How to Submit Garlic Plants for Diagnosis

Sending whole plants and soil allows for the following assessments:

Foliar, stem and bulb analysis:
These can be checked for plant pathogens, insects and mites.

Root analysis:
Roots can be checked for root rot pathogens and insect damage.

Soil analysis:
Soil can be tested for pH and EC.

If you are not sure of how to take a sample, call the laboratory for advice. Taking a digital image of the field and emailing it to laboratory staff can help staff direct you to where in the field a representative sample should be taken.

1. If possible, send the samples prior to spray applications.
2. Ensure the sample is representative of the problem. Send at least 6 plants.
3. Send plants with symptoms at various stages of the disorder, but not completely dead. Dead plants are often colonized by contaminants that mask the original problem.
4. Send in whole plants and the soil from the root zone.

The laboratory does not do nematode, nutrient or chemical residue analysis on soil or plant tissue.
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5. Samples must be fresh (except bulbs from storage). Field dug plants should be sent the same day or refrigerated. Include at least 1 cup of field soil from the root zone.

6. Dig up plants rather than pulling them from the ground to prevent damaging the roots. Do not expose the sample to heat or freezing.

7. Fill out the laboratory submission form with as much detail as possible. The submission form can be found at: www.gov.bc.ca/planthealth. The submission form can also be filled out at the Ministry’s Plant Health Laboratory reception area if the sample is delivered in person.

8. For couriered samples, package securely and enclose appropriate payment.

   Cheques are payable to: Minister of Finance and Corporate Relations

   Payment can be made by credit card. Staff will contact the submitter for credit card information.

Sample quality counts! Sample results are only as good as the sample submitted.

If whole plants cannot be submitted, follow these instructions:

Whole plants do not need to be submitted when a specific bulb problem is suspected (bulb disease, insects or mites), however, a follow-up sample of other plant parts may be required.

Leaf symptoms:
For diagnosis of leaf symptoms, please send in whole plants with soil. Leaf symptoms are often an indication of root, bulb, or soil issues. Submitting whole plants with soil allows the laboratory to provide results more quickly instead of delaying diagnosis by waiting for more plant parts to arrive.

Place samples in a plastic bag with dry paper towels to absorb excess moisture. Keep the sample cool until shipping. Do not freeze.

If only bulbs are sent in, then the problems with the bulb will be assessed. Foliar, root and soil issues may be missed.

The Vegetable Production Guide has up-to-date information on growing garlic in British Columbia. It can be viewed at http://productionguide.agrifoodbc.ca/guides/17/section/211/chapter/