UNIVERSITY OF KENTUCKY WHEAT SCIENCE NEWS

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Wheat in Kentucky -Team Work Makes a Difference-

Wheat Science Group 2006

A 70 bu/ac. state average wheat yield in 2006 is the highest ever produced by the state of Kentucky. This is the 5th highest in the U.S. and higher than almost all of the surrounding states. This is a dramatic increase over the 40 bu/ac state average in the mid 1980's. This increase occurred in steps that corresponds to increased emphasis on education and applied research. The first step occurred as an agribusiness established a scouting and applied research program. With the new emphasis, the state average yields improved from the 40's to the 50's bu/ac. range. The next step occurred when the University of Kentucky concentrated and focused efforts on wheat with a group of 16 specialists with diverse expertise to form the Wheat Science Group. Soon afterward, the state average yields moved to the 60's bu/ac range. The UK Specialists, consultants, and the Small Grain Grower's Association worked as a team on many research and educational efforts. So Kentucky now has excellent research and education programs on wheat with well informed and productive producers. Wheat yields have reached the 70 bu/ac range and Kentucky leads the nation in the percentage of acres planted to no-till wheat. Team work among the different groups has been the key to this effort.

Kentucky's Wheat Enterprise Demonstrating Economic Potential Richard L. Trimble—Extension Economist

Kentucky's wheat enterprise has been earning management returns on a par with corn and soybeans over the past few years. However, 2006 could be the year that wheat, in the traditional combination with double crop soybeans, could really shine for Kentucky producers. Projections of 2006 return over variable costs by Craig Gibson, Kentucky Farm Business Management Specialist, indicate that wheat and double crop soybeans could expect a return over variable costs of \$184.00 per acre. This was \$66.00 per acre greater than the next best enterprise projected return.

Kentucky wheat producers find themselves in this fortunate position as a result of two major factors. First, as a result of the efforts of the University of Kentucky Wheat Science Group, producers have been constantly increasing wheat yields. The state wide average wheat yield has increased from 53 bushels in 1996 to an average of 70 bushels per acre in 2006. Second, wheat prices are projected to be quite favorable for 2006. The result of combining these two factors has the potential for creating an uncommonly pleasant outcome for Kentucky wheat producers.

2006 Kentucky Extension Wheat Production Contest Summary of Award Winners

17 Entries (8 Tillage, 9 No-Tillage)
9 Varieties
10 Counties



I. State Awards:

| AWARD | DIV. | TILLAGE | PRODUCER | COUNTY | BRAND/ VARIETY | YIELD (BU/AC) |
|----------|------|--------------|--------------|------------|-------------------|------------------|
| Champion | Ι | Conventional | George Fox | Todd | Pioneer 25R49 | 108.36 |
| Champion | Ш | No-Tillage | Pat Clements | Washington | Cumberland | 119.71 |

II. Area Awards

| AREA | PRODUCER | COUNTY | BRAND/ VARIETY | YIELD (BU/AC) | DIV. |
|-------------------------|-----------------------|---------|-------------------|------------------|------|
| 1. Purchase & Pennyrile | Jeremy & Bruce Benson | Hopkins | Pioneer 25R37 | 110.51 | П |
| 2. Green River | Knott Farms | Daviess | Pioneer 25R78 | 107.75 | I |
| 3. Mammoth Cave | No Entry | | | | |
| 4. Rest of State | Bivens Farms | LaRue | Pioneer 25R78 | 109.21 | П |

III. Summary of Cultural Practices

| CATEGORY | NUMBER OF ENTRIES* | | CATEGORY | NUMBER OF ENTRIES* | |
|---------------------------------------|-----------------------|--------------|----------------------------|---------------------------------------|--------------|
| 1. Date Planted | | | 2. Test Weight (lbs/bu) | | |
| Oct. 1-9 | 1 | | 51.0-53.5 | 1 | (1) a |
| Oct. 10-20 | 11 | (4) b | 55.0-58.0 | 10 | (4) b |
| Oct. 21-30 | 3 | (3) | 58.5-60.5 | 2 | (1) |
| Nov. 1-15 | 2 | (1) a | 60.5-62.0 | 1 | |
| | | | 62.1-64.0 | 1 | (1) |
| 3. Row Width (inches) | | | 4. Seed Rate (lbs/ac) | | |
| 7 | 4 | (2) | 90-114 | 1 | |
| 7.5 | 10 | (5) ab | 115-125 | 1 | |
| 8 | 1 | (1) | 126-135 | 2 | (2) a |
| Broadcast | 2 | | 136-145 | 1 | (1) |
| | 2 | | 146-155 | 5 | (1) b |
| | | | 156+ | 6 | (4) |
| | | | 34 seeds/ft ² | 1 | |
| 5. Tillage Used | | | 6. Insecticides Used | | |
| No-Tillage | 7 | (5) a | Cruiser fb Mustang | 1 | |
| Disc x1, 2, or 3 | 8 | (3) b | DiSyston | 1 | |
| DISC X1, 2, 01 3 | 0 | (3) 6 | Di-Syston fb Mustang | <u>'</u> 1 | (1) |
| | | | Mustang | 3 | (1) |
| | | | Mustang (fall & spring) | 2 | (2) a |
| | | | Warrior T | 3 | (1) |
| | | | Warrior (fall & spring) | 3 | (2) b |
| 7. Herbicides Used | | | 9 Eumainides Head | | |
| Glyphosate | 1 | (1) | 8. Fungicides Used Folicur | 14 | (4) b |
| Harmony Extra XP | 20 | (8) ab | Headline | 4 | (4) 0 |
| 2,4-D | 4 | (3) | Quilt | 1 | (1) |
| Sencor | 2 | (3) | Stratego | 1 | (1) |
| Buctril | 1 | (1) | Stratego Tilt | | (1) |
| 9. Fertilizer | | | 10. Fertilizer | | |
| P ₂ O ₅ (lbs/A) | | | K₂O (lbs/A) | | |
| | | | | | (4) 1 |
| 0 20-59 | <u>3</u> 1 | | 0 20-30 | <u>3</u> | (1) b (1) |
| 60-70 | 4 | (4) a | 20-30 40-59 | 1 1 | (1) |
| 75-99 | 6 | (4) a (1) | 60-70 | ı | |
| 100-120 | 1 | (1) b | 75-99 | 5 | (3) a |
| .00 .20 | • | (.,~ | 100-120 | 4 | (5) u |
| | | | | · · · · · · · · · · · · · · · · · · · | |

III. Summary of Cultural Practices (Cont'd)

| CATEGORY | NUMBER OF ENTRIES* | | CATEGORY | NUMBER OF ENTRIES* | |
|---|-----------------------|-------|-------------------------------------|-----------------------|-------|
| Nitrogen Applied N at Planting (Lbs/A) | | | Nitrogen Applied Total N (Lbs/A) | | |
| 0 | 2 | | 60-79 | 1 | (1) |
| 15-20 | 2 | (1) | 80-99 | 3 | (1) |
| 21-25 | 2 | (1) b | 100-110 | 2 | |
| 26-35 | 7 | (4) a | 111-120 | 1 | |
| 36-60 | 1 | | 121-130 | 6 | (4) a |
| Broiler Litter (2 tons/ac) | 1 | (1) | 131-140 | 4 | (1) |
| Split N in Spring | | + + | Split N in Spring | | |
| 1 st Split Date | | | 1 st Split N (Lbs/A) | | |
| Feb. 1-10 | 7 | (3) b | 30-39 | 1 | (1) |
| Feb. 13-28 | 6 | (3) | 40-50 | 12 | (6) b |
| Mar. 1-15 | 2 | (1) a | 51-90 | 3 | (1) a |
| 2 nd Split Date | | | 2 nd Split N (Lbs/A) | | |
| Mar. 10-20 | 10 | (4) b | 20-29 | | (1) |
| Mar. 21-30 | 4 | (3) | 30-49 | 3 | (1) a |
| Apr. 1-25 | 2 | (1) a | 50-59 | 6 | (3) |
| | | | 60-90 | 5 | (3) b |
| Single N in Spring | | + + | Single N in Spring | | |
| Date Applied | | | Single N (Lbs/A) | | |
| Mar. | 1 | | 90-99 | | 1 |

^{*}Number of entries

Example 15 (3) a,b

15 = total number of entries
(3) = number of entries above 105 bu/acre
a = Top Yield, Division I, Conventional Tillage
b = Top Yield, Division II, No-Tillage

IV. Agent Awards

Top Yield: Rick Greenwell, Washington County, 119.71 bu/acre

Top Three Average Yield: Curt Judy, Todd County, 106.13 bu/acre Most Entries: Clint Hardy, Daviess County, 6 entries

V. Summary of Entries

| Grower, Farm Name | County | Brand | Variety | Yield (bu/A) | |
|---------------------------|------------|------------|------------|--------------|--|
| Division I, Tillage | | | | | |
| George Fox | Todd | Pioneer | 25R49 | 108.36 | |
| Knott Farms | Daviess | Pioneer | 25R78 | 107.75 | |
| Traughbe Bros./George Fox | Todd | Pioneer | 25R49 | 107.11 | |
| Greg Thomas | McLean | | Vargo | 104.76 | |
| Triple T Farms | Daviess | Pioneer | 26R58 | 101.67 | |
| Scott Kuegel | Daviess | Pioneer | 26R58 | 99.45 | |
| Knott Farms | Daviess | Pioneer | 25R78 | 99.44 | |
| Clements Bros. | Union | Pioneer | 25R54 | 98.44 | |
| Triple T Farms | Daviess | So. States | SS 8302 | 94.95 | |
| Division II, No-Tillage | | | | | |
| Pat Clements | Washington | | Cumberland | 119.71 | |
| Jeremy & Bruce Benson | Hopkins | Pioneer | 25R37 | 110.51 | |
| Bivens Farms | LaRue | Pioneer | 25R78 | 109.21 | |
| Williams Farms | Wayne | So. States | SS 8302 | 108.17 | |
| Burton Farms | Wayne | Pioneer | 25R47 | 105.58 | |
| P & P Farms | Todd | Pioneer | 25R37 | 102.93 | |
| Phillip McCoun | Shelby | Pioneer | 25R54 | 86.96 | |
| PPJ Thompson Farms | Daviess | Pioneer | 26R58 | 79.96 | |

Contributing Agribusiness

Appreciation is expressed to the following companies for their financial support which made it possible to provide proper recognition of the participants in this contest.

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Kentucky Small Grain Growers Association

Traveling Trophy

Pioneer Hi-Bred International, Inc. and DuPont Crop Protection

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