Horticulture Hints

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Water and wilting

During the cold January weather, there is not much gardening to do outside. But for those with houseplants, we will take a look at the importance of water. In the past, grandma may have carried water straight from the well to water her plants. But nowadays, a variety of water quality factors should be considered.

Water still accomplishes the same role today in plant growth as back in grandma’s day. Nutrients are transported from the soil up through the roots to the foliage. Water is also responsible for a plant’s ability to remain erect, as without water, plant cells will not retain turgid, will shrink and thus wilting occurs. The tiny stomata or "pores" of the foliage that open and close to allow the plant to breath or transpire will seal shut when wilting occurs.

Some indoor foliage plants are more sensitive to lack of water, quickly wilt and may not recover. Permanent wilting point is when a plant reaches the stage of wilting from which it cannot recover as permanent cell damage has occurred due to lack of moisture. Fortunately, there are many houseplants that are more wilt tolerant and will recover.

Tip browning, yellowing, and leaf drop are other symptoms of lack of moisture. These same symptoms may also indicate use of chemicals in the water supply. City water is filtered and treated with chlorine or other disinfectants to help eliminate harmful microorganisms to ensure a safe water supply. However, these chemicals may affect sensitive houseplants, but chlorine rarely causes trouble in tap water used for plants, is that while moving through the municipal system, most of it volatilizes. To be on the safe side, let tap water stand overnight before using.

Use of a water softener adds salt to your tap water and the soluble salts can build up in the soil reducing nutrient uptake. Houseplants vary in sensitivity to salt, which can cause stunted growth, browning of leaf edges and wilting. Frequent leaching or running water through the pot can help to reduce salt buildup in the soil. Do not allow plants to reabsorb this water, as it contains salts and minerals that can be toxic when they're concentrated in the soil.

Excess watering can also cause a plant to wilt, as water-logged soil lacks air space for plants to breath, so the plant wilts and roots begin to rot. Repotting in fresh, dry soil may help to save a plant that has received excess water.

Did you know? Houseplants benefit from an occasional cleaning. Dust settles on leaves and clogs the stomata. Dust hinders light absorption as well as gas and moisture exchange. Give your houseplants a lukewarm shower to wash the leaves. Allow water to run through the soil, which helps to leach out salt and mineral build-up.

Gardening Questions? Contact McCormick at yvonne@iastate.edu for information or advice.