

Selecting Plant Disease Specimens

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Select material showing the symptoms you see

Take samples showing transition areas between healthy and diseased tissue. Dead plants, leaves or branches are generally of little use.



A diseased pepper plant

When possible, send entire plants, including roots.

Above-ground symptoms may indicate root or stem disease. If not practical to send the entire plant, include affected portions of stems and roots. Enclose the soil ball around the roots in a plastic bag and tie securely around the stem. This avoids drying of sample, and having the soil spill on top portions of the plant during transit and cover symptoms on the stems or leaves. Wrap the entire specimen in another plastic bag.

When entire plants cannot be sent

When only parts of plants are diseased as with leaf spots, dieback, or stem cankers, send several affected pieces. Cut stem and branch specimens making sure to include the margin between diseased and healthy tissue. Place specimens in a plastic bag. Fresh leaf samples keep very well in closed plastic bags. Do **not** add water or wet paper towels. Keep refrigerated until sample can be sent.

Dutch elm disease or Verticillium wilt

If you suspect either of these diseases, select branches having wilted, yellow, or dying leaves, not completely dead. Cut and send several branch sections 1/2 to 1 inch in diameter and about 6 inches long. Wrap samples in plastic to prevent drying.

Turfgrass

Send two or three 3" x 3" squares, containing at least an inch of attached soil, from the edges of areas that include affected and healthy plants. Wrap each sample in a slightly dampened paper towel, then in dry newspaper, or place in plastic container with lid. Turfgrass diseases are sometimes very difficult to diagnose accurately, so include as much information about the problem as possible. Photographs of the lawn are also very helpful.

Fleshy fruits and vegetables

Select firm specimens showing early and intermediate stages of the problem. Wrap each specimen separately in dry paper towels. Pack individually to avoid crushing, and then place entire sample in a plastic bag.

Pine Wilt Nematode

Cut sections of dying or dead branches up to 5" in length and greater than 1.5" in diameter, close to the main trunk, or take wedges cut from the trunk of dying trees. Sample several branches due to random distribution of the nematodes in the tree. The nematode is present in the trunk and symptomatic branches, not in soil around roots. Place samples in plastic bags.

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