



## **Proper Watering of Houseplants**

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Nothing causes the indoor gardener more frustration than figuring out when to water their houseplants. Over-watering is probably the main cause of more houseplant failures. The first step is to make sure the plant is growing in a well-drained potting medium and that the container has drainage holes. Improper watering, along with waterlogged soil contributes to unhealthy roots. Likewise, a soil that is dry and hard as a brick isn't good either. One cause of houseplant decline is soluble salt injury. Soluble salts (potassium, calcium, ammonia, nitrates, sulphates, and chlorides) accumulate because of excessive use of fertilizer, improper watering, poor drainage, and/or decomposition of organic matter in the soil.

Some symptoms of soluble salt injury to roots include wilting, yellowing of the leaves, stunting, marginal and tip burning of the leaves, leaves falling off, and a crust of salt on the surface of the soil. If you knock the plant out of the pot, you may see unhealthy roots indicated by a brownish discoloration or even rotting. The presence of a whitish substance on the entire soil surface, or on the edges of the pot is another good indication of excess salts.

Repeated light waterings with little or no drainage of water from the pot favor salt buildup. If this practice is extended over a long period of time, the concentration of salts in the potting soil can actually become toxic and kill the plant. Salt levels in the potting soil can also become so high that they draw moisture from the roots giving them the brown or burned appearance.

Proper watering of the plant can easily prevent such salt accumulation. The best rule to follow when you water your house plant is to water when the soil is dry to the touch, the top of the soil is lighter in color, and the plant starts to wilt. Eventually you learn to gauge when the plant needs water without checking these items. Pour in enough water so that it filters through the soil and collects in the saucer or container under the plant. A thorough watering washes the soil free of the salts, which are carried out the drainage hole(s). After an hour, if water is still standing in the saucer, drain it off. In areas of extremely hard water, you may even want to use distilled water for an occasional watering of a much-prized plant. Most plants are happy when the soil is kept evenly

moist. However, cacti and succulents should only be watered every 2 weeks in the summer and only once a month or less in the winter.

Bottom watering systems are commonly used for African violets, which are sensitive to wet foliage. In such cases, the water is taken into the soil through holes in the bottom of the pot and passes up to the top of the soil. Salts in the water are carried up and deposited in the upper layer of soil. Loss of lower leaves resting on the rim of the pot, or rotting of the entire plant at the soil line commonly results. The only correction is to repot, skimming off the salt-encrusted top layer and replacing it with fresh soil. You can prevent salt accumulation by occasionally watering from the top to flush out the salts. On plants that have excessively salt damage, the plant should be removed and the plant repotted in fresh soil.