19 | 69 | 30 | 36 |
| 222 | GA 5..... | 79 | 22 | 74 | 47 | 56 |
| 223 | GA 6..... | 47 | 18 | 63 | 77 | 51 |
| 224 | GA 7..... | 34 | 16 | 49 | 45 | 36 |
| 225 | ROWDEN..... | 100 | 90 | 85 | 88 | 91 |
| 226 | GA 8..... | 62 | 17 | 40 | 73 | 48 |

24 Warner Fisher, Chembred Inc., Rt. 3, Box 750, Maricopa, AZ 85239

| | | | | | | |
|-----|-----------------|----|----|----|----|----|
| 227 | 1..... | 28 | 6 | 35 | 61 | 32 |
| 228 | 2..... | 69 | 64 | 36 | 42 | 53 |
| 229 | 3..... | 74 | 55 | 72 | 32 | 58 |
| 230 | McNAIR 235..... | 11 | 6 | 41 | 38 | 24 |
| 231 | 4..... | 14 | 16 | 33 | 16 | 20 |
| 232 | 5..... | 13 | 3 | 32 | 22 | 18 |
| 233 | 6..... | 42 | 34 | 35 | 13 | 31 |
| 234 | 7..... | 4 | 7 | 33 | 38 | 20 |
| 235 | ROWDEN..... | 98 | 78 | 89 | 83 | 87 |
| 236 | 8..... | 22 | 5 | 77 | 65 | 42 |

25 W. C. Johnson, Dept. of Agron., Auburn Univ., AL 36849-5412

| | | | | | | |
|-----|---------------------|----|----|----|-----|----|
| 237 | Coker 320..... | 17 | 8 | 27 | 26 | 20 |
| 238 | KC 311..... | 21 | 13 | 20 | 18 | 18 |
| 239 | Terra C 30..... | 20 | 10 | 14 | 43 | 22 |
| 240 | McNAIR 235..... | 10 | 20 | 78 | 59 | 42 |
| 241 | Delcot 344..... | 7 | 2 | 25 | 76 | 28 |
| 242 | Arkot 518..... | 9 | 14 | 31 | 59 | 28 |
| 243 | HS 46..... | 35 | 53 | 66 | 88 | 60 |
| 244 | Stoneville 825..... | 95 | 90 | 98 | 100 | 96 |
| 245 | ROWDEN..... | 80 | 30 | 96 | 100 | 76 |
| 246 | Deltapine 20..... | 8 | 4 | 44 | 19 | 19 |
| 247 | Suregrow 35..... | 3 | 2 | 7 | 39 | 13 |
| 248 | DES 119..... | 37 | 13 | 19 | 72 | 35 |
| 249 | Tropical 225..... | 18 | 10 | 39 | 58 | 31 |
| 250 | McNAIR 235..... | 22 | 5 | 12 | 41 | 20 |
| 251 | S 1001..... | 6 | 30 | 25 | 61 | 30 |

1989 FUSARIUM WILT TEST
PLANT BREEDING UNIT, TALLASSEE, ALABAMA

| Test entry designation | Percent wilt by replication | | | | | |
|------------------------|---|----|----|-----|------|----|
| | 1 | 2 | 3 | 4 | Mean | |
| 25 | Cont'd. | | | | | |
| 252 | Deltapine 51..... | 10 | 0 | 13 | 39 | 16 |
| 253 | Suregrow 55..... | 7 | 5 | 85 | 55 | 38 |
| 254 | Coker 84-828..... | 17 | 50 | 70 | 95 | 58 |
| 255 | ROWDEN..... | 83 | 53 | 100 | 100 | 84 |
| 256 | Tifcot 56..... | 20 | 2 | 95 | 95 | 53 |
| 257 | Deltapine 90..... | 17 | 5 | 73 | 42 | 34 |
| 258 | Coker 315..... | 10 | 8 | 61 | 97 | 44 |
| 259 | KC 380..... | 23 | 9 | 96 | 91 | 55 |
| 260 | McNAIR 235..... | 9 | 11 | 56 | 40 | 29 |
| 261 | Coker 130..... | 27 | 2 | 29 | 57 | 29 |
| 262 | Stoneville 453..... | 63 | 15 | 21 | 57 | 39 |
| 263 | Stoneville 506..... | 18 | 5 | 50 | 67 | 35 |
| 264 | PD 3..... | 37 | 7 | 44 | 40 | 32 |
| 265 | ROWDEN..... | 94 | 62 | 97 | 100 | 88 |
| 266 | Terra C 40..... | 37 | 6 | 49 | 65 | 39 |
| 267 | Stoneville 112..... | 47 | 2 | 54 | 74 | 44 |
| 268 | Pima S-6..... | 22 | 5 | 80 | 51 | 40 |
| 269 | Stoneville BR 115..... | 4 | 2 | 94 | 69 | 42 |
| 270 | McNAIR 235..... | 46 | 10 | 94 | 59 | 52 |
| 271 | Stoneville 907..... | 8 | 6 | 58 | 67 | 35 |
| 272 | Paymaster 145..... | 23 | 38 | 87 | 60 | 52 |
| 273 | Deltapine 50..... | 26 | 11 | 26 | 36 | 25 |
| 26 | Hal H. Jones, Sun Valley Seed, 610 West Broadway, Suite 118, Tempe, AZ 85282 | | | | | |
| 274 | SAC 10..... | 14 | 36 | 20 | 16 | 22 |
| 275 | ROWDEN..... | 99 | 86 | 87 | 96 | 92 |

