I have a humidifier in my house, is there anything I can add to my tap water to make it distilled?

Answer: The simple answer is no. Water is distilled through a several step process and there are not proven additives you can add to distill your tap water. Distilled water is water that has had many of the naturally occurring minerals such as calcium removed from it. It is best to use distilled water with a humidifier because it will not promote the build-up of mineral deposits within the machine. The deposits can increase maintenance needs or contribute to shortening the life of your humidifier.

Source: water.unl.edu

SPLASH INTO EXTENSION

Iron & Maganese in Water

Discolored water. A strange odor. Stained ceramic fixtures such as tubs, sinks and toilets. Discolored clothes, towels and dishes. Reduced water pressure. These are all some of the potential impacts from high levels of iron and manganese in your water supply.



Black or brownish-black or reddish-brown staining can indicate the presence of higher levels of manganese or iron in water. The stains are not easily removed by common household cleaners and some may even intensify the stains. Manganese and iron are naturally occurring metals in soils. Higher levels of iron and manganese is not an uncommon occurrence in Nebraska because of naturally occurring soil types and hydrogeologic conditions.

Secondary Contaminants - The United States Environmental Protection Agency (EPA) classifies iron and manganese as secondary contaminants. Secondary contaminants are substances that can alter the taste, odor and color of drinking water. They can also have impacts on the structure or function of the water system within the home, the water well itself or, as noted above, personal belongings and home fixtures. Generally, secondary contaminants do not pose significant health risks.

Iron or manganese bacteria is a common problem when there are elevated levels of iron or manganese in water. These bacteria, unlike other bacteria such as e-coli or total coliform, do not pose a health risk but they are often the cause of blackish or reddish slime that builds up in toilet tanks or within the pipes within your water system. Manganese and iron deposits in pipes and other water fixtures can cause significant

impact to your water system or energy costs.

Testing & Treatment - If you notice staining or discoloration you should begin by having your water tested to determine iron and manganese levels or the presence of iron and manganese bacteria. The test results can then be used to determine appropriate treatment or mitigation options.

The most common treatment options for iron and manganese in water are ion exchange water softeners, oxidizing filters, aeration followed by filtration, and chemical oxidation followed filtration. These treatment options are all considered point of entry (POE) treatment methods and therefore provide treatment to all areas of your home's water system.

Shock chlorination is a common treatment method to remove iron and manganese bacteria. Shock chlorination is a process involving introducing a chlorine mixture directly into your well and thoroughly flushing that chlorinated water through your home's water pipes and the well components. It is an effective but often short term method. Repeated shock chlorination treatments can cause corrosion or damage to well components. A call should be placed to a water treatment or water well professional if frequent shock chlorination is treated to determine possible alternate treatment methods and inspect the well components and well itself.

Whiteflies-tiny pure-white gnat-like insects; fly up from undersides of plant leaves when disturbed

Whiteflies are a fairly common pest of poinsettia. If brought into a home on infested plants, whitefly populations multiply rapidly. Inspect plants closely for signs of white flies, such as sticky leaves; or for the insect itself. Whiteflies are not flies. They are related to aphids, mealybugs and scale insects and feed on plant sap. Adult whiteflies are very tiny and have wings covered with a white powdery wax. Adult females can lay between 200 and 400 eggs. Upon hatching, flattened nymphs or crawlers attach themselves to leaf undersides and feed for about four weeks before pupating. Whitefly feeding leads to weakened plants and leaf yellowing and dropping.

Consider discarding heavily infested plants as white flies are challenging to control. For smaller populations, yellow sticky traps are recommended to reduce their numbers or contact your local extension office for recommendations on how to safely apply insecticides.



IN THE DIRT

Fun Facts & Safety Tips about Holiday Plants

By: Kelly Feehan, Extension Educator

Holiday plants are a major part of this festive season. Here are some fun facts and safety tips about common holiday plants.

If you have real mistletoe, be aware all parts of this plant are toxic. For safety, it needs to be kept out of reach of children and pets.

While mistletoe may bring thoughts of kissing a loved one, in the plant world it is a parasite found hanging in tree branches. Some can kill the tree they are growing on.

Mistletoe cannot live without a specific plant host. The berry has a glue-like substance that allows it to stick to trees where it germinates and grows on the tree, obtaining nutrients and water from its host plant.

Christmas cactus also grows on tree branches but they do not harm the trees they grow on. They are epiphytes which is a plant that grows on another plant but does not parasitize that plant.

They are native to the rain forests of Brazil where they grow on trees in a very humid environment. For this reason, they need indirect light and consistently moist soil even though we call them a cactus.

They are thermo-periodic plants which simply means they need short days and cool nights to bloom. If a Christmas cactus is not blooming, provide cooler nights and 15 hours of complete darkness each night.

The dark period needs to be uninterrupted. Place the plant in a closet and cover it with a black cloth, plastic bag or box. This treatment of cool nights and short days needs to begin 8 weeks before you want Christmas cactus bloom. Stop the short day treatment once flower buds begin to form.

While Poinsettia has long had a reputation for being poisonous, like Christmas cactus it is not toxic and can be enjoyed without this worry.

It is hard to believe these bright, colorful plants originated from a common weed and the colorful parts we enjoy are not flowers at all but leafy bracts.

And Poinsettia is proof of what plant breeding and good marketing can do. Poinsettia's popularity grew after the plant was used to adorn the Johnny Carson television stage during holiday seasons. And how did ornamental pepper become a holiday plant? Through plant breeding of course. The heavy crop of small, bright red cone-shaped fruits have made them popular as potted holiday plants.

While the fruits of ornamental peppers are edible, some of them can be quite hot so keep them out of reach of children and pets. They would not enjoy the heat of some of these peppers if they tasted one or handled them and then rubbed their eyes.

Another plant sold at the holidays for its bright red and orange fruit is Jerusalem cherry. Do not confuse these plants for ornamental pepper. Jerusalem cherry has round berries and they are poisonous.

Other holiday plants listed poisonous include Holly, Japanese Yew (used in greenery), Amaryllis, Cyclamen, Kalanchoe and Gardenia.

While the severity of toxicity of these plants often depends on the size and weight of the person or pet ingesting them and how much they ingest, being sick during the holidays is never fun and a reaction or toxic effect can be quite severe.

Play it safe and keep all plants, even those listed as not poisonous, out of reach of children and pets.



GARDEN GUIDE - THINGS TO DO THIS MONTH

- January is a good time to order flower and vegetable seeds. Many varieties sell out early.
- To prolong bloom, protect poinsettias from drafts and keep them moderately moist.
- Turn and prune house plants regularly to keep them shapely. Pinch back new growth to promote bushy plants.
- Avoid heavy traffic on the frozen, dormant lawn. The crown of the plant may be severely damaged or killed.
- Brush snow from evergreens as soon as possible after a storm. Use a broom in an upward, sweeping motion. Serious damage may be caused by heavy snow or ice accumulating on the branches.
- Use sand instead of salt for icy spots on the sidewalk.
- Feed the birds regularly and see that they have water. Birds like suet, fruit, nuts and bread crumbs as well as bird seed.
- Check young trees and shrubs for rodent or rabbit damage. Prevent injury with fencing or protective collars.
- When reviewing your garden catalogs for new vegetable varieties to try, an important consideration is improved insect and/or disease resistance.
- Check stored fruits and vegetables such as potatoes and apples for bad spots which may lead to decay.