Garlic Bloat Nematode (GBN) Testing Procedure

Required for Garlic Vendors at Minnesota Garlic Festival Garlic Vendors in the MN Premium Garlic Directory

All garlic growers who wish to test their garlic for GBN with the Plant Disease Clinic may also use this testing procedure.

Testing for Garlic Bloat Nematode will be required for all vendors selling garlic at the Minnesota Garlic Festival, and for growers to be listed in the Upper Midwest Premium Garlic Directory. All garlic vendors will be required to provide proof of testing in the form of a letter from the U of M Plant Disease Clinic, and will only be allowed to sell garlic from fields that have tested negative for the nematode.

The goal of this policy is twofold:

- 1) Help to stop the spread of Garlic Bloat Nematode in Minnesota;
- 2) Enable the Garlic Festival and the MN Premium Garlic to be able to claim that all garlic sold at the MN Garlic Festival and through the Upper Midwest Premium Garlic Directory is from fields that have been tested for the nematode.

PROCEDURE

1) Plant Collection:

Collect living plants that exhibit varying stages of decline.

For Garlic Festival Vendors, collect these plants between June 10th and July 4th.

For the MN Premium Garlic Directory, collect these plants between June 10th and harvest. (For the Directory, plants may be submitted after harvest – contact Jerry Ford, <u>jerry@sfa-mn.org</u>, for details.)

It is important that you choose plants that are the least healthy in appearance. If you can't identify less healthy plants, submit healthy ones.

The same sample can be used to apply for both the Garlic Festival and the Directory.

- 2) If you have garlic planted in more than one field or plot, submit a sample from each field/plot. For this procedure, separate fields/plots are those which have more than 100 feet of something other than garlic between them.
- 3) Each sample should consist of 4 6 bulbs. Cut and remove the stalks approximately 3" above the top of the bulb. The bulbs can be of different varieties from the same field. If submitting samples from more than one field or plot, be sure to tag each sample group indicating which field/plot they came from.

Samples from separate fields or plots need to be in *separate plastic bags* so that they can be processed separately. This also applies if you want to distinguish between samples from different parts of the same field.

You do not need to label the plants individually for variety – they will all be tested as one batch. If you want to test varieties separately, you will need to treat that as separate samples.

If you have questions on this, contact Jerry Ford, 763-244-6659, jerry@sfa-mn.org

Each sample requires a \$50 fee.

- 4) Do NOT submit dead plants. If you do not have obviously infected plants, send a sample of weak or stunted plants.
- 5) Put the plants/bulbs, free of soil, in a plastic bag(s). Growers from states other than Minnesota must double bag sample(s). If you are sending more than one sample in the sample package, the plants must be in separate plastic bags to avoid cross-contamination.
- 6) Keep samples cool.
- 7) Download and print the Garlic Sample Submission Form from the Garlic Festival Website: https://drive.google.com/file/d/18621IHYfA7pIS03kBwigR38jG-LIS8eH/view
- 8) Complete the submission form, which will also serve as the packing list for your shipment.
- 9) Mail or hand deliver samples shortly after collection. Mail samples early in the week to avoid weekend layover. Ship the form, sample(s), and a check made out to "University of Minnesota" for \$50 per sample, to:

Plant Disease Clinic U of MN 495 Borlaug Hall 1991 Upper Buford Circle St. Paul, MN 55108

Hand deliveries are accepted Tuesday – Friday* to 1519 Gortner Ave. Room 105 Stakman Hall. * Except holidays June 19th and July 4th.

10) Upon completion of testing, the clinic will send you a letter stating the condition of your sample(s). The clinic will send an electronic copy of the letter to the Jerry Ford if your sample tested negative, but will *not* send him a copy if the sample is positive.

QUESTIONS?

For questions about the actual testing, please call the clinic at 612-625-1275. For questions about this procedure, please email Jerry Ford at jerry@sfa-mn.org

ADDITIONAL TESTING

If you wish to have the samples tested for other pathogens, this can be done at an additional charge. Garlic Bloat Nematode is the priority, and other conditions will be tested at a later time. Please contact the clinic to arrange for these services.