

Virus Diseases

*IYSV (Iris yellow spot virus),
OYDV (Onion yellow dwarf virus),
Garlic Mosaic (OYDV, Leek yellow stripe virus)*



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4

Virus Diseases

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PHOTOGRAPHS: Courtesy of H. R. Pappu, Agri-Food Canada and R. M. Davis (APS Onion & Garlic Compendium) [01/2011]

COMMON HOSTS: Onion, Garlic

SYMPTOMS (ON ONION):

FIGURES 1 & 2 • IYSV symptoms include dry, straw-colored, diamond-shaped lesions on leaves and scapes. Lesions often develop on the margins of the youngest, fully developed leaves or the swollen part of the scape. Lesion centers may have a green or concentric rings of green and white tissue. Lesions may coalesce, cause tip blight and extensive death of foliage and lodging of scapes.

FIGURE 3 • OYDV appears as yellow streaks at the bases of leaves which may appear crinkled, flattened, and fall over. Scapes may show extensive yellowing, twisting and curling with small flower heads and poor quality seed.

FIGURE 4 • Garlic Mosaic appears as a mild to strong mosaic, chlorotic mottling, striping and streaking of leaves. Infected plants are stunted.

FACTORS FAVORING:

- High temperatures greater than 30°C (86°F) may stress plants and favor pests and IYSV vectors like thrips.
- Moisture stress (drought) also favors thrips which in turn may aggravate IYSV if present in the region.
- Viral diseases are affected by planting of contaminated transplants and sets; insect vectors like onion and tobacco thrips (IYSV) and aphids (OYDV, Garlic Mosaic); variable plant stands; and plant stress (fertility, moisture, temperature).

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ADDITIONAL RESOURCES AVAILABLE AT:

<http://onion.ipmpipe.org>

<http://wiki.bugwood.org/PIPE:Onion>

<http://www.apsnet.org/> — Compendium of Onion & Garlic Diseases and Pests, 2nd Ed.