

Sample Submission Protocol for DON Testing at Virginia Tech

Contact: Niki McMaster at niki@vt.edu

Sample Size and Grinding

Grind a representative grain sample, usually 10-100g, at your facility. This can be achieved in a variety of ways from the household coffee grinders to a lab mill (for example a Perten 3310). The result should be a homogenous sample with a particle size sufficiently fine to resemble whole wheat flour. Refer to “Sampling Grain for Deoxynivalenol (DON) Analysis: A Researcher’s Guide” found on the USWBSI website under research tools.

Sample sizes vary but send a minimum of 10 grams when possible. Contact the lab prior to submission for small scale samples such as individual wheat heads from growth chamber experiments. Samples with a total weight of less than 0.5 grams do not have to be ground.

Packaging and Labeling

Place samples in coin envelopes of appropriate size (#1, #3 or #5.5) and securely label them with sample numbers that correspond to the submitted datasheet. You should secure each envelope with paper clips, staples or rubber bands to minimize sample spillage. When packing the shipping container, minimize any free space to further reduce damage and sample spillage.

Datasheet

An Excel spreadsheet includes sample numbers, grain class (e.g., barley, hard red spring wheat, hard winter wheat, soft winter wheat, durum, etc.), and PI / lab contact information. Email the datasheet to Niki McMaster when submitting your samples and enclose a printed copy with your shipment. Specify requests for 3ADON, 15ADON or NIV, in addition to DON data, on the spreadsheet or by email.

Shipping Address

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