Two Spotted Spider Mite

Defining features:

- Very small
- Two black spots on back
- Webbing on underside of leaf

When do they appear?

Prefer hot, dry conditions

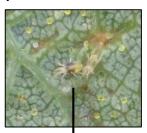
Damage:

- Leaf stippling
- · Feeding on cones
 - Dry, brittle, and browning cones
 - Quality and yield reduction

Management:

Sufficient irrigation to reduce dust

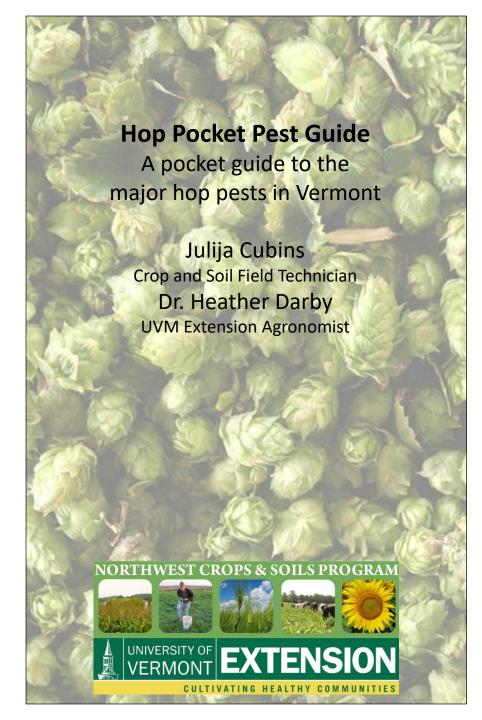
Regular scouting is key to monitoring hop pests!



Can cause leaf stippling







Potato Leafhopper



Causes hopperburn



Defining features:

- Bright green
- Bullet shaped
- Side-to-side scuttling

When do they appear?

 Variable- they arrive on wind currents from southern US as temperatures rise

Hopperburn:

- V-shaped leaf chlorosis and browning
- Decreases photosynthetic abilities

Management:

- Give them something tastier (trap cropping)
 - Red clover and alfalfa
- Varietal selection
 - Susceptible varieties: Liberty, Mt. Hood, Fuggle, Tettnang, Santium, Newport
- Increase natural enemy habitat
 - Minute pirate bugs, damsel bugs, big-eyed bugs, lacewings, lady beetles, spiders, parasitoid wasps

Hop Aphid

Defining features:

- Light green
- Pear shaped
- Cornicles (butt tubes)

When do they appear?

- Migrate to hop plants in May
- Thrive in cool, wet conditions

Sooty mold:

 Sugary secretions from hop aphid can lead to fungal growth



Can lead to sooty mold



Feeding damage:

- Feeding can remove water and vascular tissue
 - Leaf wilt and curl (reduced photosynthesis)
 - Unmarketable cones (limp and brown)

Management:

- Increase natural enemy habitat
 - Lady beetles, lacewings, parasitoid wasps
- Use of pesticides if populations remain high after flowering
- Populations tend to decrease in hot, dry weather