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Aphids

Pest & Natural Enemy ID
Greenhouse Scout School
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Part 1: Pest ID



Melon aphid
“damage” to
mum flower



Aphid sticky honeydew and ugly cast skins



Dan Gilrein



Elise Lobdell

Black sooty mold,
cast skins can really
make a plant ugly



Elise Lobdell

Foxglove
aphid feeding
causes leaf
distortion



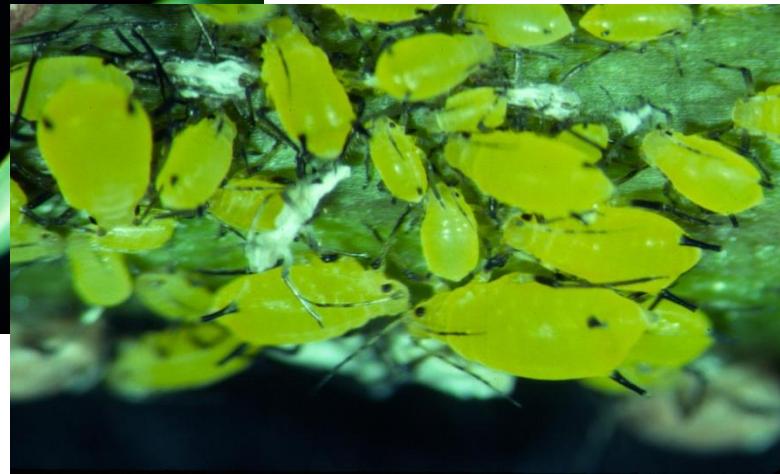
Plants can
outgrow the
damage



Elise Lobdell



Most aphid species in nature infest only certain plant species



Milkweed aphid on *Asclepias*

Photos: D. Gilrein

Photo Credit: Suzanne Wainwright-Evans/Buglady Consulting

Cannabis aphid



Suzanne Wainwright-Evans

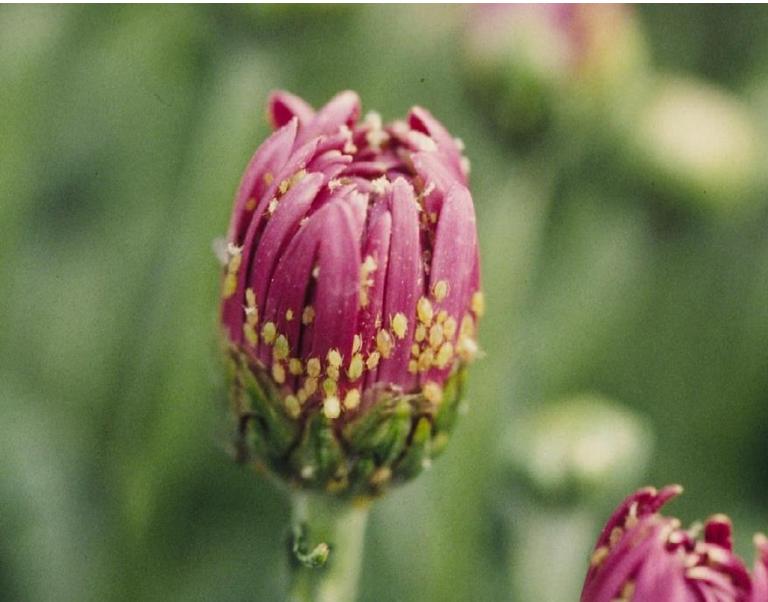
Uroleucon aphids on *Heliosp*



Lupine aphid



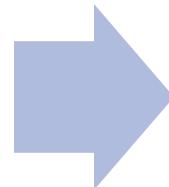
Common Aphid Pests of Greenhouse Crops



- Green peach aphid
- Foxglove aphid
- Melon/cotton aphid
- Potato aphid



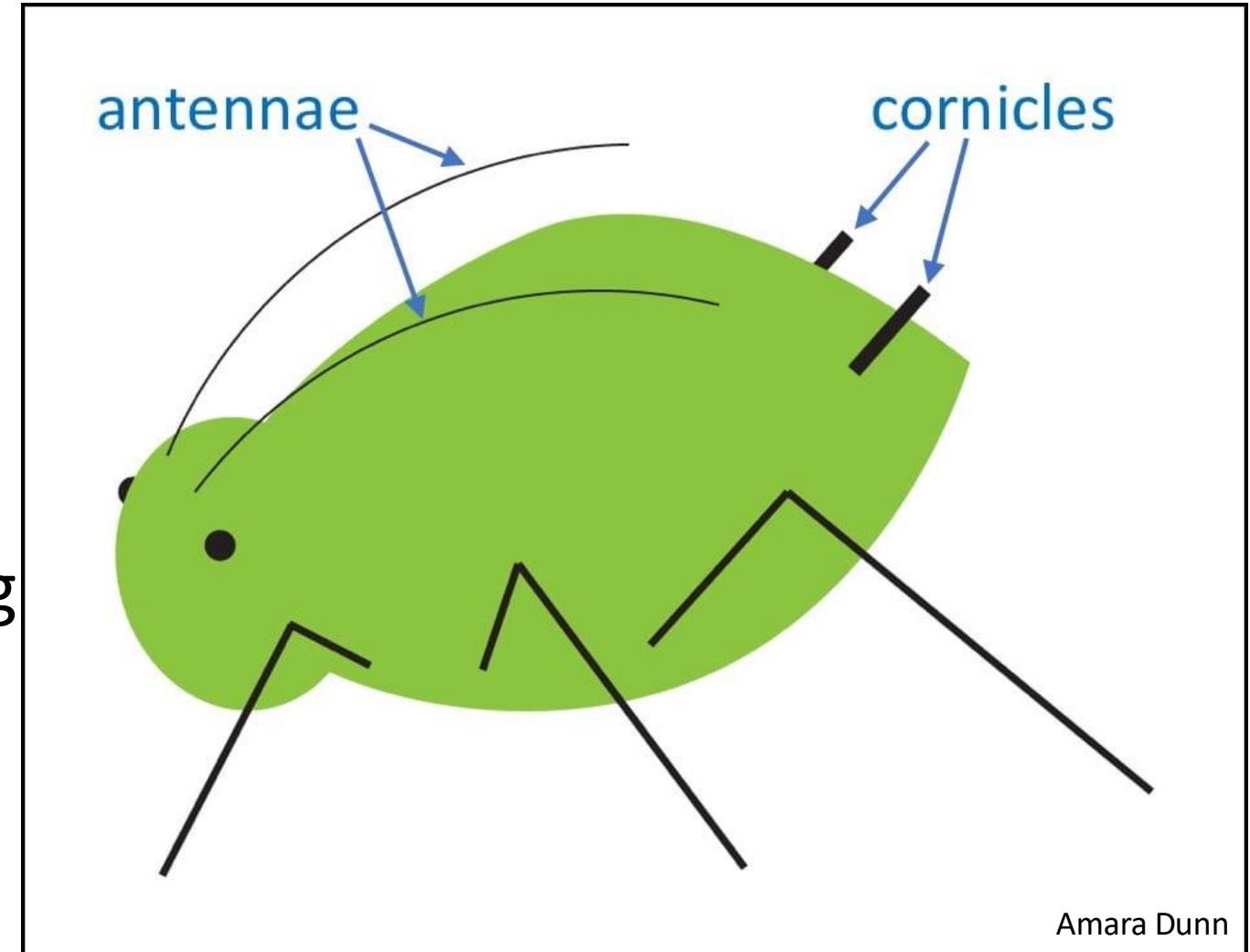
Q: Why do we care which kind of aphid is present?



A: Some natural enemies work better on some than on others.

Some aphid characteristics for identification

- Coloration
- Size
- Antennal length, coloring
- Cornicles coloring

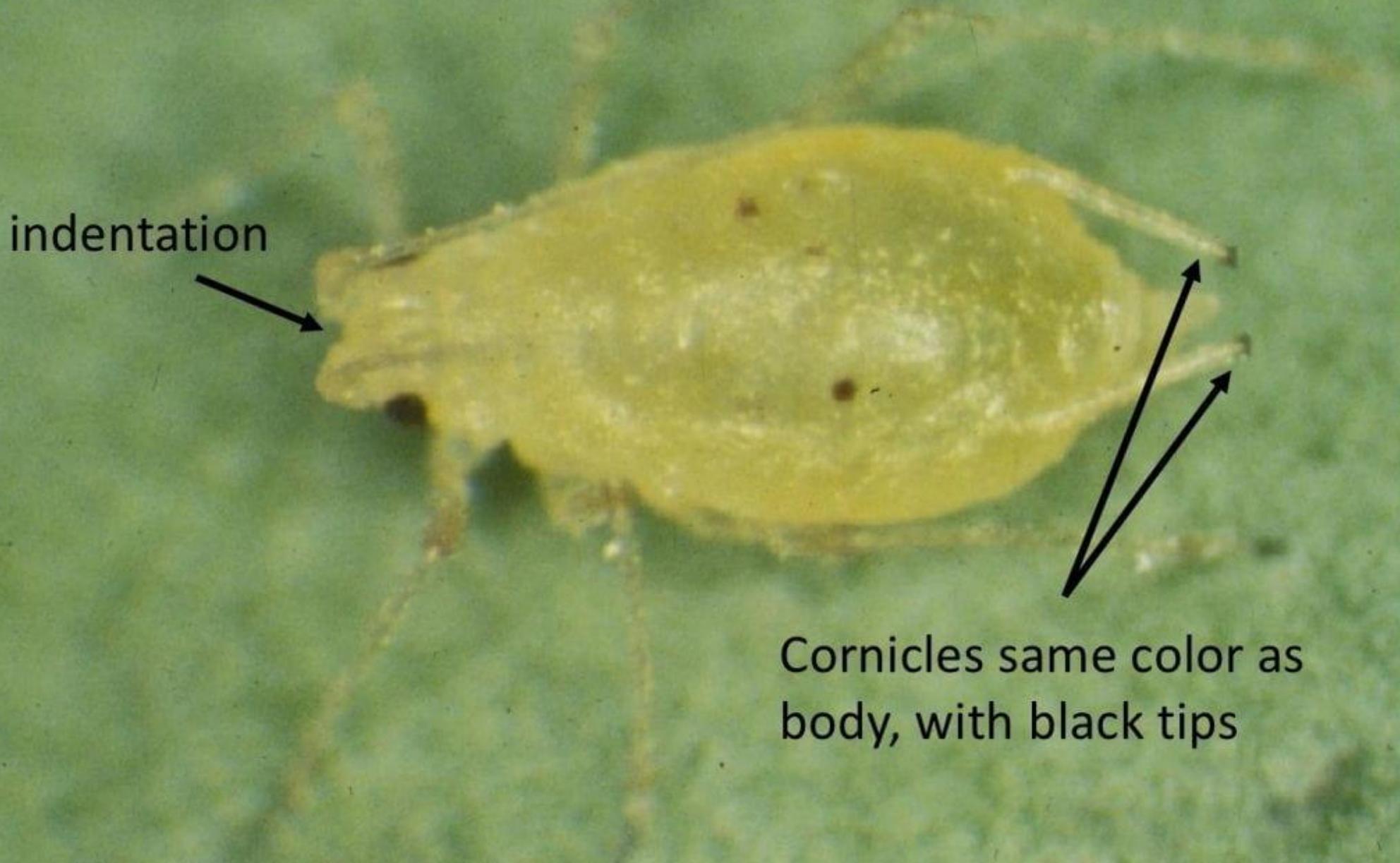


Green Peach Aphid



- Most common aphid on most greenhouse crops
- Smallish aphid
- Lime-green, yellowish, or pinkish
- Body and cornicles same color

Green Peach Aphid





Melon/cotton aphid



- Small aphid
- No indentation on head
- Note black cornicles, regardless of body color



Foxglove aphid

Dark green patch at base of each cornicle

Antennae and legs
long with dark
joints

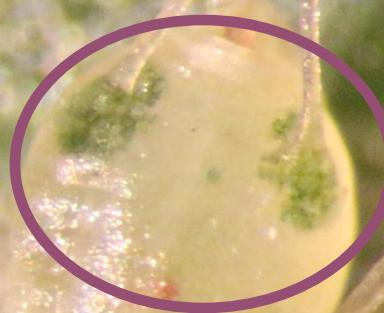
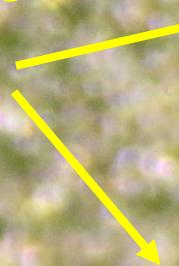


Larger aphid
Light green body

Foxglove aphid

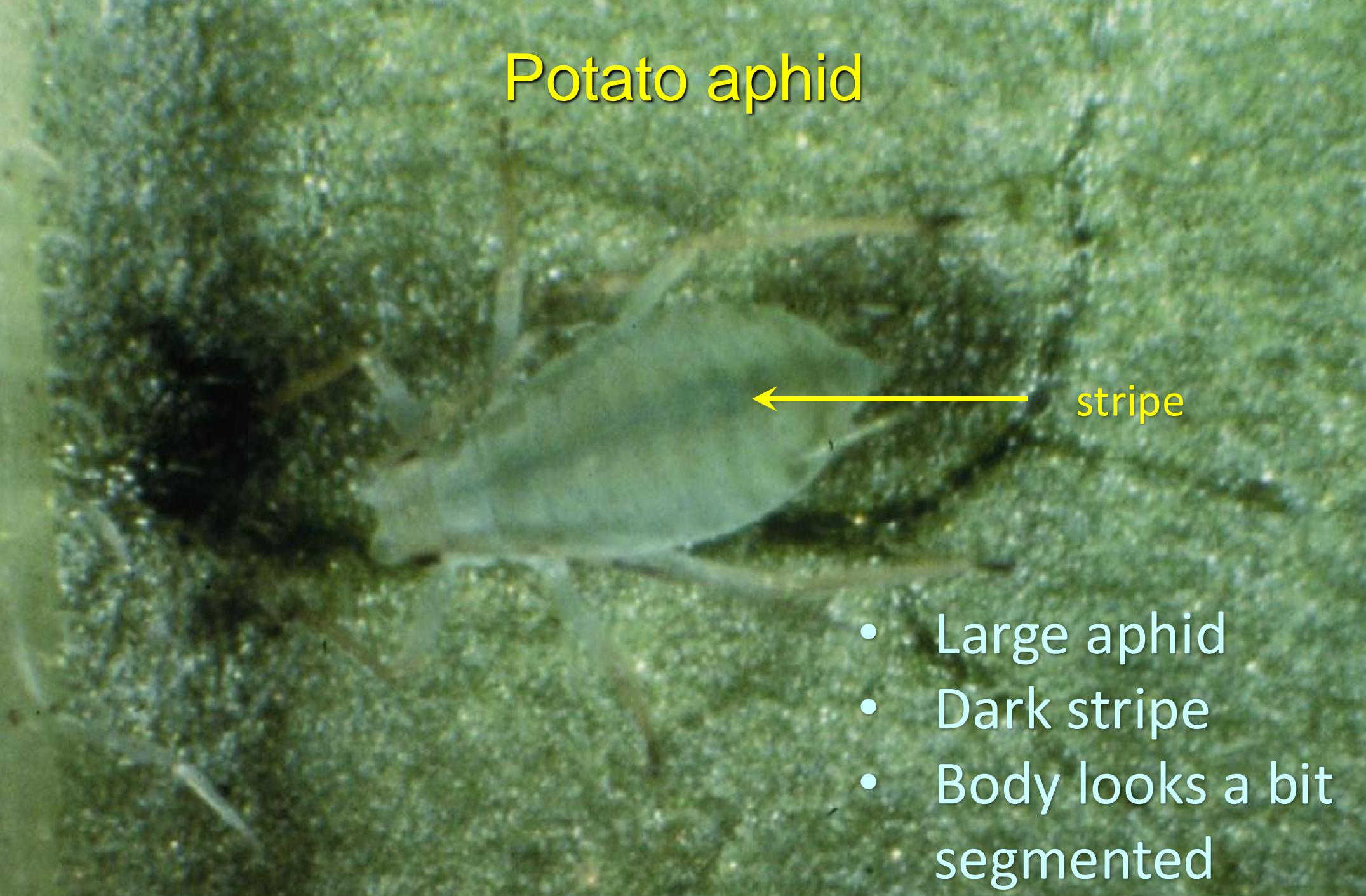
Dark green patch at base of each cornicle

Antennae and legs
long with dark
joints



Larger aphid
Light green body

Potato aphid



stripe

- Large aphid
- Dark stripe
- Body looks a bit segmented

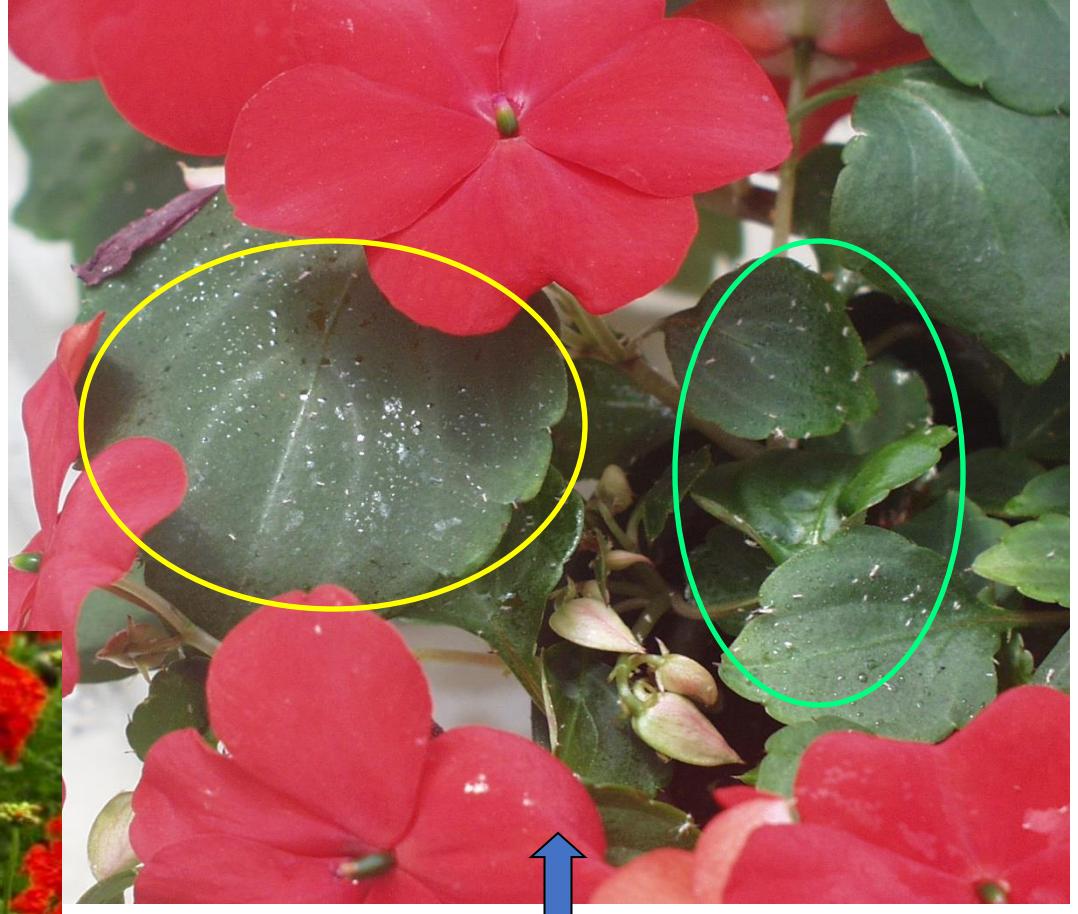
Aphids may be winged or non-winged. These are both green peach aphids



UGA1326230

W. Cranshaw, Bugwood.org

Monitoring: Early detection



Look for shiny, sticky honeydew
and white cast skins

Yellow sticky cards may help
but are not reliable for aphids



cornicles

Winged aphid on a yellow sticky trap

Alerts you to aphid presence, but:

- Did it fly in from outdoors?
- Is there an infestation on the crop?

Aphids usually give birth to live nymphs; no egg stage.
Do not need to mate to reproduce 50-250 offspring



Can develop to reproductive adults in 7-10 days



- Red eyes of developing nymphs can be seen inside mother

Aphid days-to-adult at various temperatures



Green peach aphid

Foxglove aphid

Temperature (°F)		58°	68°	77°	86°
Devel. Time (days)	GPA	12	7	5	5
	FGA	11	8	7	10

Aphids are cool weather pests

Aphids reproduce rapidly



Elise Lobdell



Elise Lobdell

Aphid feeding locations on a plant can vary



Elise Lobdell



Aphid feeding locations on a plant can vary

Be careful of
aphids
dropping
from hanging
baskets onto
crop below





Watch for ants!

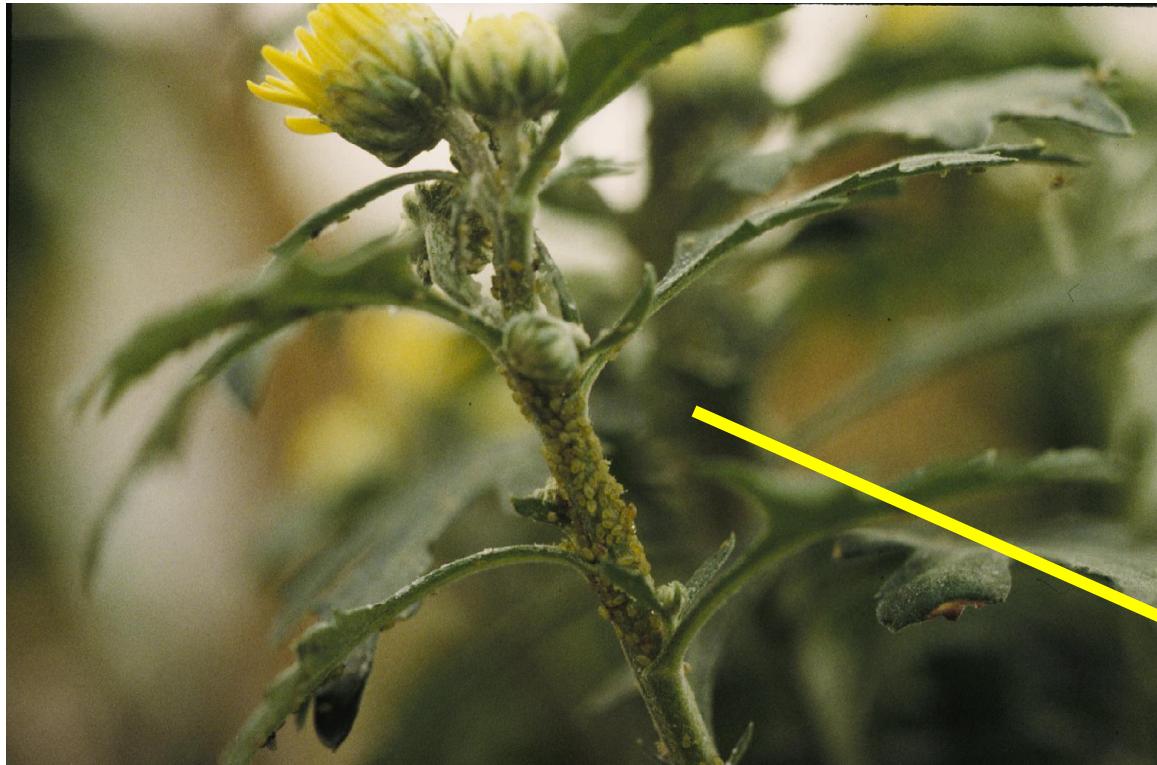


Ansel Oommen, Bugwood.org

Scouting Tips for Aphids

- Yellow sticky traps only for winged adults
- Foliar inspection is necessary
 - Incoming plant material
 - Weekly during crop growth
- Inspect new growth, stems below buds, lower surfaces of leaves
- Look for:
 - White cast skins, honeydew, ants, deformed growth
- Use sentinel plants to monitor control

Use “sentinel plants” for monitoring aphid control



Look for killed (or
parasitized) aphids



Crops that are earliest for aphid infestations

Weeds!!
Pansies
Fuchsias
Daylilies (if they've been overwintered in a
greenhouse)
Calibrachoa
Peppers
Eggplants
Ipomoea
Vinca vine
Salvias
Portulacas