

## DIAGNOSING HOUSEPLANT PROBLEMS: How to keep plants out of the ICU

*Texas A&M AgriLife Extension Service — Galveston County Office*



PHOTO BY William M. Johnson

They're called "houseplants" but not one grows natively in houses. So really, we are asking quite a lot of such plants in our pursuit to cultivate them within the artificial environment of our modern-day homes. While some houseplants are quick to adjust to a home's environment, others struggle along suffering from one problem after another.

"Indoor gardening" can be an enjoyable and relaxing endeavor and, in some cases, can even help remove certain indoor air pollutants. Not surprisingly, one or more growing problems may enter the picture. A friend of mine who is a medical doctor recently told me that while he really enjoys house-

plants, they seem to need to spend too much time in the Intensive Care Unit!

As with our own health and well-being, prompt recognition of plant ailments is very essential and prompt correction or modification of the problem causing the condition is likewise essential.

I offer a personal experience on this matter. I had convinced myself over the years that it was not possible for me to grow African violets. My graduate school advisor had a sizable and amazing collection of African violets that he grew in his home. I guess I was so amazed at his collection that he shared two potted plants

"Indoor gardening" can be an enjoyable and relaxing endeavor and, in some cases, can even help remove certain indoor air pollutants. Studies have affirmed the calming effects real plants have on us in our environment, indoors or outdoors (pictured above are African violets).



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with me. I took them home and a few weeks later, they were dead and well on their way to the great compost pile in the sky.

That was some years ago. Fast forward to earlier this spring. Clyde Holt, a good friend and a Master Gardener, had a colorful collection of African violets on display at an educational program on propagation. When he offered a plant to me, I commented to him about my experience with this particular houseplant and intended to pass on his offer to share.

The next week Clyde deposits a "gardener's gift" of a potted African violet on my office desk. Clyde provided me with information on how to water and fertil-

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ize the plants as well as where to place the plant for best light exposure.

I have amassed a bit more horticultural experience and wisdom since grad school days so I was willing to give it another try. As with houseplants in general, knowing how to water is essential. I had to relocate the African violet from a west window during spring to a north window when summer arrived (due to changing light intensity).

Visitors to my office have typically commented on the robustness of my African violet as it usually has an abundance of beautiful blue flowers (see accompanying photo).

Here are 10 of the most common symptoms reflecting ailments of houseplants with probable causes for each:

**- Plants stretched, spindly with leaves sparsely spaced:** This indicates that light conditions are too dark, or that the plant is receiving too much water and/or too much fertilizer.

**- Lower leaves drop:** This can be expected for certain types of plants grown under indoor conditions (Dracaena, rubber plants, ficus and several others, for example). Sudden changes in light intensity can cause leaf dropage in any plant. It may also point to prolonged under-fertilization or under-watering.

**- Leaves bleached or blotted:** Usually too much light. This is often a problem in the summer when plants are first set out on the patio in excessive sunlight.

**- Stems rotted, decayed, or plants**

**wilt:** Excessive watering. Roots actually drown, plant vigor drops and infection may occur. Growth of green moss or algae on top of the soil is another good indicator of over-watering.

**- Leaves die at tips or around edges:** Again, a water problem—either low soil moisture or low humidity. A very common problem. Fluoride and chlorine in treated water can also cause this condition on certain houseplant species. Plants may be rootbound. Build-up of fertilizer salts can also cause this (see following section).

**- White crust on outside of clay pots and on soil surface:** These are accumulated mineral salts left behind as soil moisture evaporates. Minerals contain in tap water and fertilizers are the prime sources. A thorough leaching of the soil with water will usually take care of this situation, at least temporarily. When watering houseplants, be sure to provide sufficient water to permit some outflow through the drainage holes of the container to help reduce accumulation of excessive salts.

**- Plants refuse to flower:** Could be low light or improper fertilizer (especially excessive applications of nitrogen). Many outdoor flowers (geraniums, chrysanthemums, begonias, for example) don't prosper under low light conditions indoors. Some plants (kalanchoes, chrysanthemums, Christmas cactus, and poinsettias) must have long, dark periods at night to set buds and flowers.

**- Spotting on leaves:** Can be a particular problem on African violets and their relatives. Usually water

"burn"; however, can also be the result of chemical injury. When watering plants, avoid splashing water on foliage of sensitive species. Sometimes the water temperature is too cold, even when it comes from the tap especially during the winter.

**- "Things" crawling on leaves:** Red spider mites (which cause speckled yellow areas on the upper side of leaves), mealybugs and scale insects (which secrete honeydew causing black, sooty mold on leaves) do the most serious damage indoors. Insecticides intended for use on houseplants are available at your favorite nursery. Use these strictly according to label directions and, again, it is always a good idea to test the chemical spray on a leaf or two a few days before spraying the entire plant.

**- Disease spots on leaves, stems:** Your plant may have a disease problem, but it is likely the result of one of the other items previously mentioned. Diseases of houseplants are fairly uncommon, partially because sources of inoculation are limited indoors.

Armed with your newly found knowledge of what can go wrong with plants in the home, let's hope that at best you'll never need to make a diagnosis and, in the least, you can keep them out of the ICU.

Whether it's African violets or another houseplant, become acquainted with its needs, and your problems will likely be few!