OBJECTIVE DESCRIPTION OF VARIETY
SORGHUM AND RELATED CROPS

<table>
<thead>
<tr>
<th>NAME OF APPLICANT (S)</th>
<th>TEMPORARY OR EXPERIMENTAL DESIGNATION</th>
<th>VARIETY NAME</th>
</tr>
</thead>
</table>

ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)

FOR OFFICIAL USE ONLY

PVPO NUMBER

NOTE: Observations should be made on an appropriate number of well-spaced plants (approximately 15 cm spacing).

1. GENERAL CATEGORIES

   ___ Kind: 1 = Sorghum  2 = Sorghum X Almum  3 = Sudangrass  4 = Johnsongrass  5 = Other _____________________________

   ___ Inbred Type: 1 = Male Sterile  2 = Maintainer  3 = Restorer

   ___ Male Sterile Cytoplasm: 1 = A-1  2 = A-2  3 = A-3  4 = A-4  5 = A-5  6 = Other _____________________________

   ___ Use Class: 1 = Grain  2 = Forage  3 = Silage  4 = Sugar  5 = Syrup  6 = Broomcorn  7 = Multipurpose (specify)____________________

2. MATURITY

   ___ ___ ___ Days From Planting To Mid-Anthesis

   ___ ___ Number Days Earlier Than 1 = TX3042  2 = Wheatland  3 = TX2737  4 = TX430  5 = Redian

   ___ ___ Number Days Later Than 6 = Other Public Line (Specify) ______________________________

3. PLANT

   ___ Coleptile: 1 = Green  2 = Red

   ___ Plant Pigment: 1 = Tan  2 = Red  3 = Purple  4 = Other (Specify) ______________________________

4. STALK

   ___ Diameter (Main Stalk): 1 = Slim  2 = Mid-Stout  3 = Stout
5. STALK HEIGHT

___ ___ ___ cm From Soil To Top Of Panicle

___ ___ cm Less Than ___ 1 = TX3042  2 = Wheatland  3 = TX2737  4 = TX430  5 = Redlan

___ ___ cm Greater Than ___ 6 = Other Public Line (Specify) ______________________________

___ No of Recessive Height Genes Plant Height Genotype (Mark only recessive) : ___ dw1 ___ dw2 ___ dw3 ___ dw4

___ Waxy Bloom 1 = Present  2 = Absent

___ Tillers: 1 = Few  2 = Moderate  3 = Many

___ Sweetness: 1 = Sweet  2 = Insipid

___ Juiciness: 1 = Dry (Pithy)  2 = Juice

___ Panicle Exsertion: 1 = Short  2 = Medium  3 = Long

___ Degree of Senescence: 1 = Senescent  2 = Nonsenescent  3 = Intermediate

6. LEAF (First leaf below flag leaf)

___ Width (Relative to Class): 1 = Narrow  2 = Moderate  3 = Wide

___ Color: 1 = Light Green  2 = Dark Green

___ Margin: 1 = Smooth  2 = Wavy

___ Attitude: 1 = Erect  2 = Horizontal  3 = Drooping

___ Ligule: 1 = Present  2 = Absent

___ Midrib Color: 1 = White  2 = Intermediate  3 = Cloudy  4 = Yellow  5 = Brown

7. PANICLE

___ ANther COLOR (At Flowering) 1 = White  2 = Light Yellow  3 = Dark Yellow  4 = Wine

___ ___ cm Panicle Length

___ ___ cm Less Than ___ 1 = TX3042  2 = Wheatland  3 = TX2737  4 = TX430  5 = Redlan

___ ___ cm Greater Than ___ 6 = Other Public Line (Specify) ______________________________

___ Density: 1 = Open  2 = Semi-Open  3 = Semi-Compact  4 = Compact

___ Shape: 1 = Round  2 = Oval  3 = Cylindrical  4 = Conical  5 = Obovate

___ Length of Central Rachis (% of Panicle Length): 1 = 100%  2 = 75%  3 = 50%  4 = 25%

___ Rachis Branches (At Grain Maturity) 1 = Erect  2 = Horizontal  3 = Drooping

___ Rachis Branch Averag 1 = Short  2 = Intermediate  3 = Long
7. PANICLE (Continued)

___ Panicle Type (Select Number from Diagram Below)

[Diagram of panicle types 1 to 8]

Glumes

___ Length: 1 = Short  2 = Intermediate  3 = Long
___ % of Grain Covered by Glume: 1 = 25%  2 = 50%  3 = 75%  4 = 100%  5 = Over 100%
___ Texture: 1 = Papery  2 = Intermediate  3 = Tough
___ Color (At Grain Maturity): 1 = Black  2 = Mahogany  3 = Red  4 = Sienna  5 = Dark Tan  6 = Light Tan
___ Hairiness: 1 = Smooth  2 = Intermediate  3 = Hairy
___ Venation: 1 = Present  2 = Absent
___ Transverse Wrinkle: 1 = Present  2 = Absent
___ Awns: 1 = Absent  2 = Short  3 = Intermediate  4 = Long

8. ROOTS

___ 1 = Fibrous  2 = Rhizomatous

9. GRAIN

___ Testa: 1 = Absent  2 = Present
___ Testa Color: 1 = Brown  2 = Purple
___ Mesocarp Thickness: 1 = Thin  2 = Intermediate  3 = Thick
___ Epicarp Color (Genetic): 1 = White  2 = Lemon Yellow  3 = Red
___ Spreader (Tannin in Pericarp): 1 = Absent  2 = Present
___ Intensifier: 1 = Absent  2 = Present
___ ___ Grain Color (Appearance): 1 = White Pearly  2 = White Chalky (Opaque)  3 = Yellow  4 = Lemon Yellow
___ ___ 5 = Light Red  6 = Dark Red  7 = Light Brown  8 = Reddish Brown  9 = Dark Brown
___ ___ 10 = Purple  11 = Other (Specify) ______________________________
9. GRAIN (Continued)

___ Endosperm Color:  
1 = White   2 = Yellow

___ Endosperm Type:  
1 = Starchy   2 = Waxy   3 = Sugary

___ Endosperm Texture:  
1 = Floury   2 = Intermediate   3 = Corneous

___ Seed Shape:  
1 = Round   2 = Oval   3 = Ovate   4 = Turtleback
  5 = Flat   6 = Wedge   7 = Other (Specify) ______________________________

___ No. of Seed per 100 G Genotype (if known):  
R,   Y,   I,   Z,   B1,   B2,   S,   Tp,   Wx,   Fl

Define) ________________________________________________________________

10. DISEASE RESISTANCE  (1 = Susceptible   2 = Intermediate   3 = Resistant)

Bacterial Stripe, Charcoal Rot, Maize Dwarf Mosaic Virus, Puccinia (Rust), Bacterial Streak, Bacterial Spot, Anthracnose, Head Smut, Sooty Stripe, Downy Mildew, Grain Mold, Fusarium Stalk Rot or Others.

<table>
<thead>
<tr>
<th>REACTION</th>
<th>DISEASE</th>
<th>CAUSAL AGENT</th>
<th>RACE OR PATHOTYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. INSECT RESISTANCE  (1 = Susceptible   2 = Intermediate   3 = Resistant)

Sorghum Midge, Chinch Bug, Greenbug or Others.

<table>
<thead>
<tr>
<th>REACTION</th>
<th>INSECT</th>
<th>BIOTYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. MOLECULAR TRAITS
13. OTHER DISTINGUISHING TRAITS