VIRGINIA AGRICULTURAL EXPERIMENT STATION
SOUTHERN PIEDMONT AGRICULTURAL RESEARCH AND EXTENSION CENTER
VIRGINIA TECH.

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Help needed: winter wheat and grass sampling for mapping barley yellow dwarf (BYDV) spread in Virginia

Hello,

I am Shirin Parizad, a Ph.D. student in Entomology at Virginia Tech Southern Piedmont AREC, working in Dr. Arash Rashed's lab. My research focuses on BYDV movement between winter wheat and grazing lands (as reservoirs for the virus). More information on BYDV in Virginia is available at https://blogs.ext.vt.edu/ag-pest-advisory/barley-yellow-dwarf-virus-bydv-status-in-virginia-wheat/.

I need winter wheat and dominant grass samples from fields across Virginia to test for BYDV. I am especially interested in plants with yellowish or reddish leaves, potential signs of BYDV infection (Fig. 1A).

Test results will be shared with producers free of charge.

Sampling Plan:

- **Locations:** Winter wheat fields, especially near forage grasses or crops like soybean and tobacco.
- **Method:** Collect samples from a one-square-foot area every 50 feet, covering up to 200 feet. Samples will be taken along two rows, 100 feet apart, starting 10 feet from the field edge (or grazing land). A total of 20 samples per field (Fig. 1B).
- **Sample Collection Details and Handling Guidelines:** 1. Geographic coordinates; 2. Distance of the wheat field to grazing land; 3. Ship samples with ice. If overnight shipping is not possible, send the entire plant with roots covered in a small amount of soil to maintain freshness.

Your help would be invaluable to this research. If you are interested or have questions, please reach out.

Shipping Address:
Dr. Arash Rashed/ Shirin Parizad
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2375 Darvills Rd, Blackstone, VA 23824

If you have any questions or need further assistance, please contact me at shparizad@vt.edu.

Best regards,
Shirin Parizad
Ph.D. Student, Entomology
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(A) (B)

Fig 1. A) Barley yellow dwarf virus (BYDV) symptoms on winter wheat. **B)** Schematic sampling pattern layered on one of our sampling sites, with a would-be field on the left and grazing land on the right.