



# Garden Talk!

for the Heartland Garden Enthusiast

December 2003

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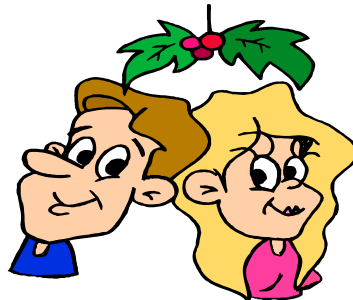
## MISTLETOE



Hanging mistletoe over a doorway during the Christmas holiday is a tradition that most Americans and a lot of people around the world have grown up with. But have you ever stopped to think about the story behind it? Where did it come from? Why do we kiss just because we're standing underneath some shrubbery?

Mistletoe (*Phoradendron flavescens* or *Viscum album*) is a **parasitic** plant that grows on trees, particularly hardwood trees like oak and apple. A parasite is a plant or animal that needs another plant or animal to survive. As mistletoe grows on a tree, it sends out its roots right into the tree's bark and takes nutrients from the tree. Sometimes, mistletoe can harm a tree and cause deformities in a tree's branches, but usually it doesn't kill its host. If the host dies, the mistletoe dies. Mistletoe is easy to spot in winter because its leaves stay green all year long. In the United States, it grows in tropical and subtropical regions (from New Jersey to Florida and in the Southwestern United States).

Mistletoe has pointy, green, leathery leaves, with waxy berries that are either red or white. The plant's flowers can be a wide variety of colors, from bright red to yellow to green. Ingesting mistletoe can cause severe stomach cramps and diarrhea, and in some cases can be fatal. If you have mistletoe in your house this holiday season, be sure that it is in a place where children and pets won't be able to get to it.



The custom of using mistletoe, which was widespread among the Anglo-Saxons, was connected to the legend of Freya, goddess of love, beauty and fertility. According to legend, a man had to kiss any young girl who, without realizing it, found herself accidentally under a sprig of mistletoe hanging from the ceiling.

The custom of exchanging a kiss under the mistletoe can still be found in many European countries as well as in Canada. Thus, if a couple in love exchanges a kiss under the mistletoe, it is interpreted as a promise to marry, as well as a prediction of happiness and long life. In France, the custom linked to mistletoe was reserved for New Year's Day: "Au gui l'An neuf" (Mistletoe for the New Year). Today, kisses can be exchanged under the mistletoe any time during the holiday season.



## LIVING WITH HOUSEPLANTS

Houseplants come in a variety of sizes, shapes, colors, and textures and help beautify our home. They have been proven to improve our health by lowering blood pressure and removing pollutants from the air we breathe. You can always find houseplants to match the environmental conditions in your home. The most important factors are light intensity and duration.

When selecting indoor plants for the home, first consider the characteristics of the location; the amount and duration of light all year long. A second factor often interrelated to light exposure is temperature. Usually the temperature of the house governs this, however, window exposures can become quite hot because of the sunlight penetration and lack of air movement. Danger signs that conditions are too warm are wilting leaves with brown margins, short-lived flowers and spindly growth. Conversely, keep your plants away from air conditioning vents in the summer. Sudden temperature fluctuations can cause rapid yellowing and drooping leaves. Curling leaves that turn brown and drop also indicate that it is too cold.

Most houseplants prefer a humidity level of 50% or more. Houseplants may suffer in the winter from lack of humidity. A method to increase humidity is to place the plants in a pebble tray. This is a tray filled with pebbles and filled with enough water to reach to just below the pebble's surface. The water evaporates from the tray up into the air around the plants increasing the relative humidity.

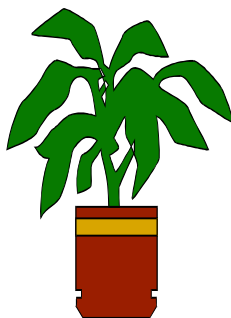
Before watering your houseplants stick your finger in the soil one inch down from the surface. If the soil is dry, you need to water your plant. Use tepid water and moisten the soil until the water is coming out of the bottom of the pot. Overwatering is one of the most common causes of houseplant problems. Do not let plants sit in water.

Houseplants need adequate amounts of fertilizer to grow. Look for a balanced plant food with N-P-K analysis like 10-10-10. Feeding should be done only when the plant is actively growing or flowering. Do not over-fertilize.

Remove any shriveled or discolored leaves and clean dust from your plants to make it look more attractive and allow it to function more effectively.

Some houseplants can get out of hand and deteriorate if not regularly pruned. Pruning can modify and redirect growth, improve structure, reduce size, as well as remove diseased branches and foliage. Prune with sharp clean scissors.

Plants in pots up to 10 inches in diameter should be repotted annually. Large container plants should be repotted every 2 years. This prevents the plant from becoming root-bound. Root-bound plants have very slow leaf and stem growth. The soil dries out quickly even with frequent watering and roots may be growing out of the drainage holes.



## SURE WAY TO KILL TREE STUMPS & TREE PLANTING IDEA

By: Russ Heindselman  
Gardener from La Grange, MO

Some of the hardest to kill tree stumps are Thorn Locust, Mulberry, and Osage Orange. Many other tree stumps are also hard to kill even with full strength brush killer. Sometimes it rains right after application and it washes off some of the brush killer. A better way to insure killing of the tree stump is to take a cordless drill with a 1/4" bit and drill a row of 1" deep holes about 2 inches apart around the outside edge of the stump about 1" from the stump edge. When you paint or apply the stump killer or brush killer make sure the 1" deep holes are full of the chemical. This penetrates the stump for sure kill.

When planting new tree seedlings, especially in gumbo bottom soil or tight clay soil with a back hoe or shovel, dig a 4 foot square hole 15 inches deep. This makes loose soil for the new lateral root to establish and expand. This method will double or triple the growth rate over just digging a slightly larger hole than your seedling root mass or root stem. New lateral roots have a hard time penetrating tight soils.

Note: Never plant deeper than the root ball.





# WINTER STRATIFICATIONS

By: Dr. Mary Ann Gowdy  
Assistant Professor, Dept. of Horticulture,  
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Cold winter winds, freezing rain, and falling snow; winter is quickly approaching. Although we usually dread the winter season, nature relies on these conditions to promote plant propagation.

Most woody plants produce a crop of fall maturing seeds. At maturity the plant drops, or sheds its seeds. Seeds commonly fall to the ground directly under or near the tree that produced them. However, many seeds are carried to distant locations by wind, water or animals. Regardless of where the seeds ultimately land, if they were to immediately germinate the newly emerging seedlings would be killed by Cold temperatures and harsh winter conditions.

Since the survival of many woody plants depend on seed propagation, germination must occur at a time when seedlings will survive and grow. Nature has developed a mechanism that prevents fall produced seeds from immediately germinating; it's called dormancy.

Trees and shrubs produce seeds that commonly have an internal type dormancy. Cells deep within the seed are physiologically dormant and cannot become active, even if exposed to warm conditions. Without cellular activity, germination will not occur. Cellular dormancy is overcome by exposing seeds to cool conditions for a designated period of time. This process is called stratification. The length of cold treatment required varies with each plant species; however, 3 months of stratification is quite common for many species.

For seeds to perceive the cold temperatures they must be moist and well aerated. Nature provides these conditions by covering fallen seeds with leaf litter; snow, sleet and rain wets the leaf litter and the seeds stay moist. As the temperature drops the seeds are chilled. After the seeds have received the required period of stratification, the internal cells are activated and germination can occur. Coincidentally, this activation phase occurs in spring as the natural temperatures outdoors are warming.

Home gardeners can stratify large quantities of seeds using natural outdoor conditions. Begin by researching the crop of interest, determining when to collect seeds, the stratification requirements etc. For example, hickories can be collected when they fall to the ground and require at least 90 days stratification. Till an area in the garden and bury the seeds 1.5 inches deep and 2 inches apart. If you're concerned about hungry rodents feasting on the stratifying seed, fabricate a small box or cage from wire and place the seed/soil mixture in the box. Bury the box so the seeds are 1.5 inches deep. Mulch the site well and water thoroughly; nature does the rest. Remove the seeds from the stratification bed in early spring, sowing them in their permanent location. Germination should occur as the soil naturally warms.

In January, try to remember that the falling snow and howling winter winds are serving essential roles in the natural propagation of many woody plant species.

# WINTER SEASON MULCHING

As the winter season approaches plants need greater protection from cold temperatures and dry, winter winds. The principal reasons for winter mulching are to provide more uniform soil moisture and to protect the plant from severe temperatures during cold weather. Winter mulches generally are applied around and over the tops of low growing plants after the plants are in a dormant or inactive stage of growth. Mulches used to help moderate winter temperatures can be applied late in the fall after the ground has frozen but before the coldest temperatures arrive. Applying mulches before the ground has frozen may

attract rodents looking for a warm over-wintering site. Delayed application of mulch should



prevent this problem, as hopefully the creatures would already have found some other place to nest.

Mulches used to protect plants over winter should be loose material such as straw, hay, or pine boughs that will help insulate the plants without compacting under the weight of snow and ice. One of the benefits from winter applications of mulch is the reduction in the freezing and thawing of the soil in the late winter and early spring. These repeated cycles of freezing at night and then thawing in the warmth of the sun cause many small or shallow rooted plants to be heaved out of the soil. This leaves their root systems exposed and results in injury or death. Mulching helps prevent rapid fluctuations in soil temperature and reduces the chances of heaving.

# GARDENING TIPS FOR DECEMBER

## HOUSEPLANTS

- On cold nights, move houseplants back from icy windows to prevent chilling injury.
- Over-wintering geraniums like bright light and cool temperatures. Keep soils on the dry side.
- Water houseplants with tepid water. Cold tap water may shock plants.
- Be sure newly purchased indoor plants like poinsettias are protected for the trip home. Exposure to cold temperatures even for a few moments may cause injury.

## ORNAMENTALS

### WEEKS 1-3

- Hollies may be trimmed now and the prunings used in holiday decorations.
- Only the female hollies bear the colorful berries. There must be a male plant growing nearby for pollination, if fruits are desired.
- Christmas trees hold needles longer if you make a clean, fresh cut at the base and always keep the trunk standing in water.

## MISCELLANEOUS

### WEEK 1

- Clean and oil all garden hand tools before storing for winter.
- All power equipment should be winterized before storage. Change the oil and lubricate moving parts.
- Apply mulches to bulbs, perennials, and other small plants once the ground freezes.
- If you feed rabbits corn or alfalfa, they may leave fruit tree bark alone.
- Hairspray works well to keep seed heads and dried flowers intact on wreaths and arrangements.

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## UPCOMING EVENTS

**December 5 & 6:** Missouri Livestock Symposium, Kirksville, MO. Visit [www.missourilivestock.com](http://www.missourilivestock.com)

**January 9-10:** Great Plains Vegetable Conference, Ramada Inn, St. Joseph, MO

**January 20-22:** Mid-America Fruit Grower's Conference, Excelsior Springs, MO; **For more information contact Dr. Michele Warmund at 573-882-9632.**

**April 3, 2004:** Salt River Master Gardeners 2nd annual "Spring Forward" educational conference. Quality Inn and Conference Center, Hannibal, MO



## 'Tis the Season..... To Buy Missouri Christmas Trees!

By: Dr. Hank Stelzer,  
Extension Forester, University of Missouri-Columbia

The holidays are just around the corner. While we don't want to get into the great debate of real vs. artificial Yuletide traditions, we do want to encourage those who prefer the real deal to think Missouri-grown this season.

The past few years have seen the big box home improvement stores market their trees at ridiculously low prices. They use this seasonal product as a hook to get buyers in their doors. Consumers love it because they think they're getting a bargain.....but are they? Most of the large chains purchase their trees from national wholesalers who begin harvesting their trees as early as mid-October to ensure they arrive at the store in time for the big Thanksgiving weekend. As we said, the store manager views losses on the sale of Christmas trees will be offset by the consumer buying other items while at the store.

Christmas trees, like any living plant you buy, are best fresh. What better way to ensure freshness than to buy a Missouri-grown tree? Either at a choose-and-cut farm or at the lot run by your local charity who bought their trees from a Missouri producer, the consumer can't go wrong. They are buying a fresh product that will last longer (if properly taken care of) and they are supporting the local economy.

So, this Christmas, think real and buy Missouri! To find a local producer in your area, go on-line at:  
[www.missourichristmastrees.org/memberlist.html](http://www.missourichristmastrees.org/memberlist.html)



## Garden Talk!

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