Flower Insects

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Flower Insects and Related Pests

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Ants

• **Hosts**
  - Many

• **Description**
  - Red to black in color
  - Three distinct body sections

• **Note:**
  - Ants drive away predators to protect aphids disrupting biological control. Controlling aphids drives ants away.
Ants

• **Damage**
  - Make soil mounds
  - Disturb roots
  - Make vector diseases

• **Control**
  - Drench nests with hot water
  - Use baits to control visible ants
  - Apply insecticide granules to nesting areas
Aphids

• **Hosts**
  - Many plants, including
    • Chrysanthemum
    • Petunias

• **Description**
  - Small, green to black sucking insect, with or without wings
  - Over 600 varieties in Utah
  - Reproduce asexually in summer
Aphids

• Damage
  – Curling of new foliage
  – Sticky leaves and dripping honeydew

• Control
  – Green lacewings, lady bird beetles, and other predators
  – Insecticidal soap
  – Most insecticides, including acephate or malathion
Blossom Weevils

- **Host**
  - Hollyhock

- **Description**
  - Adult beetle about $\frac{1}{8}$” long with a long snout
  - Dull, grayish brown in color
Blossom Weevils

- **Damage**
  - Eat blossoms before they open
  - Skeletonize leaves

- **Control**
  - Cut and destroy infested seeds and pods
  - Spray with insecticidal soap
  - Most insecticides, including acephate
Bumble Flower Beetle

- **Host**
  - Sunflower
  - Strawflower
  - Daylily

- **Description**
  - Larvae (white grubs) found in manure or compost
  - Adult beetle resembles bumblebee
Bumble Flower Beetle

• **Damage**
  - Chew on some flower petals and bulbs
  - May transmit bacterial diseases

• **Control**
  - Hand pick beetles if numerous
  - Clean up any manure or rotten fruit
  - Chemical control is seldom needed
Cabbage Looper

- **Hosts**
  - Carnation
  - Chrysanthemum
  - Nasturtium
  - Other flowers

- **Description**
  - Larvae are pale green with white lines on back and sides
  - Moths are gray brown with silvery spot on forewings
Cabbage Looper

• **Damage**
  - Feed on leaves or small buds
  - Fecal droppings make flowers unsightly

• **Control**
  - Wash away or handpick larvae
  - Insecticidal soaps
  - *Bacillus thuringiensis*
  - Pyrethrum and other insecticides
Carpenter Bees

• Host
  – Yucca
  – Roses
  – Raspberries and other pithy plants

• Description
  – Small bees about $\frac{3}{16}$ ” long
  – Metallic blue or blue-green
Carpenter Bees

• **Damage**
  - Burrow into stems and make cells for young
  - Only a problem when they burrow into live tissue

• **Control**
  - Cover cut stems with wax
  - Prune damaged stems
  - No chemical control recommended
Carpenter Bees
Caterpillars

• **Host**
  - Many

• **Description**
  - Larval stage is worm-like with many legs
  - Adults are moths or butterflies
Caterpillars

• **Damage**
  - Eat leaves and flowers as well as roots and stems

• **Control**
  - Hand pick larvae
  - *Bacillus thuringiensis*
  - Pyrethrum
  - Many garden insecticides
Caterpillars
Corn Earworm

- **Host**
  - Geranium
  - Gladiolus
  - Rose
  - Sunflower
  - Many vegetable and field crops

- **Description**
  - Large, green, brownish, or reddish colored worms
  - Adults are night-flying moths
Corn Earworm

- **Damage**
  - Eats petals, buds, and occasionally leaves
  - Female lays one egg per host plant

- **Control**
  - Hand pick larvae
  - *Bacillus thuringiensis*
  - Many garden insecticides
Cutworm

• **Host**
  - Zinnia
  - Petunia
  - Most other flowers

• **Description**
  - Smooth, fat, soft caterpillar
  - These creatures are caterpillars that cut and kill plants around the soil line
Cutworm

- **Damage**
  - Cut plants off at the base
  - Some climb plants and eat leaves

- **Control**
  - Paper collars that extend into the soil 2” to prevent damage
  - Fall tilling for weed and larval control
  - Insecticide granules on soil
  - Many contact insecticides
Earwig

- **Host**
  - Many flowers

- **Description**
  - Long, black and brown insects with pincers on rear end

- **Note:**
  - Earwigs can be important predators of insect and insect eggs
  - They are not harmful to humans
Earwig

• **Damage**
  - Feed on blossoms and foliage
  - Considerable chewing damage on susceptible crops

• **Control**
  - Use boards or moistened newspaper as traps
  - Chemical baits
  - Insecticidal sprays after dark
Earwig
Fungus Gnats

- **Host**
  - Most bedding plants or container plants
- **Description**
  - Small black flying insects that resemble fruit flies
Fungus Gnats

• **Damage**
  - No damage to plants unless they become very numerous

• **Control**
  - Dry out soil
  - Insecticides are almost never needed with outdoor plants
Fungus Gnats
Earthworms

- **Host**
  - Bedding Plants

- **Description**
  - Large smooth worms that burrow in the soil
Earthworms

• **Damage**
  - Small transplants and their root systems are disturbed or eaten

• **Control**
  - Handpick worms from potted plants or flower beds
  - Water less frequently
  - No chemical control
Flea Beetle

- **Host**
  - Many

- **Description**
  - Small brown, black, or dark blue beetles that jump when disturbed
  - Many species attack different plants
Flea Beetle

• **Damage**
  - Tiny circular holes in leaves

• **Control**
  - Control weeds that harbor pests
  - Fall tilling
  - Insecticidal soap
  - Most common insecticides
Greenhouse Whitefly

• **Host**
  - Fuchsia
  - Martha Washington geraniums
  - Lantana
  - Other flowers

• **Description**
  - Small white butterfly appearing pests
Greenhouse Whitefly

- **Damage**
  - Sticky leaves often grow sooty, black mold
  - Suck plant juices

- **Control**
  - Inspect all plants to avoid introductions from greenhouse
  - Wash undersides of leaves with water or insecticidal soap
  - Sprays containing pyrethrum
Grasshoppers

• **Host**
  - All plants

• **Description**
  - Large flying and chewing insect with voracious appetites
Grasshoppers

- **Damage**
  - Chew leaves, stems, flowers and fruits
- **Control**
  - Spray pest when they are young
  - Poultry
  - Nosema locustae
Lace Bugs

- **Host**
  - Sunflower
  - Chrysanthemum
  - Asters
  - Scabiosa
  - Others

- **Description**
  - Tiny, patterned insect that sucks plant juices
Lace Bugs

- **Damage**
  - Yellow, stippled leaves
  - Undersides of leaves are dirty

- **Control**
  - Wash leaves with a strong stream of water
  - Use insecticidal soap
  - Most common garden insecticides
Leafhoppers

- **Host**
  - Ivy
  - Dahlia
  - Others

- **Description**
  - Small, active white or green or brown insects about $\frac{1}{8}$” long
Leafhoppers

• **Damage**
  - Stripped foliage that lacks chlorophyll
  - Gray-green dirty foliage

• **Control**
  - Wash leaves to remove pests and residue
  - Insecticides or soaps applied to undersides of leaves
Leafminers

- **Host**
  - Columbine
  - Chrysanthemum
  - Delphinium
  - Other flowers

- **Description**
  - Small, light colored larvae
  - Many different insects are leafminers, including larvae of flies, moths, beetles, and wasps
Leafminers

• **Damage**
  - Serpentine pattern in leaves
  - Blotchy pattern in the leaves

• **Control**
  - Hand pick egg masses or infested leaves
  - Insecticide control not recommended
  - Heavily parasitized by other insects
Mealybugs

• **Host**
  - Fuchsia
  - Lantana
  - Others

• **Description**
  - Small, non-mobile insects covered with waxy threads

• **Note:**
  - Introduced on greenhouse plants
Mealybugs

• **Damage**
  - Suck plant sap
  - Encourage sooty mold growth
  - White cottony tufts on leaves and stems

• **Control**
  - Hand pick small infestations
  - Insecticidal soaps
  - Summer weight oil
  - Spot treat with alcohol
Narcissus Bulb Fly

- **Host**
  - Narcissus
  - Amaryllis

- **Description**
  - Adult is similar in size and appearance to small bumble bee
  - Large maggot $\frac{1}{2} - \frac{3}{4}$" long
Narcissus Bulb Fly

• **Damage**
  - Plants grow poorly or not at all
  - Bulbs eaten or large tunnels inside bulbs

• **Control**
  - Discard affected plants
  - Chemical control is usually not effective
Narcissus Bulb Fly
Root Weevils

• Hosts
  – Columbine
  – Peony
  – Sedum
  – Many others

• Description
  – Black, brown, or gray beetles with a long snout
Root Weevils

- **Damage**
  - Notched leaves that appear to have been trimmed by pinking shears
  - Larvae eat roots

- **Control**
  - Fall tilling
  - Parasitic nematodes
  - Acephate (Orthene)
  - Bendiocarb (Lilly Miller rose and rhododendron dust)
Soft Scale

• Host
  – Poinsettia
  – Ferns
  – Other greenhouse plants that are used out of doors

• Description
  – Small, sucking, flat brown insects about $\frac{3}{16}$” long, covered with a waxy coating and do not move
  – Often mistaken as part of the plant
Soft Scale

• **Damage**
  - Sugary secretions make plants sticky, allowing black, sooty mold to grow
  - Removal of plant sap

• **Control**
  - Remove physically
  - Insecticidal soap or alcohol wipes
  - Systemic insecticides including acephate or Di-Syston
Spittlebug

- **Host**
  - Daisy
  - Chrysanthemum
  - Many others

- **Description**
  - Insects resemble large leafhoppers
  - Most diagnostic feature is the froth or spittle covering insect
Spittlebug

• **Damage**
  - Sucking insects
  - Very little damage unless numerous
  - Plants may be distorted or small

• **Control**
  - Wash off with strong stream of water or insecticidal soap
  - Most garden chemicals are effective but seldom necessary
Sunflower Stem Weevil

• Host
  – Sunflower

• Description
Sunflower Stem Weevil

• Damage
  – Feeds on sunflower stems

• Control
  – None recommended
Thrips

• Host
  – Gladiolus
  – Chrysanthemums
  – Many other flowers

• Description
  – Tiny $\frac{1}{20}$” long slender insects that move quickly
  – Usually hide in buds
Thrips

• **Damage**
  - Petals and leaves turn brown or gray
  - Sandpapered appearance from rasping/sucking/feeding damage

• **Control**
  - Hard to control
  - Insecticidal soap
  - Systemic insecticides
  - Lysol treatment for corms
Tiger Moths

- **Host** - Petunia
- **Description** - Brown to orange butterfly-like insects
Tiger Moths

- Damage
- Control
Two Spotted Spider Mite

• **Host**
  - Hollyhock
  - Marigold
  - Many Others

• **Description**
  - Small brown spider mite with two distinctive black spots
Two Spotted Spider Mite

- Damage
  - Gray, dirty appearance
  - Dried leaves
  - Webbing

- Control
  - Wash undersides of leaves
  - Insecticidal soap
  - Kelthane
  - Vendex
Tobacco Budworm

• **Host**
  - Petunia
  - Geranium
  - Nicotiana
  - Many others

• **Description**
  - Highly variable caterpillars ranging from light green to red or black
  - Often mimic flower color
Tobacco Budworm

• **Damage**
  – Buds and blossoms destroyed
  – Holes in leaves
  – Sticky leaves

• **Control**
  – Handpick larvae
  – Remove and destroy infested plants in fall
  – Bacillus thuringiensis
  – Acephate or other systemics
Other
Flower Pests

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Birds

- **Hosts**
  - Some flowers
  - Decorative fruits
  - Many other plants

- **Description**
  - Quail, robin, starling, pigeon, sparrow and others
Birds

• Damage
  – Most damage to ripening fruit
  – Eat holes in fruit causing fruit to spoil

• Control
  – Netting over trees
  – Scarecrows in trees
Bulb Mite

- **Hosts**
  - Iris
  - Tulip
  - Other bulbs

- **Description**
  - Small, white, spider mites

- **Note:**
  - This is an infrequent problem
Bulb Mite

• **Damage**
  - Destroy developing bulbs
  - Allow pathogenic fungi to invade

• **Control**
  - Soil fumigation
  - Clean bulbs before storage
Rodents

• **Hosts**
  - Tulip and other bulbs except daffodils

• **Description**
  - Mice, gophers, squirrels, and voles
  - Tunnels or burrows are usually more visible than the animals
Rodents

• Damage
  – Poor growth of above-ground portion of the plant
  – No growth if bulb or seed is eaten before emergence

• Control
  – Plant bulbs under chicken wire mesh or in wire baskets
  – Cats or traps
  – Gas cartridges or baits
Rodents

• **Hosts**
  - Many plants

• **Description**
  - Squirrels and rabbits
Rodents

- **Damage**
  - Tops of plants are chewed away

- **Control**
  - Fences
  - Repellants
  - Live animal traps
Gopher Mounds
Gophers and Mice
Slugs and Snails

- **Hosts**
  - Most Plants

- **Description**
  - Slimy, soft-bodied mollusks
  - Snails have hard shell and soft bodies
Slugs and Snails

• Damage
  – Holes chewed in leaves
  – Small seedlings eaten off

• Control
  – Avoid excessive watering
  – Hand picking or traps
  – Slug and snail baits with metaldehyde
Crushed Glass
Cinders
• Salt is an effective slug and snail killer
• Do not use it in Utah
• Use spray ammonia instead
Slug and Snail Bait
Beer, Yeast and Water
• To avoid the PG-13 Rating we could not show the third slide