

VERSION: 1.0 **DATE:** 12/2012

PATHOGEN: Peronospora farinosa f.sp. spinaciae

HOST: spinach (Spinacia oleracea)

COMMON NAME: downy mildew

METHOD: Lcb 3.2 CDFA Wash Test

METHOD CLASS: TEMPORARY STANDARD (B)

SAMPLE: 10,000 seeds

PROCEDURE:

1. Divide sample of 10,000 seeds into approximately 3 subsamples.

- 2. Add 100ml of water and Tween 20 to seeds.
- 3. Shake seed for 2 hours.
- 4. Use a hemocytometer to find and estimate spores per seed. Centrifuge and sieves can be used to separate out spores.

REFERENCES:

CDFA Plant Disease Diagnostic Center, 3294 Meadowview Rd., Sacramento, CA 95832

IMAGES:

http://mtvernon.wsu.edu/path_team/DiseaseGallery/spinach-downy-mildew-4.htm



Sporangiophore and sporangia of Peronospora farinosa f. sp. spinaciae. **Photo Source:** Lindsey du Toit