

## Phytoplasmas

# Aster yellows

**Pathogen:** Aster yellows phytoplasma.

**Hosts include:** *Anemone*, *Bellis*, *Campanula*, *Chrysanthemum*, *Coreopsis*, *Delphinium*, *Gailardia*, *Rudbeckia*, *Salvia* and *Scabiosa*.

**Symptoms:** Symptoms vary, depending on the host. Possibilities include stunting, yellowing, twisting, distortion of flowers or flower petals, and bushy, broomlike growth. Infected plants have stunted and, possibly, malformed roots. In

Witches' brooming symptom on *Limonium* caused by aster yellows.



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## Aster yellows – continued

ected *Echinacea* and *Rudbeckia* may have deformed, yellowish flower heads.

**Spread:** The pathogen is vectored by aster leafhoppers (*Macrostelus fascifron*), as well as a few other leafhopper species.

Aster leafhoppers can migrate into production areas on air currents, bringing the pathogen with them.

**Management:** Infected plants cannot be treated and should be removed and destroyed. Susceptible field-grown perennials should be scouted regularly for leafhoppers. Good control of leafhoppers in the growing area is important to limit spread of the disease. Weeds can be infected; many are symptomless hosts. Maintain good weed control, especially of overwintering weeds, to reduce sources of inoculum.

