

Diagnosis & Treatment of Problems and Pests on African Violets

Symptom	Cause	Control/Treatment
Brown or scorched leaf tips or edges of leaves	Poor quality water.	Have water tested and follow laboratory recommendations.
	Soil too wet or too dry.	Correct inconsistent conditions.
	Poor air circulation	Try to get fresh air into the plant area at least once a day.
	Excessive dryness between watering resulting in poor root health.	Water regularly.
	Poor root health from excessive fertilization or other soluble salts in the soil. (Look for crystalline deposits on the outer edge of the soil and rim of the pot.	Leach out salts with plain water after every 4-5 waterings. Don't let plants stand in water. Repot every four months. Withhold fertilizer for one month. Use dolomite lime twice a month.
	Low humidity	Put plants on pebble trays; cover plant stands with plastic sheeting, use humidifier in the plant area, or mist daily.
	Pesticide injury	Spray damage in applying pesticide solutions.
	Mechanical (human) injury	Use knives and scissors carefully as they will nick and scratch leaves.
Leaf spots, blotches and/or blemishes	Intense light (like sunburn)	Reduce amount of light or move the plant away from the light source.
	Low temperatures	Increase heat in plant area.
	Chemical spray injury	Do not direct aerosols on plants. Spray over them, letting the mist fall on top.
	Water droplets on leaves	Blot any droplets dry before putting the plant in or under light source.
	Watering with cold water	Use room temperature water.
Yellow-green foliage on older leaves; leggy plant growth.	Insufficient nitrogen	Water occasionally with a high nitrogen fertilizer like fish emulsion.
	Compacted soil; poor drainage	Repot into the same size or larger pot, removing as much of the potting mix as possible without damaging the root ball.
	pH too high or too low (low pH = acidic soil; high pH = alkaline soil)	Repot in fresh mix with a proper pH ()
	Insufficient light	Increase light or move plant closer to the light source.
Yellow-green foliage on younger leaves	Soil pH imbalance (low pH = acidic soil)	Test soil to verify low pH; add a little dolomite lime to the potting mix and repot.
	Nutrient imbalance, especially iron deficiency	Use a fertilizer with trace elements or give the plant a "booster" shot of iron (chelate) additive.
Brown spot on leaves	Sunburn – too much direct sunlight	Filter direct sun with a shade or curtain.

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Generalized yellow-green foliage	Too much light	Reduce amount of light; move the plant away from the light source.
	High temperatures and dry soil.	Plants are very stressed; water carefully; reduce temperatures.
	Insects	Isolate plant and identify insect. It is taking its nutrition from the plant. Use appropriate means to get rid of it or destroy plant.
	Crown or root rot (fungus)	Over-watering is the usual cause. Check root ball, cut off diseased part. Make sure healthy roots are present. Remove as much of the soil as possible and repot in fresh, sterile potting mix. Or, take crown cutting and restart plant if not spread to crown.
	Soil mealy bugs	See next item for control/treatment
Wilting and/or drooping foliage	Soil mealy bugs	Isolate plant and inspect the soil for evidence, which looks like "small grains of rice" or powdery clusters. Use a systemic in the soil or water reservoir (Disyston in reservoir = 1 tsp. per 16 oz. water for 3-4 weeks. Then discard & replace with clean water.) Carolee's treatment: wash off as much soil as possible from the roots, pour isopropyl alcohol (70%) over the roots and the lower portion of the plant, wait a minute, rinse plant, drain plant on a paper towel. Then repot the plant in new potting mix and loosely cover with a plastic Baggie to create a greenhouse while the plant recovers (3-4 weeks).
	Aphids (small, pear-shaped insects clinging to the plant)	Sponge or lightly wash plant with soapy water. Apply an insecticidal soap. Watch plants closely for more infestations.
	Excessive dryness	Water regularly.
	Excessive fertilizer or other soluble salts in the potting mix.	Leach out salts with plain, aged water. Do not let plants stand in water.
	Compacted or poorly drained potting mix.	Repot into the same size or larger pot, removing as much of the old soil as possible without damaging the root ball. Use fresh potting mix.
Collapse of plant	Root rot from overwatering.	No known cure!
	Excessive cold or heat	Move plant to a spot with fairly consistent temperatures of between 65-70 degrees.
	Root shock when repotting	Remove some bottom leaves and mist plant several times a day with warm water. Or cover the plant loosely with a plastic bag, leaving a small opening.
	Excessive fertilizer salts in soil.	Try repotting or flushing out excessive fertilizer salts.
	Dehydration	Mist and water more frequently, especially on hot days.

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Crown or root rot (fungus); plant is wet or wobbly in the pot. Slight pull on a leaf, and either the leaf will come off easily or the whole plant will dislodge from its base.	Over-watering	Take a crown cutting. Clean as much of the rot away from the good part of the stem. Tap some cinnamon on the exposed stem and repot in fresh, damp potting mix. Cover with plastic to create greenhouse. Cut small hole in top of plastic to let excessive moisture escape. Plant should re-root in 5-6 weeks.
Dry, shriveled leaves	Heat too high	Move to a cooler spot or lower thermostat.
	Humidity too low	Use pebble tray with water. Set pot on pebbles above water line. Use cool vapor humidifier.
Brown, dry leaves in crown; excessively hairy leaves, possible webbing	Spider Mites	Isolate plant. Spray with Malathion, Insecticidal soap or Avid.
Tight centers; stunted growth	Excessive light	Place a paper towel over the center of the plant for one week. If the center begins to open, adjust light level.
	To little light	Move plant to a brighter area or supplement with a fluorescent light.
	Plant undernourished	Feed plant with a complete fertilizer, following directions.
	Cyclamen Mites (leaves in center twisted and brittle and finally gray)	Isolate. Look for bugs using a magnifying glass. Look for webbing. Spray with Malathion, Insecticidal soap or Avid. In no improvement, toss the plant.
	Soil pH too acid (too low)	Raise soil pH by adding lime or repot in soil with pH of 6.5 – 7.0.
	Pot-bound	The could occur after forced blooming, as for a show. Repot the plant.
Tight, brittle center leaves	Too much fertilizer	Water with solution of 1 tablespoon dolomite lime per gallon of water for two weeks when plant needs watering. Go easy on the fertilizer after that.
White sticky, cottony mass at the leaf axils; cottony spots on the leaves. Plants look dull, off-color.	Foliar Mealy bugs	Isolate plant. Dab cottony spots on foliage with a Q-tip dipped in alcohol. Spray with Malathion, Neem Oil or Insecticidal soap. Use a systemic in the soil or water reservoir (Disyston in reservoir = 1 tsp. per 16 oz. water for 3-4 weeks. Then discard & replace with clean water.)
Burned out crown	Pesticide spray	Do not let pesticide solutions sit in crown. Dab with an absorbent paper towel.
	Washing foliage	Blot crown and leaves dry with a paper towel.

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Leaves curl around pot	Excessive light	Move the plant from the light source, reduce the time the lights are on. Note that the color of the tray may reflect too much light. Cover the surface with a colored cloth.
	Cold plant area	Increase the heat in the plant area or move to a warmer room.
	Broad mites – brittle leaves curling around the pot or rolled under.	Isolate and spray plant, especially under the leaves with Diazinon, Kelthane. Hard to eradicate. Toss the plant.
Spilled pollen on petals; blossoms fade quickly (blow on a blossom, then watch for thrips to emerge)	Thrips	Disbud ALL plants in the room. Keep disbudded at least two months. Spray with Avid (1 tsp. per gallon of water), Conserve (1/4-tsp. per gallon of water), or Neem Oil. Use No Pest Strips nearby to attract any strays. Be careful not to enter the plant room after being in the garden. This includes your pets too!
Powdery patches on upper surfaces of leaves, stems and blossoms	Powdery Mildew (fungus)	Maintain humidity below 60%. Avoid temperature fluctuations or temperatures consistently below 70°. Remove affected blossoms, use household Lysol spray, sulfur spray, or Phyton 27 & spray according to directions. Use a fan in the room and increase space between plants for circulation. Neem oil can be used as a preventative.
No blossoms	Insufficient light	Increase light or move plant closer to light.
	Too cold	Heat plant area, or move plant to warmer room.
	Lack of or improper fertilizer	Too much nitrogen, not enough phosphorus and potash. Try a bloom booster fertilizer.
	Heavy or packed potting mix	Repot into a porous, light mix. Do not pack potting mix into the pot.
	Pot too large	Use pots that are approximately one-third the diameter of the plant.
	Soil mealy bugs	Isolate plant and inspect soil for evidence, which looks like "small grains of rice" or powdery clusters. Use a systemic in the soil or water reservoir (Disyston in reservoir = 1 tsp. per 16 oz. water for 3-4 weeks. Then discard & replace with clean water.) Carolee's treatment: wash off as much soil as possible from the roots, pour isopropyl alcohol (70%) over the roots and the lower portion of the plant, wait a minute, rinse plant, drain plant on a paper towel. Then repot the plant in new potting mix and loosely cover with a plastic bag to create a greenhouse while the plant recovers (3-4 weeks).

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Stems and leaves are limp, turn mushy, glassy, then rot	Over-watering	The potting mix holds too much water. Repot in a porous mix.
Loss of Variegation	Too much nitrogen in the fertilizer	Change to a fertilizer with less nitrogen. Do not fertilize with fish emulsion.
	Too warm	Wait for cooler weather. Use air conditioning or a ceiling fan in the plant area.
Ring spot	Impatiens Necrotic Spot Virus	No cure. Destroy the plant, get rid of thrips. Bleach all surfaces and tools.
	Water droplets on leaves	Blot off all droplets before placing plants in light.
Yellow edge around leaves (sometimes called "haloing")	Nitrogen deficiency or pH imbalance in the potting mix	Repot the plant in fresh potting mix with a pH between 6.5 and 7.0. Use a low-salt-content water.
	Transplant shock	It will eventually grow out.
Rusty-Orange crystal-like crust on hairs of the center leaves	Excessive fertilizer build-up	Pour warm water over the plant to dissolve the salt crystals and to leach the soil mix. Be careful to not overwater the plant for the next week or so, but don't stop fertilizing. Use a lower dosage (50% less) of fertilizer for a month and note difference.
Roots have bumps and swollen areas that look like "beads."	Nematodes	Toss the plant. If you are community watering, check all plants that share that area.
Leaves and stems are smaller than normal, plant growth is slow, leaf edges appear either pale or yellow.	Nitrogen deficiency	Repot the plant in fresh potting mix with a pH between 6.5 and 7.0.
Darkening of the veins in the leaves (early sign); darkened, water-soaked patches on leaves and wilting, rotting stems (mid-sign); collapse of entire plant (late symptom)	Erwinia (bacterial soft rot)	Avoid high humidity and maintain temperatures below 80°. Keep tools clean. Nitrogen may improve resistance. Use a copper-based bactericide such as Phyton 27 on healthy plants and destroy affected plants. Do not reuse soil from contaminated plants.
Premature dropping of buds and blossoms	Soil mealy bug	See treatment above.
	Cyclamen mites	See treatment above.
Flower buds fail to open, and if they do, they may be undersized, deformed or have colors streaked.	Cyclamen mites	See treatment above.
	Overwatering	Cut back on watering.
	Cold Drafts	Move plant out of draft.
	Cold Water	Use tepid water.
	Gas sensitivity	Move plant as far from gas source as possible and check for gas leaks.

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Honeydew-like droplets on leaves and stems	Aphids (small, pear-shaped insects clinging to the plant)	Sponge or lightly wash plant with soapy water. Apply an insecticidal soap. Watch plants closely for more infestations.
Small, light-colored pests scurrying around on the top of the soil or in the saucers	Springtails	Ignore them. They do very little damage to the overall health of the plant.
White spots on the edges of the leaves	Dried condensation	This occurs during "mildew weather" of warm days, cold nights and high humidity. Check plants early in the morning where dew drops may be seen along the leaf edges. Remove droplets with paper towel. If residue remains use a solution of a few drops of vinegar to one cup of water.