

Grain Grading Problems & Worksheet

2009 Purdue Invitational Contest

<p><u>Sample #1</u></p> <p>Yellow dent corn Moisture 13.2% Material passing through 12/64" sieve 2.8% Test Weight (lb/bu) 55.0 Heat damage 0.9% Heat damaged soybean 0.4% Pieces of cob found on top of sieve 0.9% Natural odor</p>	<p>Test wt. _____ Heat Damage _____</p> <p>Moisture _____ BCFM/FM _____</p> <p>DKT _____ Split/Defect _____</p> <p>Odor _____ Shru & Brkn _____</p> <p style="text-align: center;">_____</p>
<p><u>Sample #2</u></p> <p>White dent corn Moisture 15.0% Test Weight (lb/bu) 57.0% Foreign Material 2.5% Damaged by heat corn 3.04% 7 cockleburs Broken pieces of corn too large to pass through 12/64" sieve holes 3.09% 3 castor beans Natural odor</p>	<p>Test wt. _____ Heat Damage _____</p> <p>Moisture _____ BCFM/FM _____</p> <p>DKT _____ Split/Defect _____</p> <p>Odor _____ Shru & Brkn _____</p> <p style="text-align: center;">_____</p>
<p><u>Sample #3</u></p> <p>Yellow dent corn White dent corn 13.00% Moisture 14.27% Test Weight (lb/bu) 53.47 Giant ragweed seed 0.8% Germinated corn seed 1.0% 1 weevil 5 dead granary weevils Corn with insect pin holes 3.96% Natural odor</p>	<p>Test wt. _____ Heat Damage _____</p> <p>Moisture _____ BCFM/FM _____</p> <p>DKT _____ Split/Defect _____</p> <p>Odor _____ Shru & Brkn _____</p> <p style="text-align: center;">_____</p>
<p><u>Sample #4</u></p> <p>White dent corn 4.00% Yellow dent corn 96.00% Moisture 12.97% Test Weight (lb/bu) 55.4 Material through 12/64" sieve 1.03% White kernels with purple colored plumule 0.81% Popcorn with insect pinholes 1.50% Insect damaged corn 2.90% Three live insects Garlicky odor</p>	<p>Test wt. _____ Heat Damage _____</p> <p>Moisture _____ BCFM/FM _____</p> <p>DKT _____ Split/Defect _____</p> <p>Odor _____ Shru & Brkn _____</p> <p style="text-align: center;">_____</p> <p style="text-align: right;">Over →</p>

Sample #5		Test wt. _____	Heat Damage _____
Yellow soybean		Moisture _____	BCFM/FM _____
Bi-color soybean	2.43%	DKT _____	Split/Defect _____
Material through 8/64" sieve	3.22%	Odor _____	Shru & Brkn _____
Yellow dent corn picked off from top of sieve	1.50%		
Moisture	13.70%		
Test Weight (lb/bu)	56.00		
Splits	21.47%		
Splits-heat damaged	4.8%		
Sprout Damaged Soybean	0.45%		
Musty Odor			
Sample #6		Test wt. _____	Heat Damage _____
Yellow soybean		Moisture _____	BCFM/FM _____
Stink bug damaged soybeans	4.5%	DKT _____	Split/Defect _____
Corn found on top of 8/64" sieve	0.7%	Odor _____	Shru & Brkn _____
Stalk material found on top of the 8/64" sieve	1.4%		
Test weight (lb/bu)	56.04		
Moisture	13.20%		
Pieces of soybean (<3/4 seed)	21.00%		
2 live insects			
Natural odor			
Sample #7		Test wt. _____	Heat Damage _____
Soft red winter wheat		Moisture _____	BCFM/FM _____
Dockage (grams per 1000 grams)	43.91	DKT _____	Split/Defect _____
Moisture	13.24%	Odor _____	Shru & Brkn _____
Test weight (lb/bu)	58.0		
Sprouted rye	1.23%		
Shrunken & broken kernels	4.5%		
Ground damaged soybean	1.2%		
Germ damaged wheat	0.47%		
Heat damaged soybeans	2.95%		
Natural odor			
Sample #8		Test wt. _____	Heat Damage _____
Soft red winter wheat		Moisture _____	BCFM/FM _____
Durum wheat	1.5%	DKT _____	Split/Defect _____
Dockage (grams per 1000 grams)	60.00	Odor _____	Shru & Brkn _____
Moisture	13.00%		
Test weight (lb/bu)	60.00		
Hard red winter wheat	3.8%		
Shrunken & broken kernels	2.32%		
Insect damaged wheat	2.1%		
Garlicky odor			