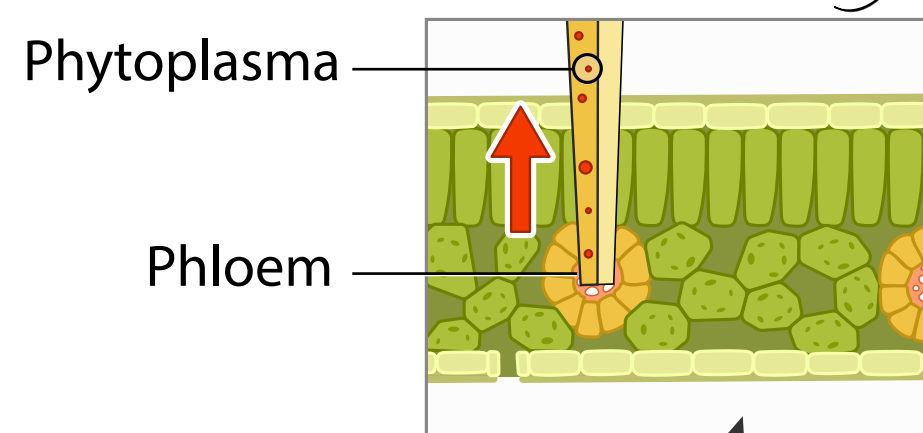


Aster Yellows Disease Cycle

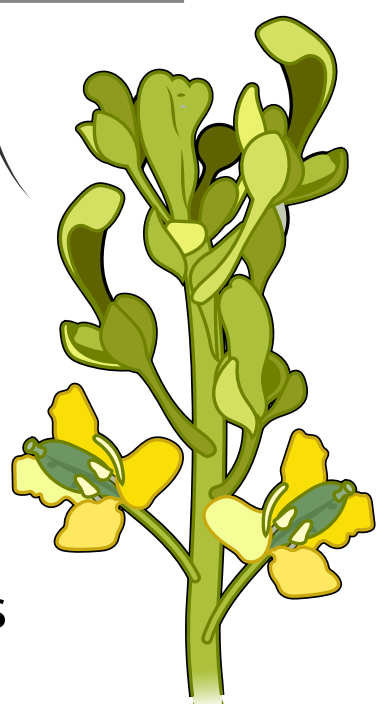
1 Acquisition Feeding

Healthy leafhopper acquires phytoplasma from the phloem of an infected plant.



4 Diseased Canola Plant

Infected canola plants turn blue-green colour, develop misshapen seeds, and leaves show red-purple tinge in late season. Diseased canola plants can be spotted for standing noticeably taller than the crop through flowering to podding stages.



Infected Canola Plant

Salivary glands

Intestinal tract

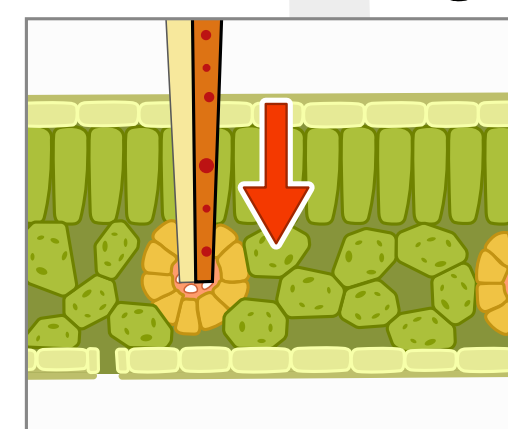
2 Systemic Invasion and Multiplication

Ingested phytoplasma invades the intestinal tract, cross into the hemolymph, and move into the salivary glands where they multiply.

Latency Period: 20-50 days

3 Inoculation Feeding

Infected leafhopper transmits phytoplasma into the phloem of a healthy canola plant.



Scouting

Aster leafhoppers are monitored with sweep nets and sticky traps as an early warning of potential issues, since no simple in-field test to determine if the insects are infective exists. The role of the insect is limited in the disease cycle and the insect itself doesn't pose an economic threat.



Symptoms of aster yellows disease spotted in canola plants: **(A)** infected plants are noticeably taller than the crop through flowering to podding stages, **(B)** display mishapped flowers and pods, and **(C)** characteristic bladder-shaped pods.