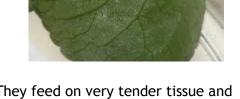
INSECTS AND PESTS OF AFRICAN VIOLETS By Mary Lou Harden

- I. **Insect and mite pests.** Many different pests attack African violets. Some feed on the **roots**, some on the **foliage**, and others on the **blooms**.
- II. Nature of Damage. The pests may be divided into three groups according to the damage they cause: (1) Chewing pests, (2) Sucking pests, and (3) Nuisance pests.
- A. Chewing Pests. Damage usually occurs rapidly and is evident immediately. These pests should be eliminated as soon as they are detected. Symptoms include:
 - 1. Wilting of plant (root or crown damage)
 - 2. Severed leaves or flower buds
 - 3. Holes in leaves or flower petals
 - 4. Discolored areas on the surface or margins of leaves or flower petals.

Examples:

- **a.** Cockroach the most commonly reported chewing pest of African violets. Eat leaves and flowers.
- **b.** Thrips Minute insects that feed on pollen and tender plant tissue. Thrips enter your home through window or door screens, on clothing or in already infested plants and cut flowers. They cause deformed, undersized or discolored blooms and brown edges on flower petals. Also, the yellow pollen is scattered on the flower petals.
- c. Foliage Feeding Larvae Caterpillars, loopers (like inchworms) and armyworms. Most of the time, these are accidental pests that have found their way into your home brought in on plants that have been left outside.
- d. Foliage Feeding Beetles These are not common pests of African violets but occasionally they find their way into an African violet collection. They move more quickly than the larvae and can cause severe damage in a short time.



e. Snails and Slugs - Usually found in greenhouses. They feed on very tender tissue and occasionally damage rooting leaves and small seedlings. They generally feed at night and hide under pots, flats, etc., during the day. Both leave a slime trail behind them.









Beetle

Garden Snail

Slug

B. Sucking Pests. Sucking pests insert their mouthparts into plant tissue and suck out the juices. Some inject toxic compounds into the plant and some are capable of transmitting

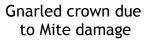
certain plant diseases. The symptoms often go unnoticed for a period of time. This allows the pests to become established and increase in numbers, resulting in considerable plant damage. Symptoms are:

- D. Wilted appearance
- E. Presence of honeydew
- F. Curling or stunting of leaves
- G. Discoloration (yellowing) of leaves
- H. Necrotic (dead tissue) spots in leaves

Examples:

- a. **Cyclamen Mite** One of the most damaging to African violets. They are very tiny about 1/100-inch long and not visible without magnification. Adults live for about a month and a female lays about 100 eggs. Damage includes leaf curling and a fuzzy appearance in the center of the plant.
- b. **Broad Mite** They resemble Cyclamen Mites but are not usually found in African violet collections. Unlike Cyclamen Mites, they don't attack the center of the plant but prefer the older, bottom leaves. They feed on both the upper and lower surface of the leaves. Damaged leaves turn yellowish and the edges may curl under.
- c. **Spider Mite** They are small and red. They can barely be seen by the naked eye. They seldom attack violets but can cause severe damage. Symptoms are bleached out or yellowish spots on leaves.
- d. **Aphids** Small, soft-bodied insects, some with wings. They may be yellow, green or black. They suck juice from leaves and stems. They secrete honeydew, sometimes resulting in the sticky substance covering the plant. They reproduce rapidly so treatment should begin immediately.
- e. **Scale Insects** They are very small, soft-bodied insects that attach themselves to plant leaves and petioles. They secrete a covering or "scale" over their body. Once attached, they never move. Like aphids, they secrete honeydew which collects on the plant.
- f. Foliar Mealybugs They are about 1/40-inch long, soft bodied and covered with a white waxy material. Usually found in the crown of the plant, the leaf and petioles and the flowers. They secrete honeydew and heavily infested plants become very sticky.
- g. **Soil Mealybugs** Like the Foliar, they are about 1/40-inch long and milk-white in color. They resemble tiny bits of perlite in the root-ball. They destroy the root hairs. Symptoms of infestation include yellowing plant leaves, wilted appearance, stunting and bloom reduction.







Thrips damage to bloom leaves





Thrips on



Aphids

Aphids on blossom



Foliar Mealybugs





Cyclamen mite damage

Soil Mealy Bugs



Spider Mite Damage



Red Spider Mites



Scale Insects on Leaf



Mealybugs

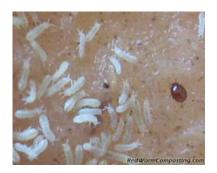
C. Nuisance Pests. These pests cause no damage. They are considered pests simply because their presence is not desirable. Flying or hopping about, they detract from a beautiful centerpiece or a show plant. They multiply rapidly and often are found in overwhelming numbers.



Pillbugs



Earwigs



Springtails

Pesticides and Control

Safer's Soap - Multi-insect control. Killing insects, including aphids, earwigs, grasshoppers, harlequin bugs, leafhoppers, mealybug control, mites, plant bugs, psyllids, sawfly larvae, soft scales, spider mites, squash bugs, blossom thrips and whiteflies.

Avid - for control of Thrips - A Miticide/Insecticide - For control of leafminers and mites and suppression of aphids, whiteflies, and thrips on ornamental plants Active Ingredients:

Avid, which contains Abamectin as the active ingredient, is an effective insecticide/ miticide for many different mite species and is typically recommended for control of mites both indoors and outdoors. Avid is a contact and translaminar miticide. *Translaminar* is a term that refers to insecticides/miticides that penetrate the leaf tissue and form a reservoir of active ingredient within the leaf. Avid generally provides up to 28 days of residual activity. Suggested rate for all mite species is ½ teaspoon per gallon of water. Avid is active on the mobile life stages of mites, with no activity on eggs. Although Avid is slow acting, treated mites are immobilized after exposure.

Neem - for control of Thrips - As an alternative to traditional chemical treatments, try spraying with Neem (Azadirachtin). Neem is a substance which has natural insecticidal properties, and according to currently available research, it is biodegradable and non-toxic. When sprayed on African Violets, it discourages Thrips by making the plant unpalatable. Though Neem does have some systemic effect in plants, spray it as you would other contact insecticides, being sure to spray in areas where Thrips are known to cluster. Remove all flowers and buds from your Violets.

Yellow Sticky Aphid Whitefly Traps - for Aphids, Thrips, gnats and other flying insects - Sticky strips are bright yellow plastic sheets coated on 2 sides with a specially formulated sticky glue. Place flat on the ground, hang them, or fasten them in place. Peel off the protective sheeting and they'll catch insects until covered with debris. Standard yellow strips attract insects such as Aphids, Fungus Gnats, Corn Rootworm, Whiteflies, Thrips, Mushroom Flies, and certain leafminers. Available in 2 sizes: 3"x5" or 6"x12".

Raid House & Garden insect spray - for Roaches and nuisance pests

Information regarding Miticides with Imidacloprid - Imidacloprid is the active ingredient in several widely used insecticides. Merit Insecticide™ is used extensively in commercial plant nurseries as well as in lawn and landscape insect control. Bayer Advanced™ brand insecticides are intended for the homeowner market and Premise™ insecticide is used for termites and other structural pest control. Imidacloprid is also the active ingredient in Advantage Flea Control and many agricultural insecticides.

Marathon - for prevention/control of Soil Mealybugs. When repotting African violets,

place wick in pot, add a layer of perlite, then some soil, then sprinkle some Marathon over the soil before placing the plant in the pot. Marathon is for foliar and systemic insect control. Active ingredient is **Imidacloprid.**