



5.17e Leafminer; damaged (mined) beet leaves.



5.17f Leafminer; damage to Swiss chard leaf.



6.1a Bacterial leaf blight; droplets of bacterial exudate on carrot umbel.



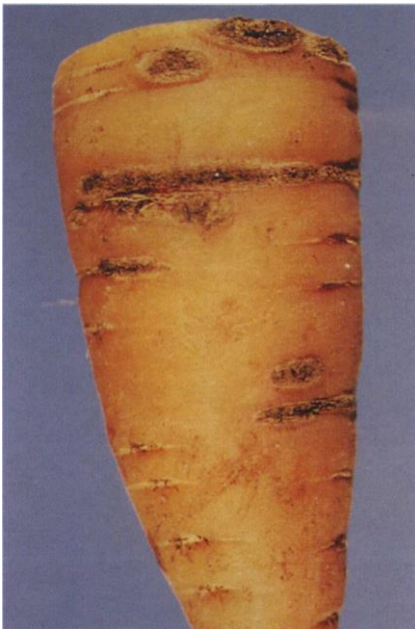
6.1b Bacterial leaf blight; diseased (left) and healthy carrot leaves.



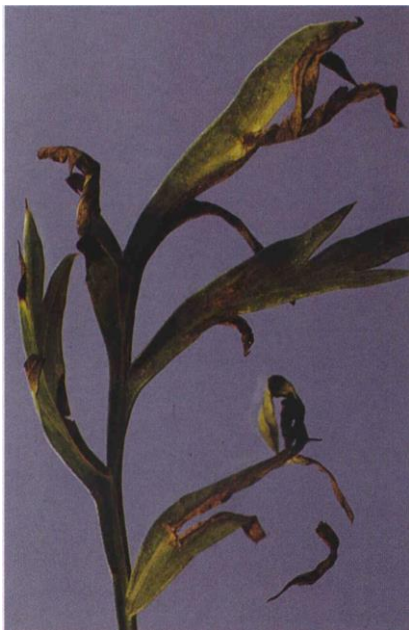
6.2 Bacterial soft rot; internal decay of carrot roots.



6.3 Crown gall; roots with prominent galls.



6.4 Scab; lesions on root.



6.5a *Alternaria* leaf blight; leaf symptoms.



6.5b *Alternaria* leaf blight; conidium of *Alternaria dauci*.



6.6a Black root rot; early symptoms.



6.6b Black root rot; advanced symptoms.



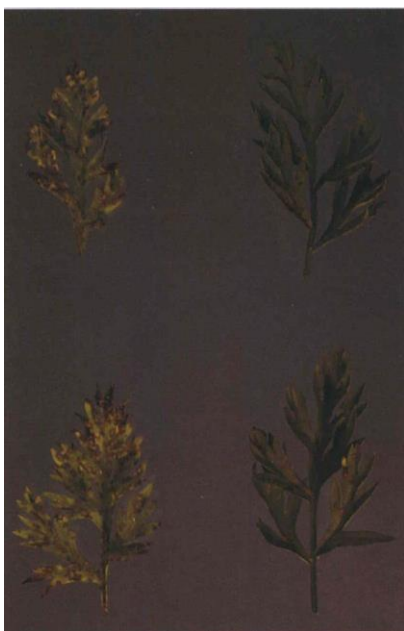
6.6c Black root rot; chlamydospores (large) and endoconidia (small) of *Chalara elegans*.



6.7 Black rot; greenish-gray mat of *Alternaria radicina*.



6.8 Cavity spot; root symptoms.



6.9a *Cercospora* leaf blight; lesions on leaflets.



6.9b *Cercospora* leaf blight; petiole lesions.



6.9c *Cercospora* leaf blight; coalesced lesions give the foliage a blighted appearance.



6.9d *Cercospora* leaf blight; conidia of *Cercospora carotae*.



6.10 Crater rot; sunken lesions on roots.



6.11a Crown rot; healthy (bottom) and diseased roots.



6.11b Crown rot; note severed crown (at left), soil adhering to affected root, and cankers at points of lateral root emergence.



6.11c Crown rot; severe infection causes tops to wilt and die.



6.12 Fusarium dry rot; lesions on a carrot root.



6.13a Pythium root dieback; note discoloration and reduced size of the affected root (right).



6.13b *Pythium* root dieback; taproot forking symptom.



6.14 Rubbery brown rot; diseased roots from storage.



6.15a *Sclerotinia* rot; mycelial growth on stored roots.



6.15b Sclerotinia rot; white mycelium and black sclerotia of *Sclerotinia sclerotiorum* on roots.



6.16 Violet root rot; purple-brown net of mycelium and spores on affected roots.



6.17a Aster yellows; bronzing and yellowing of affected leaves.



6.17b Aster yellows; affected plants (bronzed foliage) in a field.



6.17c Aster yellows; proliferation of lateral roots on infected taproots; deformed foliage (above).



6.18 Growth cracks; longitudinal cracks on roots; healthy (left).



6.19a Heat canker; collapsed and dying seedlings.



6.19b Heat canker; note constriction and severing of the tap root at the crown.



6.19c Heat canker; note constriction of the tap root just below the crown.



6.20 Northern root-knot nematode; galls and extensive lateral root proliferation.



6.23a Carrot rust fly; larvae and feeding injury on a carrot root.



6.23b Carrot rust fly; larval feeding damage to carrot roots.



6.23c Carrot rust fly; pupae; length ± 4.5 mm.



6.23d Carrot rust fly; older larvae affect the lower third of carrot roots.



6.23e Carrot rust fly; adult; length ± 6 mm.



6.24a Carrot weevil; feeding damage to carrot roots.



6.24b Carrot weevil; feeding injury to a carrot root.



6.24c Carrot weevil; adult; length ± 7 mm.



6.24d Carrot weevil; larva (left) and pupa.



6.25a Black cutworm; larva.



6.25b Dark-sided cutworm; larva.



6.25c redbacked cutworm; larva.



6.26 White grubs; larvae.



7.1a Bacterial leaf spot; rusty brown lesions with halos.