

## **General Information for Grain Sorghum**

**Grain Sorghum can be marketed on a per bushel or a 100 wt. (CWT) basis. A per bushel basis will be used for this contest. The Class will be Sorghum. There are no subclasses. Dockage will be given on the problem sheet and will not need to be judged. Broken kernels will be given on the problem sheet and will not need to be judged. Smutty sorghum will not be used but infested may be used. Stones will not be used. Test Weight, Moisture and odor will given on the problem sheet. There will be no general appearance determinations. There may be a handpicked foreign material separation, there may be a separation of FM that has been removed by a No.6 riddle. (refer to Broken Kernels and Foreign Material in the sorghum handbook section 9.18) Germ damaged sorghum will not be used in this contest. Damaged / heat damaged corn or soybeans separated by the no. 6 riddle will count as both FM AND Damage/ Heat damage. (refer to the damage / heat damage section 9.21 in the sorghum handbook) Heat Damaged corn or soybeans separated by a No. 6 riddle IS added to total damage. There will not be heat damaged sorghum, but there may be heat damaged corn or soybeans.**

**The discount schedule will be based on an actual elevator discount schedule.**

## 2018 sorghum grading explanation

Natural Odor does not affect the grade and has no discount

Test weight of 54.5 lb/bu will make grade U.S. No. 3 and has a discount of \$0.02

Moisture of 14.1% does not affect the grade and has a discount of \$0.04

Dockage of 0.5% does not affect the grade and is recorded at the end of the grade line. It has a discount of \$0.02

Broken Kernels is added to foreign material for broken kernel and foreign material (total)

Compartment A:

Handpicked non-grain sorghum is foreign material .66 gram divided by 30 grams = 2.2% This will make the grade U.S. No. 3 and has a discount of \$0.10 This is added to Broken Kernels of 4.1% for a BKFM (total) of 6.3%. This will make the grade U.S. No. 3 and has a discount of \$0.10.

Compartment B: This is Insect damaged kernels, part of damaged kernels total. .32 grams divided by 15 grams = 2.1% This will make the grade U.S. No.2 and has a discount of \$0.05

Compartment C: These are weevils and make the special grade Infested. It is recorded on the grade line between the words Sorghum and Dockage. There is a \$0.10 discount

The final grade is U.S. No. 3 Grain Sorghum, Infested, Dockage 0.5%

2018 National Agronomy CDE  
Sorghum Grading

Base Price: \$4.20 per bushel

Odor: Natural

Test Weight: 54.5 lb /bu

Moisture: 14.1%

Dockage: 0.5%

Broken Kernels: 4.1%

Compartment A: .66 grams handpicked from cut 5 A. 30 Gram base

Compartment B: .32 grams picked from cut 6 A 15 gram base

Compartment C: Consider these to be alive

## U.S. No. 2 Sorghum Discount Schedule

Adapted from MB Grain in Allerton IA

| Moisture                 | Discount \$ /bushel | Test Weight                    | Discount \$/bushel |
|--------------------------|---------------------|--------------------------------|--------------------|
| 14.0 or less             | \$0.0/bu            | 55.0 or higher                 | \$0.0/bu           |
| 14.1 – 14.5              | \$0.04/bu           | 54.9 – 54.5                    | \$0.02/bu          |
| 14.6 – 15.0              | \$0.08/bu           | 54.4 – 54.0                    | \$0.04/bu          |
| 15.1 – 15.5              | \$0.12/bu           | 53.9 – 53.5                    | \$0.07/bu          |
| 15.6 – 16.0              | \$0.16/bu           | 53.4 – 53.0                    | \$0.10/bu          |
| 16.1 + subject to reject |                     | 52.9 or less subject to reject |                    |

| FM                         | Discount  | BKFM total                 | Discount  |
|----------------------------|-----------|----------------------------|-----------|
| 0.0 – 1.0                  | \$0.0/bu  | 0.0 – 3.0                  | \$0.0/bu  |
| 1.1 – 2.0                  | \$0.05/bu | 3.1 – 6.0                  | \$0.05/bu |
| 2.1 – 3.0                  | \$0.10/bu | 6.1 – 8.0                  | \$0.10/bu |
| 3.1 + subject to rejection |           | 8.1 + subject to rejection |           |

| Heat Damage             | Discount | Total damage             | Discount  |
|-------------------------|----------|--------------------------|-----------|
| 0.0 – 0.2               | \$0.0/bu | 0.0 – 2.0                | \$0.0     |
| 0.3 – 0.5               | \$0.10   | 2.1 – 5.0                | \$0.05/bu |
| 0.6 – 1.0               | \$0.20   | 5.1 – 10.0               | \$0.10/bu |
| 1.1 + subject to reject |          | 10.1 + subject to reject |           |

| Dockage                 | Discount   |
|-------------------------|------------|
| 0.0-1.0                 | \$0.02/bu  |
| 1.1 – 3.0               | \$0.05/bu  |
| 3.1 – 5.0               | \$0.10/ bu |
| 5.1 + subject to reject |            |

Sour, Musty, COFO accepted on a case by case basis

Up to 10 cockleburs in 1000 grams will be accepted with \$0.10 discount

Infested sorghum will be accepted with a \$0.10 discount

**TABLE NO. 1 - GRADES AND GRADE REQUIREMENTS -  
SORGHUM**

| Grade                    | Minimum Limits<br>of -             | Maximum Limits of - |                    |                                                  |                    |
|--------------------------|------------------------------------|---------------------|--------------------|--------------------------------------------------|--------------------|
|                          | Test weight per<br>bushel (pounds) | Damaged Kernels     |                    | Broken Kernels and foreign material              |                    |
|                          |                                    | Heat<br>(percent)   | Total<br>(percent) | Foreign material<br>(part of total)<br>(percent) | Total<br>(percent) |
| U.S. No. 1               | 57.0                               | 0.2                 | 2.0                | 1.0                                              | 3.0                |
| U.S. No. 2               | 55.0                               | 0.5                 | 5.0                | 2.0                                              | 6.0                |
| U.S. No. 3 <sup>1/</sup> | 53.0                               | 1.0                 | 10.0               | 3.0                                              | 8.0                |
| U.S. No. 4               | 51.0                               | 3.0                 | 15.0               | 4.0                                              | 10.0               |

U.S. Sample Grade:

U.S. Sample Grade is sorghum that:

- Does not meet the requirements for grades U.S. No. 1, 2, 3, or 4; or
- Contains 8 or more stones which have an aggregate weight in excess of 0.2 percent of the sample weight, 2 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria* spp.), 2 or more castor beans (*Ricinus communis* L.), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 8 or more cocklebur (*Xanthium* spp.) or similar seeds singly or in combination, 10 or more rodent pellets, bird droppings, or an equivalent quantity of other animal filth in 1,000 grams of sorghum, 11 or more pieces of other material from any combination of animal filth, castor beans, crotalaria seeds, glass, stones, unknown foreign substances, and cocklebur, or
- Has a musty, sour, or commercially objectionable foreign odor (except smut odor); or
- Is badly weathered, heating or otherwise of distinctly low quality.

<sup>1/</sup> Sorghum which is distinctly discolored shall not grade any higher than U.S. No. 3.

### 9.3 GRADE DESIGNATIONS

After completing the analysis, compare the results with the limits for each grade factor specified in table 1. Use the following guidelines when assigning grades.

- The letters "U.S.",
- The abbreviation "No." and the number of the grade or the words "Sample Grade",
- The words "or better" when applicable,
- The class.
- The applicable special grade in alphabetical order, and
- The word "Dockage" and the percentage thereof.

CHART 2 - DIVIDING THE WORK SAMPLE

