

2018 Wheat Update: May 30, 2018

As we turn to the homestretch for this wheat crop, there are a couple of items to review to ensure high yields of food-grade quality wheat.

As of May 29, wheat planted Oct. 15 in Central VA reached 2637 GDU which a day behind the 14 year average. As a reminder, wheat is considered mature at 2800 GDU; averaging 30 GDU/day (warm forecast), we are about seven days away from physiological maturity (30% kernel moisture).

Wheat Quality

Two major limiting factors affecting profitable soft-red winter wheat production for food-grade wheat in the eastern US are low test weights and low falling number scores. Both of these factors are impacted by harvest.

Low test weight indicates a physical change in kernels. Test weight is a measure of how much grain weight can be placed in a given volume. At maturity (about 30% kernel moisture), prior to any rain, wheat kernels will pack well into a bushel. When it rains, kernels swell and upon drying, the kernels do not shrink back to their original volume, shape, and smoothness.

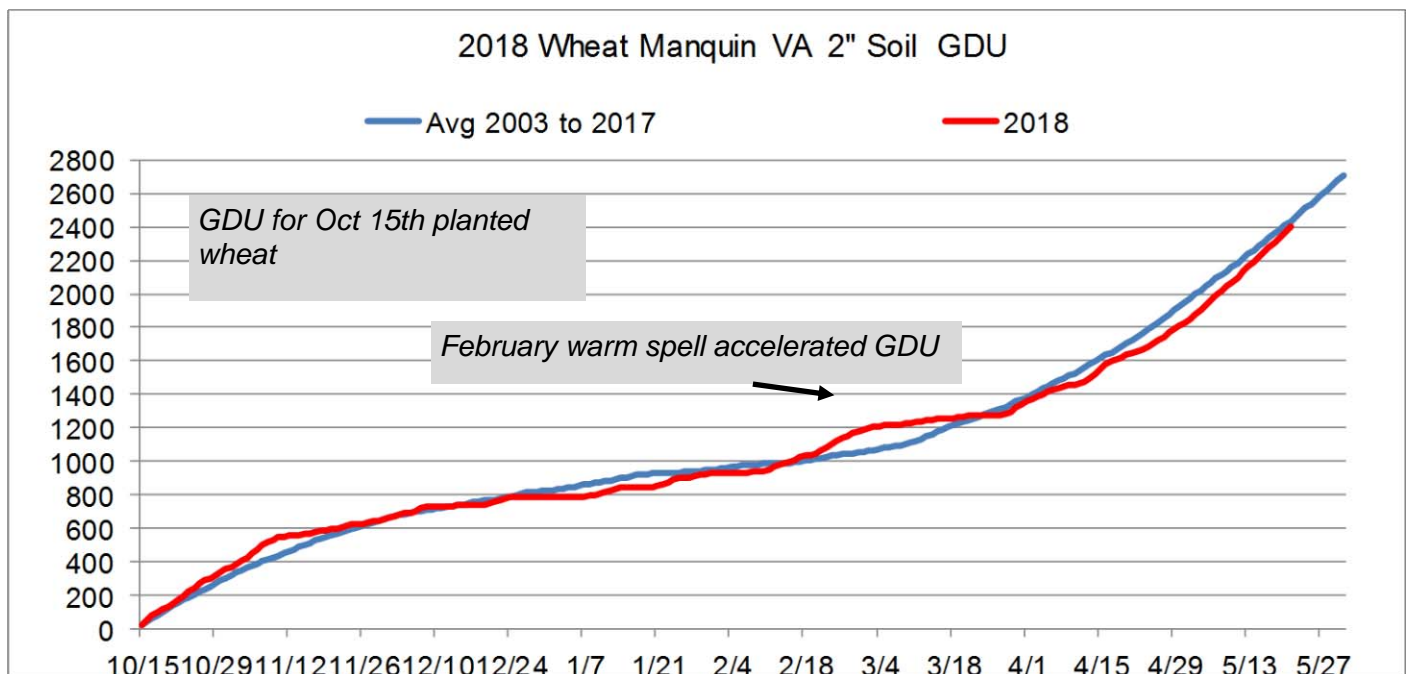
This results in more space between kernels, and they will not pack into a bushel as well as they did before the rain. The result is a lower test weight.

Low falling numbers indicate a chemical change in kernels. The Falling Number test is used to measure alpha-amylase activity due to sprout damage in wheat, causing poor bread, cake and noodle quality.

Harvesting wheat as soon as possible is critical to avoid dockage from either low falling numbers or low test weight. Once wheat is mature, rainfall or even heavy dews will begin to lower test weight and falling numbers. Hopefully, most of your fields received one or two Molyron™ applications and a late fungicide to extend protection.

Grading Wheat Samples

The VA Dept. of Agriculture & Consumer Services (VDACS) offers wheat grading services for farmers at their Chesapeake Lab. Farmers should consider grading wheat when selling into food-grade (milling quality) wheat markets or when they suspect that scab/vomitoxin may be impacting wheat quality.





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Bringing Home the Wheat Crop

There are three important tests that are available at the VDACS lab:

Full Grade - provides the USDA grade (ex: U.S. No.1, No. 2, etc.). This test also provides test weight, kernel moisture, damaged kernels, defects, odor, shrunken and broken kernels and protein results.

You can request "wet gluten protein" in the "remarks" section on FGIS Form-907. It is part of the "full grade" grading process. *If not requested, it will not be tested.*

Vomitoxin – the toxin produced by scab fungal infections. While the presence of scab does not automatically mean that vomitoxin is present, noticeable levels of scabby kernels in the harvested grain are considered suspect. **NOTE:** crop insurance claims for scab by wheat, either docked or rejected by commercial elevators, **MUST** have independent test results provided by the grower to be acknowledged as a claim by RMA.

Falling Numbers (FN) - the industry standard test for measuring pre-harvest sprouting of wheat. Wheat with FN values below 250 is generally not suited for milling

Testing Costs

Full grade = \$10.55 per sample
Vomitoxin = \$34.30 per sample
Falling Numbers = \$21.88 per sample

Submitting Samples:

For the VDACS office to be able to complete any or all of these tests:

1. Send 3 lbs. for each sample: zip lock bag is ok
2. Complete FGIS Form-907 for each sample: one sample per page
3. List the sample ID in Box 11
4. Mark testing requests in the "Remarks" box
5. Make checks payable to VDACS and enclose with the samples: we recommend a cardboard box and shipping via UPS

The VA Dept. of Agriculture & Consumer Services
UPS mailing address is:

VDACS
2503 South Military Highway, Suite C
Chesapeake, VA 23320
Office: 757-494-2455

In North Carolina, for testing for vomitoxin only, the NCDA requests two-pound samples and a completed test form be shipped overnight by FedEx or UPS to:

Feed & Forage Testing Facility
c/o NCDA&CS
4000 Reedy Creek Road
Raleigh, NC 27607

Forms can be downloaded at

<http://www.ncagr.gov/fooddrug/forms/forageanalysis.pdf>

U.S. DEPARTMENT OF AGRICULTURE
 GRAIN INSPECTION, PACKERS AND
 STOCKYARDS ADMINISTRATION
 FEDERAL GRAIN INSPECTION SERVICE
 APPLICATION FOR INSPECTION AND
 WEIGHING SERVICES

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0580-0013. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Pursuant to Section 7 and 7a of the United States Grain Standards Act as amended (7 U.S.C. 79 and 79a) and the regulations thereunder (7 CFR 800 et. seq.) and/or Section 203(h) of the Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1622) and the regulations and standards thereunder (7 CFR Parts 57 and 868), we apply for services described below.

1. Type of Services (check all that apply) <input checked="" type="checkbox"/> Original Inspection <input type="checkbox"/> Reinspection <input type="checkbox"/> Appeal Inspection <input type="checkbox"/> Official Weighing <input type="checkbox"/> Review of Weighing <input type="checkbox"/> Board Appeal Inspection <input type="checkbox"/> Supervision of Weighing <input type="checkbox"/> Retest			2. Where are the services to be performed (check one) <input checked="" type="checkbox"/> United States <input type="checkbox"/> Canada		
3. Kind of Official Inspection Service Requested (check all that apply) <input type="checkbox"/> Official Sample Lot <input checked="" type="checkbox"/> Submitted Sample <input type="checkbox"/> Checkweigh/Checkload/Checkcount <input type="checkbox"/> Sampling <input type="checkbox"/> Official Weighing <input type="checkbox"/> Supervision of Weighing <input type="checkbox"/> Stowage Examination <input type="checkbox"/> Grade and Factor <input type="checkbox"/> Official Commercial <input type="checkbox"/> Condition <input type="checkbox"/> Factors Only <input type="checkbox"/> Other Criteria (list in remarks)					
4. Type of Grain/Commodity		5. Location of Grain/Commodity		6. Contract Number (if applicable)	
7. Carrier or Other Identification		8. Quantity (specify in pounds, bushels, etc.)		9. Contract Grade (Factor or Specifications)	
10. Number and Kind of Containers		11. Container Markings SAMPLE ID		12. Appeal Request <input type="checkbox"/> File Sample <input type="checkbox"/> New Sample	
13. Name, Address and Telephone Number of Applicant (Firm Name)			14. Name and Address of Interested Party (agent, consignee)		
13a. Applicant GIPSA Account Number:					

15. Remarks: PLEASE LIST TESTS TO RUN HERE

In submitting this application, we expressly agree that the fees and charges for the inspection and weighing services shall be assessable to and payable by us in accordance with the fees and charges described in the regulations (7 CFR 800 et. seq.) under the United States Grain Standards Act and/or described in the regulations (7 CFR 868) under the Agricultural Marketing Act of 1946. I declare that the foregoing statements are true to the best of my knowledge, information and belief.

16. Date (mm/dd/yy)	17. Name of Firm	18. Signature of Person Making Application
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Warning: Attempts to influence any official personnel with respect to the performance of his/her duties under the U.S. Grain Standards Act may upon conviction thereof, be subject to imprisonment for not more than 5 years and/or a fine of not more than \$20,000. 18 U.S.C. 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both, for false or fraudulent statements made to an agency of the United States. The offering of any gratuity, as described in 7 CFR 800.187, will be deemed an attempt to influence official inspection personnel.

For Use by FGIS			
19. Application Received By	20. Date (mm/dd/yy)	21. Field Office	22. Fees
23. Certificate No. or Nos.		24. Remarks	

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