

Pea Viruses



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4



FIGURE 5

Pea Viruses

AUTHORS: H.F. Schwartz (Colorado State University), M.A.C. Langham (South Dakota State University), and R.C. Larsen (USDA-ARS, retired)

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COMMON HOSTS: legumes in *Cicer*, *Lens*, *Medicago*, *Pisum*, *Trifolium*, and/or *Vicia* species may be susceptible to one or more Pea viruses transmitted by various aphid species in a persistent or nonpersistent manner.

PEA VIRUSES:

FIGURE 1 • *Bean leaf roll virus* (BLRV), Luteovirus. Symptoms include chlorosis and stunting of foliage, with misshapen and poorly filled pods.

FIGURE 2 • *Pea enation mosaic virus* (PEMV), Enamovirus. Symptoms include translucent flecks (windows), enations, veinclearing, and deformed leaves; stunted plants; deformed and twisted pods.

FIGURE 3 • *Pea mosaic virus* (PeMV), Potyvirus. PeMV is a strain of *Bean yellow mosaic virus* distinguished by its vivid yellow mosaic in pea.

FIGURE 4 • *Pea seed-borne mosaic virus* (PSbMV), Potyvirus, seed transmitted. Symptoms include downward leaf rolling, plant deformation, mild chlorosis, veinclearing, mosaic and general stunting, possibly with split or banded seed.

FIGURE 5 • *Pea streak virus* (PeSV), Carlavirus. Symptoms include purple to brown streaks on stems and petioles, and small brown streaks on leaves and pods which may abort.

FACTORS FAVORING:

- Presence of aphid vector, either colonizing or migratory
- Infected perennial legumes nearby, e.g., alfalfa, clover, vetch
- Seed with virus infected embryos; seed transmission is variable depending on the variety (e.g., PSbMV)
- Susceptible varieties
- Infection at V1–V4 enhances symptom severity, reduced pod set, poor seed fill, and yield loss

ADDITIONAL DIAGNOSTICS AVAILABLE AT:

<http://legume.ipmpipe.org>

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

<http://www.apsnet.org/> —Compendium of Bean Diseases, 2nd Ed.; Compendium of Chickpea and Lentil Diseases and Pests; Compendium of Pea Diseases and Pests, 2nd Ed.