

# CARROT DISEASES

## & other factors affecting carrot packout

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### Corky Crown Rot



*Streptomyces* species

Corky crown rot does not deteriorate in storage. Usually associated with potatoes as previous crops.

### Carrot Scab



*Streptomyces* species

Scab lesions do not deteriorate in storage. Usually associated with potatoes as previous crops.

### Tiger Stripe or Ring Rot Disease



*Phytophthora* species

This disease can develop in the field and sometimes become apparent only after storage or in transit. Usually associated with poor drainage and in ground storage.

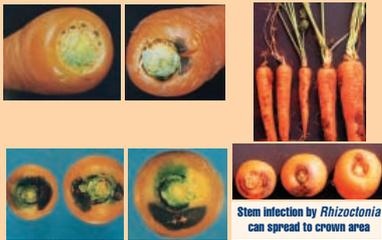
### Cavity Spot



*Pythium sulcatum*

The cavities can increase in size in storage. Incidence appears to increase with multiple carrot cropping.

### Smooth Crown Rot



Stem infection by *Rhizoctonia* can spread to crown area

*Fusarium* species,

*Rhizoctonia*, or *Sclerotinia*.

Usually does not deteriorate in storage. Wet conditions favour this disease, which increases in severity over time.

### Sclerotinia Rot



*Sclerotinia sclerotiorum*

Rot may spread in storage to the rest of the infected carrot, or to adjacent carrots. Wet and warm conditions favour this disease.

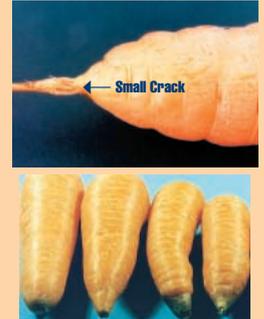
### Sour Rot



*Geotrichum* species

This disease can develop in the field and in storage. Associated with poor drainage.

### Tip Rot



Tip rot is caused by poor drainage in the field and small cracks that develop on root tips. This usually becomes apparent only during storage.

### Black Ring Rot



Black ring rot develops when stem decay, due to bacterial or fungal rot, spreads into the crown tissues. Severe rot can develop if the crop is left in the field long after plant maturity.

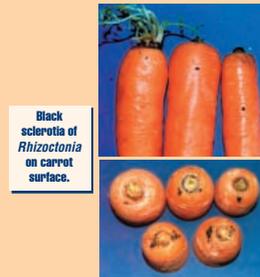
### Violet Root Rot



*Rhizoctonia crocorum*

Lesions will enlarge and merge as the disease progresses in the field causing large areas of decay. Shallow lesions on carrots at harvest can enlarge and deteriorate in storage. Associated with poor drainage.

### Carrot Black Scurf



Black sclerotia of *Rhizoctonia* on carrot surface.

*Rhizoctonia solani*

Not normally considered a problem, as the sclerotia are removed during the washing process. The carrots do not deteriorate in storage. Usually associated with potatoes as previous crops.

### Carrot Forking



Forking of carrots due to tip damage by *Pythium*.

Forking of carrots due to tip damage by root-knot nematodes.

Factors that can damage root tips, e.g. *Pythium*, root-knot nematodes and compaction, can cause carrot forking.

## Carrots are also rejected due to other non-disease factors



Except for the carrots with 'Shadow' and 'Weather Damage' (far left), the non-disease photographs have been reproduced courtesy of Field Fresh Australia.

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