

Onion Disease Fact Sheet *Foliar Fungal Diseases*

Foliar Fungal Diseases

Purple Blotch (*Alternaria porri*) Powdery Mildew (*Leveillula taurica*) Downy Mildew (*Peronospora destructor*) Botrytis Diseases (*Botrytis* species)

COMMON HOSTS

Onion, Garlic

SYMPTOMS (ON ONION)

Figure 1:

Purple blotch may appear on leaves or seed stalks as small, water-soaked lesions that develop white centers. The lesion margin is a shade of red or purple, surrounded by a yellow zone that may extend 1 inch [2.5 cm] or larger. Lesion centers may contain brown to dark gray spores of the fungus.

Figure 2:

Powdery mildew includes circular to oblong, white to grayish white patches of fungal growth with irregular margins; often after initiation of bulbing.

Figure 3 & 4:

Downy mildew commonly starts in spots in a field and spreads to surrounding areas. Initial symptoms appear as pale, elongate patches that turn light tan to brown on the foliage, affected leaf or seed stem tissues during moist periods.

Figure 5 & 6:

Botrytis (blast, leaf blight) may appear as a small white, sunken, elliptical lesion (less than 1/8 inch or 2 mm) with necrotic center. Multiple lesions may develop on the leaf, and cause a tip die-back and blighting of the leaf.

FACTORS FAVOURING

Most bacteria are favoured by:

- Harvest and storage temperatures above 30°C (86°F); some are favored by lower temperatures.
- Free moisture and high humidity (greater than 75%) during production and harvest.
- · Planting of contaminated seed, transplants, sets
- Irrigation water; storm damage; excess nitrogen after bulb initiation; insects like thrips and maggots; and bruising during harvest.



Fig 1



Fig 2



Fig 3



Fig 4





