



19.1 Gangrene; blackened fronds of fiddlehead (ostrich fern).



20.1a Alternaria blight; leaf lesions on a 1-year-old ginseng plant.



20.1b Alternaria blight; lesions near the soil line on a ginseng stem.



20.1c Alternaria blight; conidia of *Alternaria panax*.



20.2 Botrytis blight; leaf lesion on a 3-year- old ginseng plant.



20.3a Damping-off; ginseng seedling (left) killed by *Alternaria panax* stem infection.



20.3b Damping-off; circular patches of ginseng plants lost to *Rhizoctonia solani* infection.



20.4a Disappearing root rot; superficial root rot lesions.



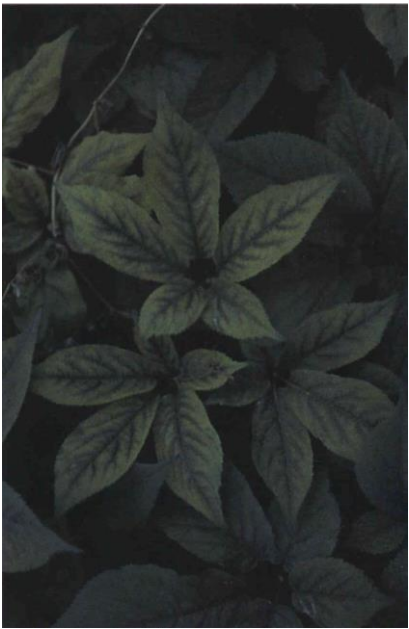
20.4b Disappearing root rot; advanced root decay.



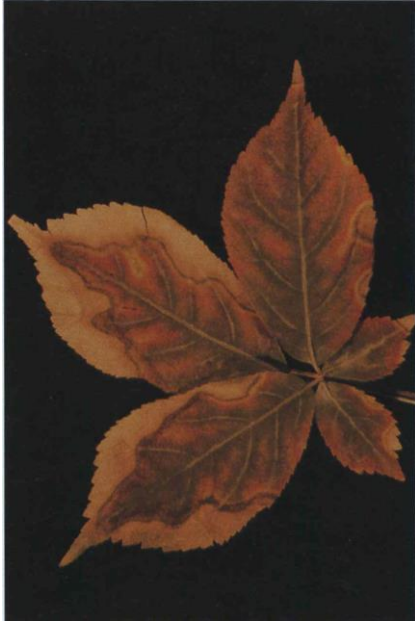
20.5 Phytophthora mildew and root rot; healthy and affected (right) roots.



20.6 Rusted root; raised, reddish brown lesions may girdle root.



20.9a Zinc deficiency; interveinal yellowing of leaves.



20.9b Phytotoxicity; mancozeb injury and sunscald.



20.9c Phytotoxicity; chemical injury on leaves.



20.9d Sunscald; injured foliage.



21.1a Apical chlorosis; severely affected plant.



21.1b Apical chlorosis; stunted, chlorotic plants in a field.