

Mycotoxin Analysis

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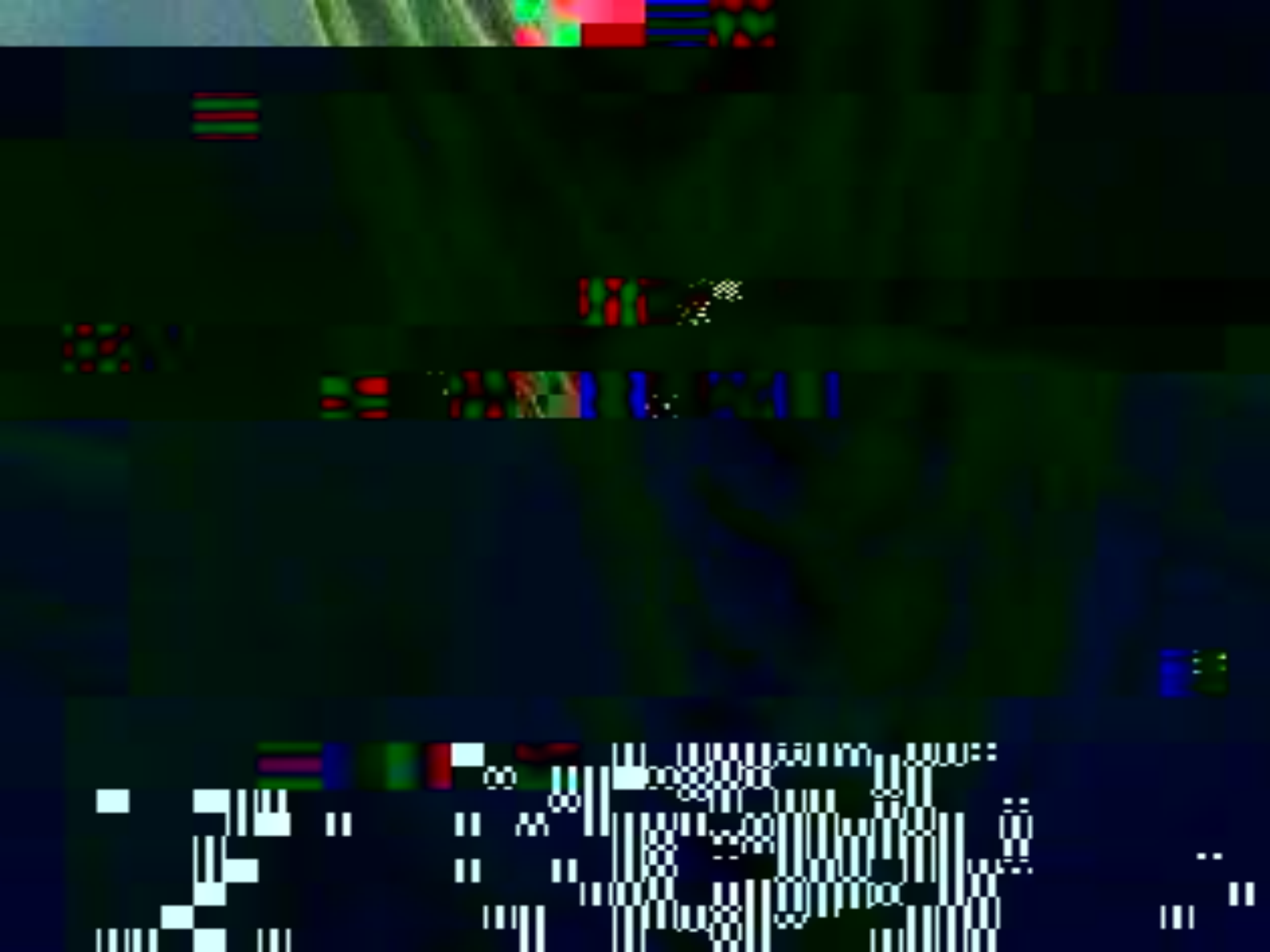


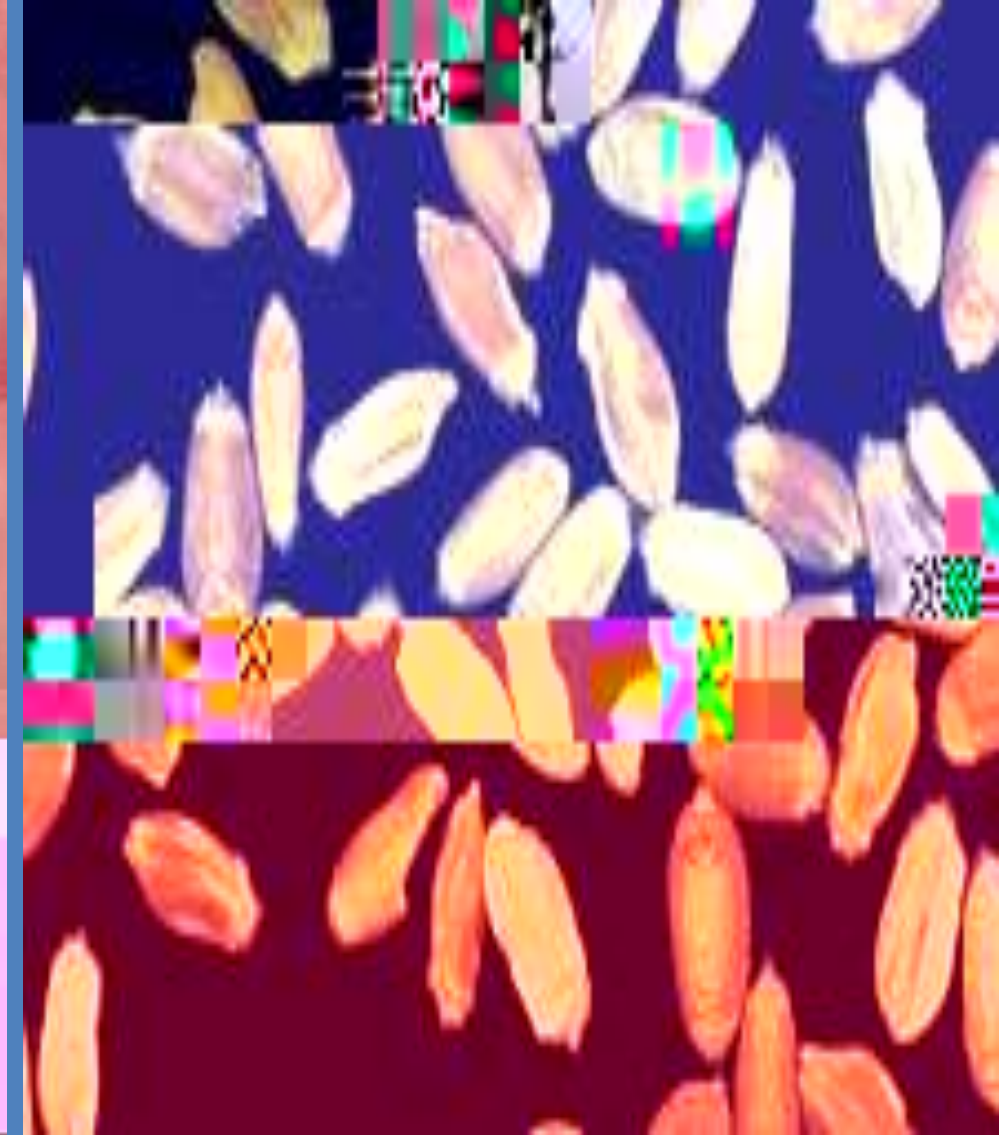
FUSARIUM HEAD BLIGHT OR SCAB

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Warm, humid conditions at flowering





White shivelled

Mold Growth in Grains:

- Change color and smell
- Make grains undesirable to livestock/humans
- Decrease fat, protein, and vitamin content, leading to nutritional deficiencies in livestock
- Mold growth can also lead to **mycotoxin** contamination.

MYCOTOXINS

- Toxins or chemicals produced by certain groups of fungi
- Not all fungi produced toxins
- Toxins are produced under a certain set of conditions
- **+** mean the toxin has been produced.
- **-** mycotoxins are present

ARE ALL TOXINS HARMFUL?

- Aflatoxin-most harmful toxin
- Penicillin-harmful to fungi/bacteria
- Harmful ones include:
aflatoxin

Deoxynivalenol (DON) or Vomitoxin

- Toxin produced by
- Wheat, corn, barley and ensilages
- Vomiting, feed refusal, gastroenteritis, diarrhea, immuno-suppression and blood disorders
- DON

DON testing

- Take representative sample-1 quart ziplock bag as harvesting
- Send check made out to UVM for \$20.00 from July 1-December 1 (higher prices at other times)
- Sample must be clean with no rocks
- Quick turn around

Mycotoxin Veratox 2/3

.5 to 5 ppm



- Fall results-
- variable depending on variety and location
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Plant Diagnostic Clinic

- Resource for growers for disease weed and insect identification
- Send samples to Ann Hazelrigg, Plant Diagnostic Clinic, Hills Building or Jeffords Hall,
- UVM, Burlington, VT 05405.
- Ann.hazelrigg@uvm.edu
- <http://www.uvm.edu/pss/pd/pdc/>
- 656-0493

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- that put 1 ppm into perspective.
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