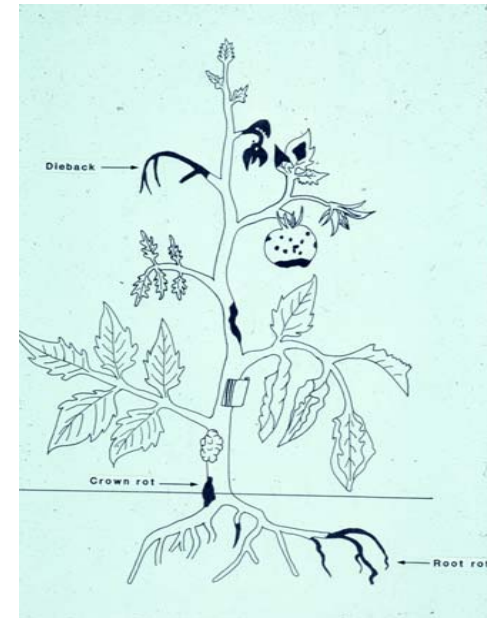
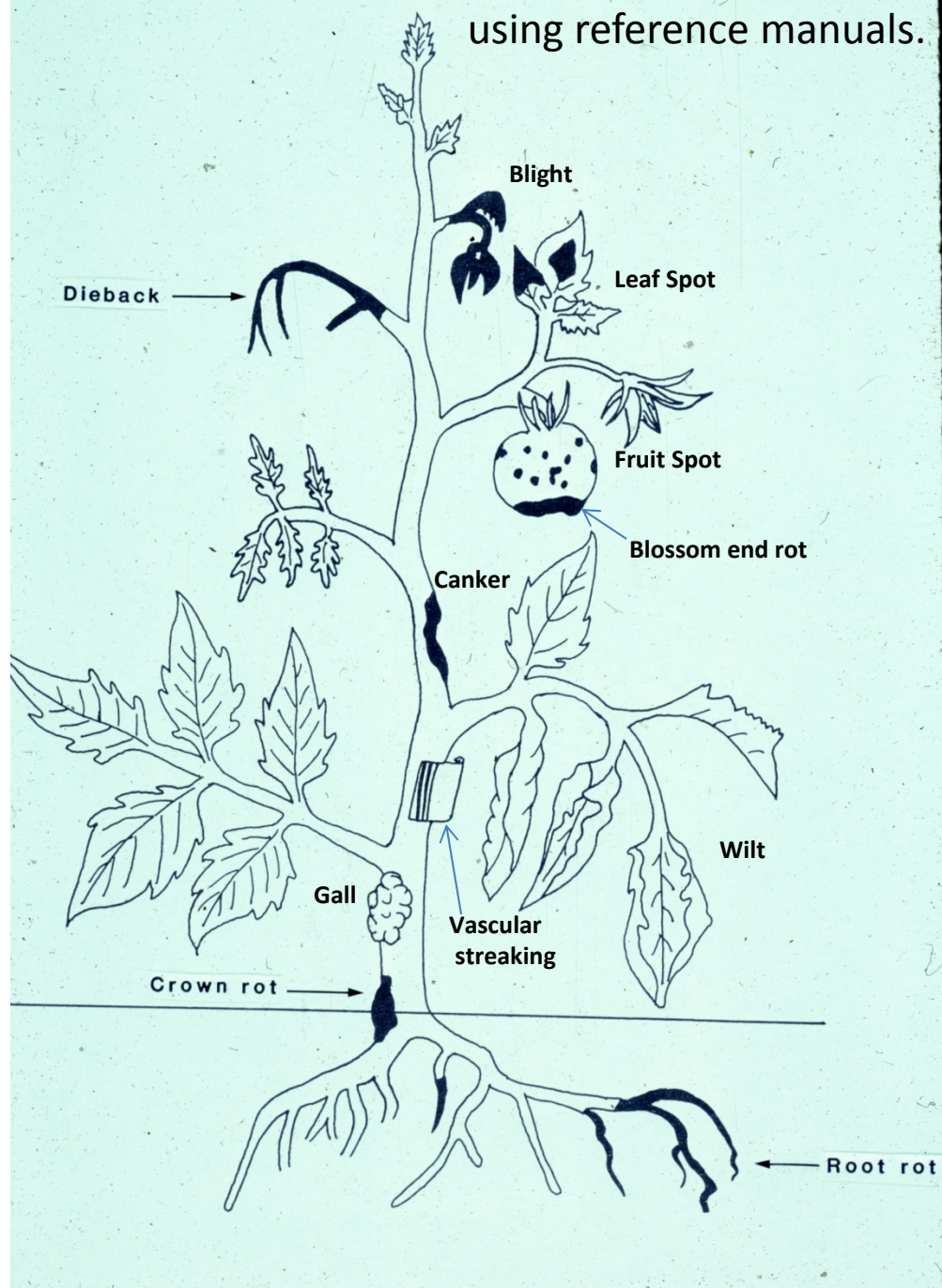


Getting to the root of the problem: the initial steps towards an accurate diagnosis.

1. Familiarize yourself with the symptomology of plant diseases and the related causes. One symptom, eg. wilt, can be caused by many things.
2. Scout nursery for plants exhibiting symptoms characteristic of plant stress or disease.
3. Note potential problem areas associated with plant decline. (low spots, overhanging native trees or plants, etc.)
4. Look for patterns within the block of plants, and within the plant itself. Diseases are often associated with patterns.



Knowing the terminology is important when using reference manuals.



Taking the right sample

Accurate recognition of symptoms and identification of the potential causes is the basis for collecting the right plant part for diagnosis.

- Dieback caused by pathogens or pests attacking the foliage or branch tips. (fireblight, Botryosphaerias, Cytospora)
Collect sample from margin of dieback.
- Dieback caused by a lack of water to the top of the plant. (root rot, crown rot, mechanical damage, etc.) *Collect sample of the roots and crown, or entire plant.*
- Dieback caused by other stuff. (chemical, ???) *Take notes, photos and collect as much symptomatic tissue as possible.*



Always have an open mind to potential causes of plant decline and watch out for the next Pest du Jour!

Root Pathogen, Whole Plant Sampling Technique



Symptomatic Plant



Check root crown for discoloration. Necrotic tissue in root crown & lower stem



Carefully remove entire root ball.

Enclose root ball and soil in plastic bag.

Enclose entire plant in a larger bag.



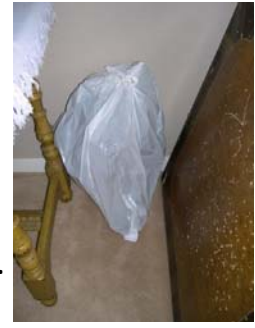
Never place the sample in the sun!

Deliver sample to the lab asap!!

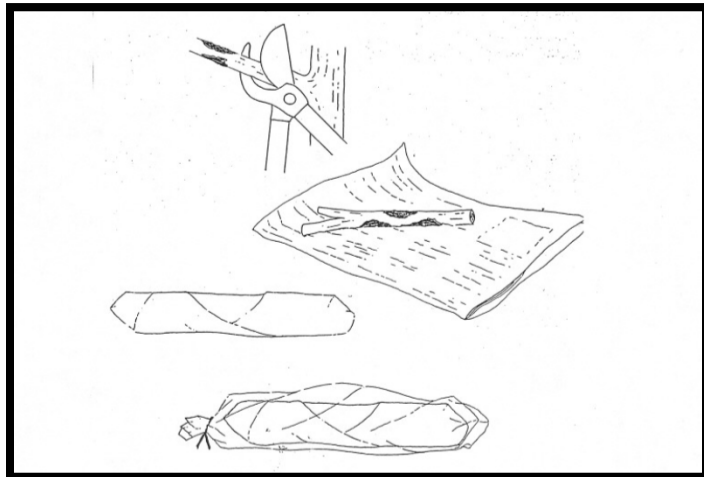
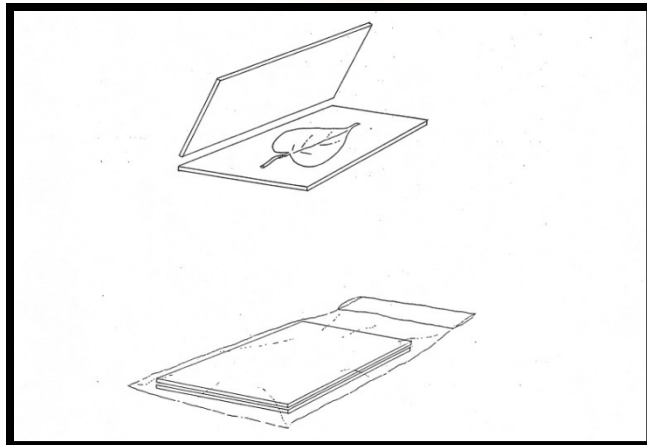
If it won't fit in the frig or ice chest...



keep it in as cool a spot as possible.



Sampling Guidelines

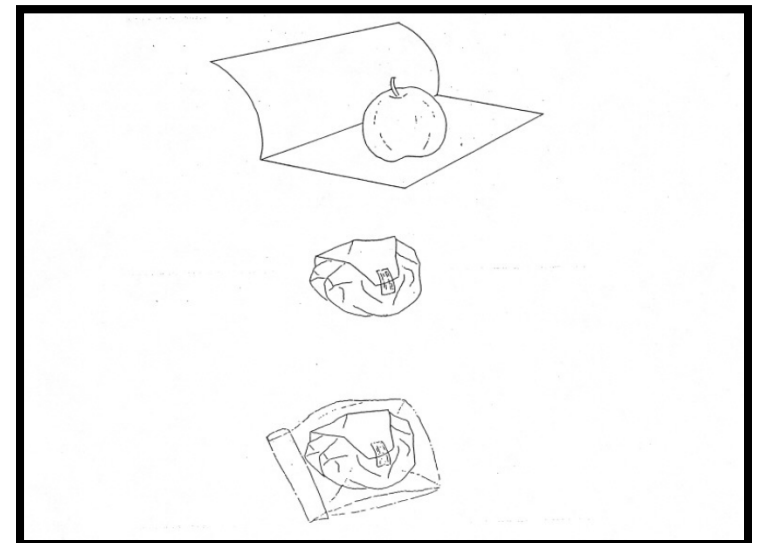
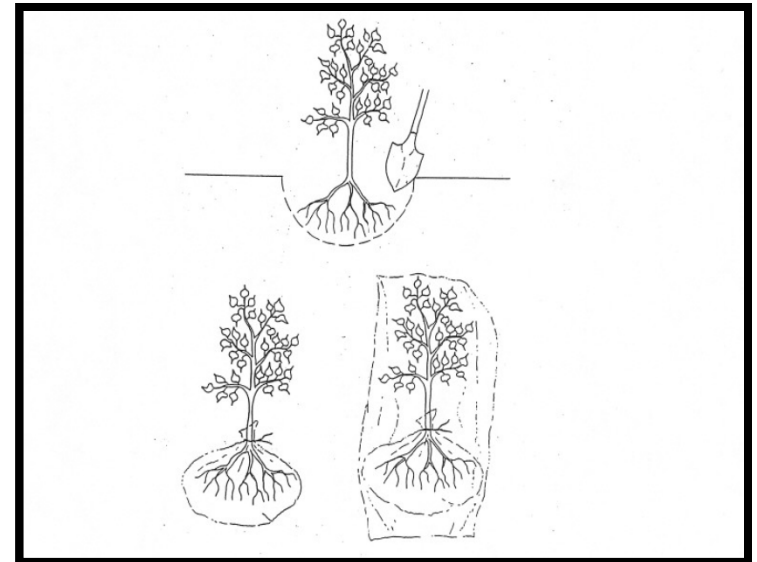


- For most samples fold the top of the plastic bag over loosely.

- Include dry paper to absorb condensation around the foliage.

- Do not use wet toweling!!***

- Twig and branch samples can be wrapped and sealed tightly.





- Include blue ice in the shipment if possible; insulate plant to prevent ice from freezing plant tissue.
- Ship or deliver samples to the lab as soon as possible after collection.
- Avoid shipping samples late in the week. (packages may be held at the shipping center until the following week, allowing for time to decay.)