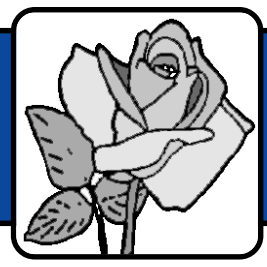


Horticulture

Deicing Salts Harmful to Plants

Deicing salts can save your neck this winter but they can spell disaster for landscape plants. Whether the salt is sprayed on the plants from passing traffic near the road, or is shoveled onto plants near the sidewalk, the salt can cause damage.

Salts can adversely affect plants in several ways. Salts deposited on the surface of twigs, branches, and evergreen leaves can cause excessive drying of foliage and roots. They can be taken up by plants and accumulate to toxic levels. Salts can also cause a nutritional imbalance by changing the chemistry of the soil and can directly harm soil structure.

The most apparent damage from salts is death of buds and twig tips as a result of salt spray. As the tips of the plants die the plant responds by growing an excessive number of side branches. But accumulation damage is more slowly manifested and may not be noticeable for many months. Sodium salts are the most common type used for deicing while calcium salts are used to a lesser extent.

Effects usually appear as stunting, poor vigor, dieback of growing tips, leaf burn or leaf drop. Winter and spring rains and large amounts of snow can help prevent accumulation by diluting the salt and helping to wash it out of the root zone. Protect roadside plants by constructing burlap or durable plastic screens to shield them from traffic splash. If screening from traffic is not practical, try to use salt tolerant plants such as junipers or Siberian pea shrub.

Avoid throwing sidewalk residue onto nearby plants including shrubs and ground cover. Use alternatives, such as clean cat litter, sand or sawdust, to help improve traction on ice. (MJF)

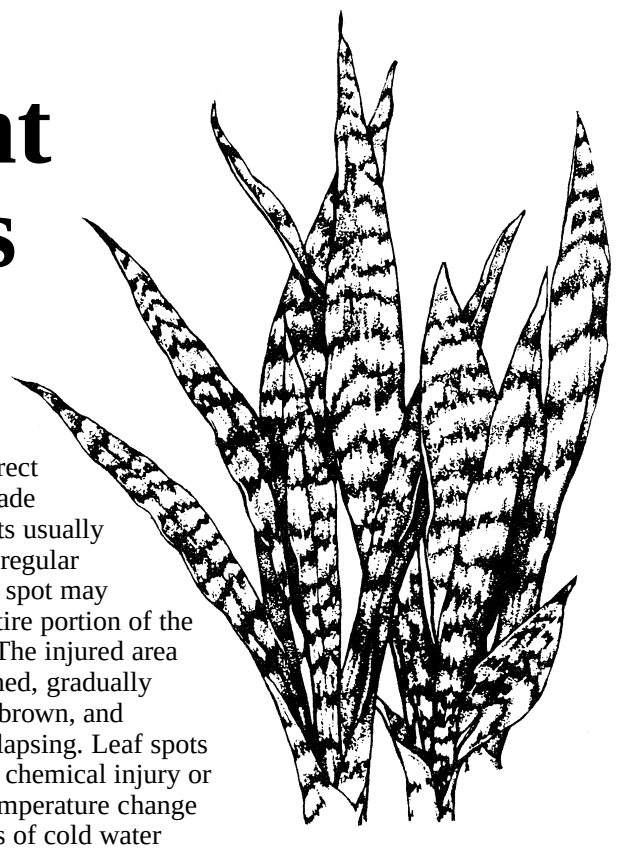
Horticulture information center

NUFACTS
24 hours a day, 7 days a week
1-800-832-5441; or
441-7188 in the Lincoln area

To listen to a NUFACTS information center message, call the number above on a touch-tone phone, then enter a three-digit number listed below.

NUFACTS	
210	Amaryllis
212	Swedish Ivy
214	Houseplant Insects
217	Boston Fern
218	African Violet Care
222	Winter Houseplant Care
223	Repotting Houseplants
224	Houseplant Artificial Light

Houseplant Problems



Living plants of various kinds are a popular addition to the decor of many homes, restaurants and other business places. Green and flowering plants serve as accents and also help soften hard architectural lines and wall surfaces. They also improve quality of living.

Although less harsh in many respects, the average indoor environment presents some unique problems for normal plant growth. Light intensities in homes tend to be low, especially during fall and winter. Low light results in small leaves, pale color, long spindly stems and flower failure. Lowered atmosphere humidity from the heating of homes causes rapid loss of moisture from plant surfaces, the soil surface and the outside surface of porous clay pots.

There are a number of other stress inducing factors that may cause problems. Most people over water their houseplants by maintaining the soil constantly wet. This can cause root rots that impair ability to replace moisture loss. A plant may outgrow the pot so its top is out of balance with the amount of soil in which the plant is growing. Such plants quickly exhaust the supply of water present in the soil and must be watered more frequently. Constant watering sometimes compacts the soil and reduces air space, which deprives the roots of adequate oxygen. This can reduce root development and plant growth. The soil may become “channeled” so water drains too rapidly and fails to thoroughly wet all of the soil in the container.

Determining the cause of some houseplant problems may be difficult and require skilled laboratory diagnostic procedures. Other problems are relatively simple to diagnose. Described below are some of the more common disorders and diseases, their possible causes and suggested corrective measures.

Leaf spots are quite variable in appearance, depending upon the cause. Spots caused by injury from direct sunlight on shade requiring plants usually are large with regular margins. Each spot may involve the entire portion of the exposed leaf. The injured area appears bleached, gradually turning tan to brown, and eventually collapsing. Leaf spots resulting from chemical injury or exposure to temperature change due to droplets of cold water usually are smaller. They generally are yellowish at first with regular margins conforming with the shape and size of the drops of chemical solution or water that caused the injury.

A number of leaf spot diseases are caused by fungi and bacteria. Symptoms usually are small, water soaked spots, gradually enlarging and turning brown. There also may be considerable yellowing around the margins of the spots. These diseases rarely develop under the dry atmospheric conditions prevalent in most houses. They are most common on plants recently brought into the state from southern propagating areas.

Leaf spots occasionally develop in the vicinity of feeding injury caused by sap sucking insects, such as aphids, scale and mealybugs. Plant surfaces in the vicinity of these insects often are covered by a glistening, sticky honeydew.

To control leaf spot you can: remove and destroy affected leaves, avoid sprinkling water on the foliage, provide adequate air circulation. If insects are involved, correctly identify the pest causing the problem. Control sap sucking insects by washing leaves, petioles and stems with a damp cloth or treating with a commercially prepared pyrethrin spray for houseplants. Rubbing alcohol also may be applied to insects such as mealybugs with cotton swabs. Systemic insecticides also will control sucking insects.

Yellowing leaves is often caused by nutrient deficiency, especially nitrogen, but also may occur as a result of a sudden reduction of light intensity. Dieffenbachia, dracena and rubber plant are especially susceptible, as are larger pot-bound specimens of other plants. Applications of nitrogen fertilizer may reverse the development of this condition when yellowing has just started. Be cautious about fertilizing plants during the winter months. Plants growing under low light intensities are easily injured by over fertilization. Older leaves are slower to respond, as are leaves in which yellowing is advanced.

Leaves and succulent shoots become limp or wilted, usually recovering when water is supplied. This may be evidence of water shortage or over abundance of water followed by the development of root rot. Over fertilization also can cause wilting. To control wilting, check drainage, look for root rot, check for conditions promoting unusually rapid loss of water and alter watering schedule.

Proper care of your houseplants will insure you will be able to enjoy your plants for years to come. (MJF)

Growing Cacti and Succulents

Looking for an interesting new houseplant? Beginners and experts can find many good choices among the cacti and succulents.

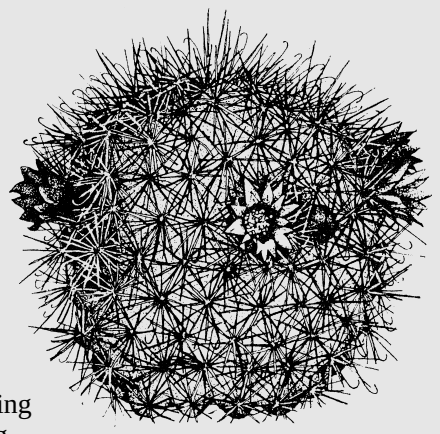
The term succulent refers to a broad, loose category of plants, including cacti, which have developed thick fleshy leaves or stems. These serve as water storage organs to insure survival under arid conditions. Succulents are found worldwide. Besides cacti, they include many familiar plants: jade plant (Crassula arborescens), medicine plant (Aloe barbadensis), century plant (Agave americana), flowering Kalanchoes (Kalanchoe blossfeldiana) sold as gift plants as well as sedums (Sedum sp.), and hens and chicks (Sempervivum sp.) that are common in the perennial garden.

Many cacti and succulents are extremely well adapted to living in houses where the relative humidity is low, 10 to 30 percent. They require only modest amounts of water and fertilizer, but do need abundant light. They should be placed in a bright, sunny window.

In nature, most cacti and succulents are found growing in open, well-drained sandy soil. These conditions should be duplicated indoors. A mix of one part potting soil and one part coarse sand is usually porous enough. A good test is to moisten the mixture and squeeze it in your hand. On release, the soil should fall apart. Both pot and growing medium should be sterile. Ideally, these plants should be grown in pots with drainage holes because excess water trapped in the soil will result in rotting and decay in a very short time.

During the low-light winter months, cacti and succulents should be watered only enough to prevent shrinking and withering. When watering, do it thoroughly. Water should flow through the drain holes, and the excess should be discarded after a few minutes. A series of repeated shallow sprinklings often results in distorted growth. As the amount of light increases in the spring, so does the plant’s need for water. The soil, however, should always be allowed to dry out between watering.

Many cacti and succulents benefit from spending the summer months outdoors. Once the weather warms up they should be placed in a semi-shaded, protected area of the yard and then gradually moved to a sunnier location. Avoid locations where they will receive the hot, intense sunlight from 11 a.m. to 3 p.m. Once outdoors, these plants will require more water and should be checked regularly.



Cacti and succulents are not troubled much by pests. If they have mealybugs or scale, the problem can be controlled by wiping them off with cotton swabs dipped in rubbing alcohol. Fungal or bacterial rots can almost always be prevented by maintaining adequate cultural conditions, which are bright light and proper watering.

Cacti and succulents can be propagated easily by stem cuttings. Many succulents will form new plants from leaves which have been broken off. Allow the cutting wound to air dry before sticking the cutting into slightly moistened, sterile sand. Water sparingly since moisture retention is not a problem. When the roots have formed, transplant into the regular sand and potting soil mixture. (MJF)