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U of A Cooperative Extension, Pinal County 820 E. Cottonwood Lane, Bldg. C., Casa Grande, AZ 85122
(520) 836-5221 **http://extension.arizona.edu/pinal**

CHOOSE UNUSUAL HOUSEPLANTS

If you like to grow plants inside your home and you are wanting to add something different to your collection, consider these eight less common and easy-to-grow indoor plants.

Indoor plants, of course, offer many benefits. They filter air and return oxygen to the environment. They increase humidity levels in our dry, air conditioned buildings. They soften the sharp lines of a corner or a piece of furniture, and they can brighten up a room with a touch of the outdoors. For many of us, indoor plant culture, for whatever reason, is hard to resist.

Old friends like philodendron, ficus, and rubber plants are indeed comfortable and fun. They are easy to find in the stores and we pretty much know what care they need. Still, when it comes time to select a plant, should they really be the only ones we consider? I think that most of us would answer "no" to that question. Sometimes we just have that craving to add a touch of the new to spice things up. The challenge is deciding what we want and where we need to go to find it.

While I am going to suggest eight different plants here, there are many others to consider. You might want to consult a good indoor plant reference for inspiration. As far as where to find them, I would check the local nurseries and flower shops first. If they do not have the one you want in stock, they might be willing to order it for you. Another way is to find a friend who has the plant and who would allow you to propagate a new plant from theirs.

In selecting these eight, I conferred with other indoor plant enthusiasts. They were kind enough to tell me their favorites. Each of them have a distinct growth form or color pattern that gives them a different look from other more common houseplants.

The first plant is the Norfolk Island pine, Araucaria heterophylla. Now this plant is not the normal pine tree that you would expect. Native to the South Sea island of Norfolk, between Australia and New Zealand, it does well in cool temperature conditions. It prefers bright light but not direct sunshine. It is slow growing but can reach up to three to six feet. The fronds do spread to the sides so it will need some room to grow.

Staghorn fern, Platycerium bifurcatum, is an interesting plant. It is a true fern and does well with filtered light, such as behind a sheer curtain in an east-facing window. It will withstand low temperatures, even down to about 20° F so it could conceivably work well in an outdoor covered patio setting. Most commonly grown on bark, it works well in

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hanging baskets. It can grow up to three feet high.

I really like the ZZ plant, Zamioculcas zamiifolia. It is said to be one of the easiest houseplants to grow and its dark green leaves make it striking in the collection. A member of the arum family, it has a spiky flower stalk with a protective leaf-like, yellow or copper colored spath that protects it. For this reason, it does provide interesting color contrasts in its display. It grows from an underground stem, called a rhizome, and if, for some reason, the plant dies back, such as when it does not get enough water, the plant can quickly grow back. It is my kind of plant, for sure. It can grow up to about two feet tall and it takes deep shade very well.

The Hindu rope plant is also known as the wax plant, Hoya carnosa compacta. It has thick, waxy leaves that are borne along a stiff stem. Because the leaves cup around the stem, it takes on the appearance of a rope, so both names are descriptive. It does produce flowers when it matures but it is a slow process. It prefers moderate to bright filtered light, but does not like direct sun nor excessive heat.

There are several species of the Peperomia each with different leaf characteristics, such as shape, color, and size. You could fill up an entire building just by selecting one of each species and variety. Some people indeed do specialize in Peperomia just as others focus on orchids or succulents. All plants are rather small with the largest reaching only to ten or twelve inches high. Most of the various types are slow growing with oval leaves. They prefer medium sunlight but struggle at the extremes of full sun and deep shade.

The familiar poinsettia, Euphorbia pulcherrima, makes a great houseplant after the holidays. Some people just toss them out after their brilliant red leaves turn back to green but the deep color of the leaves makes them an attractive houseplant. They require bright light, such as in a sunny window, and they need to be protected from sudden temperature changes. Temperature changes are one of the main stress factors that cause them to drop leaves. Given good care a poinsettia can actually become fairly tall so it will need adequate space to grow.

Another species from the Euphorbia, E. trigona, has many generic names but the most common seem to be the African milk bush and cathedral cactus. While it is not technically a cactus, it does have that appearance, which is why many seem to like it so well. Its main stem and any side stems tend to grow upward so it has very little spread to its frame. This makes it perfect for tight spaces. The stems have an interesting three-sided shape and produce small thorns which give it a cactus appearance. It prefers a well-drained soil with a mixture heavy on the sand. It is a slow growing plant but can reach up to nine feet in height. As it grows, you should have plenty of time to figure out where to put it when it begins to approach the ceiling.

The last of the group is another interesting plant called string of pearls, Senecio rowleyanus. The leaves are round, green, pea-sized and attached to, and separated by, a small string-like stem. As the stem grows, and more leaves form, the strand takes on the look of, well, a string of pearls. It can stand bright light so many choose to put it in a south-facing window. It prefers a well-drained soil and works well in a hanging basket where the strands can hang down. As a succulent, it needs little care and it is quite simple and easy to propagate new plants from cuttings.

Well, there is the list. All of them are tried and tested as indoor plants and do not require a lot of fussing to give them proper care. Start searching among your house plant friends and ask them for a start, clipping, or cutting. In no time you will have a collection that includes not only your old friends but newcomers too.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvertooth, Associate Dean & Director, Economic Development & Extension, College of Agriculture and Life Sciences, The University of Arizona.

Irrigate Landscape Plants Even When It Rains

It is important to keep irrigating our lawns, trees, and shrubs even when it rains.

Many people feel that when it rains they can turn off their automatic irrigation system for a time and enjoy the free water from the sky. I would submit that this decision can be risky for two basic reasons: salt accumulation and insufficient water. The reasons for this are embedded in the science.

First of all, let's ask a simple but key question. Will rain water sink into my garden soil? In most cases, yes, it will, but how deep it will go into the soil, and how much of it will run off are also key questions. The answers to these questions are based upon the rules that govern water penetration into soil. There are many rules, of course, but here are some of the most common: 1) the amount of sand versus clay in the soil, 2) the level of soil compaction, 3) the amount of organic matter mixed into the soil, and 4) the types of salts found in the soil. How deep water will sink into your soil will often depend upon these soil characteristics.

You can measure the depth of water infiltration in your own yard by running a soil probe or a long screwdriver into the ground after any irrigation or rain event. When the probe hits dry soil, it will stop short. Removing the probe from the ground allows you to measure the depth of water penetration.

Depth of water penetration is important for plant health because it is the water around the roots that allows the roots to function. When we irrigate, we expect the water to sink down and wet the entire root system of the plant. For bedding plants, the soils should be moist down to a level of about one foot. For shrubs, it needs to sink down two feet, and for trees, three feet. We call this the Rule of 1-2-3, or one foot, two feet, three feet.

When a shrub receives water sufficient to wet the soil only to one foot instead of two, or a tree receives enough to wet two feet instead of three, the plant will be short of water. After a rain, we will generally find in most desert soils that the water provided from even significant storms will penetrate only down about an inch or two. Clearly, the benefit to plants from such a shallow irrigation is limited.

Before we go any further, let me emphatically state here that I am not saying rain is bad. Nope, I would never say that. The drought is too prevalent and overpowering for any of us ever to disparage a single drop of rain. I am saying, however, that there are some very important landscape management decisions that must be made when it rains, just like there are other important decisions to make when it does not.

If it does not rain, I believe that most of us know that we have to irrigate, and do it right. The water needs to extend out to the drip line of the tree or shrub, and it needs to fill the entire depth of the root zone. The irrigations must also be timely, meaning that they need to be frequent enough to prevent the soil from drying out, but not so frequent that the soil at the six-inch depth stays sloppy wet all the time.

If it does rain, it is a slightly different story. I suggest again that the irrigation system should remain on, even with the extra moisture from the rain, to prevent salt accumulation and to push the free rainwater down deeper into the root zone.

Why am I worried about salts? I worry about them because they can seriously affect the health of many of our landscape plants. Found naturally in desert salts, when they reach toxic levels inside a plant, they can kill tender tissues and create other problems. Since they are dissolved in the water found in the soil, they can easily be picked up by roots. While they are found throughout the wetted area, they tend to accumulate in two places, 1) at the lowest edge of the wetted pattern, and 2) at the surface of the soil.

How do we prevent salt injury? We leach them out of the root zone with deep irrigations. Well and good, you say, but what does this have to do with rainfall? Look at the surface of the soil. Remember the white ring found at the outside

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edge of wetted areas? That is salt. Salt also accumulates at the surface of the soil underneath plants as water irrigation water evaporates and leaves it behind. A shallow irrigation, or a rainstorm, can dissolve them and move them down into the soil, usually just far enough for roots to find them and absorb them. For these reasons, good drip irrigation system managers know to turn the water ON when it rains, not off. The extra water keeps the salts moving down and out of the root zone.

The second problem with relying on rain alone is the total volume of water received into the root zone. Theoretically, of course, a one-inch rain should, in a soil with a medium amount of sand, sink about twelve inches, or one foot, into the ground. It is the general rule of thumb and it works in a perfect world. Because of salt accumulation or physical compaction which can seal off the soil pores and slow water penetration, excess water tends to run off. In desert landscapes, where there is little organic matter and soil compaction tends to be a problem, water penetration to any depth can be a challenge. In addition, we are often lucky to get even a fraction of an inch which is obviously not enough for even the most hardy of plants.

Yes, there have been a few heavy rainstorms this summer. Some locations have reported two and three inches of rain. However, the rate of delivery, and the slowness of the soil to absorb this much water, tend to cause most of this rain to run off site and end up lost to somewhere else. In most cases, the rains we receive here in the desert are mostly ineffective as irrigations for our plants. If a quality irrigation needs to wet the entire root system, our rains simply do not get the job done. Remember the Rule of 1-2-3.

Now that I have depressed you about the bad things that happen in the garden because of rain, let me assure you that there are good things too. The biggest benefit is the increase in humidity in the air. Remember that the leaf cools itself in the hot summer air by releasing water vapor from tiny holes in the bottom of the leaf. It acts just like the swamp cooler in our homes. The movement of air through water vapor tends to cool the air and the leaf.

The second fact is that water vapor exits the leaf at a rate that is dependent upon both temperature and relative humidity. The hotter and drier the outside air, the more water a leaf must release to keep itself cool. Thus, in the month of June when it is close to 120°F and the relative humidity levels are low enough so as to be almost nonexistent, a plant's water demand is at its highest level. As soon as the rains start, and the relative humidity levels increase, the amount of water a plant needs to release goes way down. We can irrigate less often.

Still, it is important to keep it all in perspective, both the benefits and the challenges. Over all, the fact remains that plants growing in our gardens and landscapes have a tough enough time as it is without forcing them to live on rainfall alone. For the good of our plants, it is important to keep on irrigating, especially when it rains.

Mistletoe Problems in Desert Trees

There is a host and pest relationship among desert trees and mistletoe that can be both entertaining and terribly harmful, depending upon your point of view.

For those who may be unfamiliar with these flowering plants, the various Arizona mistletoes are perennial, shrubby, woody or semi-woody flowering plants that attach themselves to other plants and steal water and nutrients from the host plant. Because they are dependent upon these host plants for nourishment, they are called parasites. Unlike dodder, which lacks any ability to produce food for itself, the mistletoes do contain the green pigment chlorophyll that allows them to manufacture food from the energy of the sun. In other words, they can feed themselves through photosynthesis but are completely dependent upon their host plant for water, nutrients, and other goodies.

In the desert Southwest, there are about a dozen different species of mistletoe that affect trees and shrubs. Each of these species have the ability to invade the living tissue of host plants and extract water and nutrients for their own growth and development. Most of them are quite host specific, meaning that they can only infest a very few types of plant. For example, we will not find the juniper mistletoe infecting a mesquite tree and one that infests mesquite to grow on a juniper. That is a good thing because, if we are interested in control, it is easier to focus on the demands related to one species without the distraction of focusing on another.

All mistletoes are thieves. Whether they are of the dastardly type, such as the Sheriff of Nottingham, or of the benevolent kind, such as Robin Hood, again is dependent upon your point of view. However, in either case, their presence can remove much strength from the host tree in a short period of time. Heavy infestations are particularly stressful. In addition, they can weaken wood and clog up the water and energy tubes in the branch as the mistletoe continues to twist and distort the shape of the branches. The loss of strength coupled with the physical damage to the wood caused by the mistletoe can eventually lead to the decline and sometimes death of infested trees and shrubs.

The traditional European mistletoe is Viscum album, but in the United States two genera, Arceuthobium and Phoradendron are the representatives of the family. Arceuthobium species are dwarf mistletoes and are weak, herbaceous plants with leafless yellow-green to orange stems. These mistletoes parasitize pines and junipers all across the Southwest.

Members of the Phoradendron generally have well-developed leaves on strong, shrubby, almost woody stems. Some species have large, yellow-green leaves while other species are essentially leafless. The common desert mistletoe that infests many of the desert legume trees like palo verde, mesquite, and ironwood has only scale-like leaves. The large-leafed yellow mistletoe is often picked and sold during the holiday season as a way to steal a kiss from someone special. It is most commonly found on riparian softwood trees like cottonwood, sycamore, willow and ash.

Most mistletoe species produce small white to pinkish or green-tinged berries, whose single hard seeds are surrounded by fleshy, sticky pulp. The fruit seems irresistible to birds, who then redistribute the seeds to new locations, not only through their droppings, but also by inadvertently carrying the sticky seeds on their beaks and feet.

While otherwise healthy host plants may seem to tolerate one or two mistletoe plants, the parasitic plant's ability to effectively produce and disperse seeds all but insures the spread of the infestation and the slow decline and even death of the host plant. The weakening, disfigurement and eventual death of shade, food and lumber producing trees represents a significant worldwide economic loss each year.

Control of these parasitic plants is often difficult. The easiest and most common method of control is to simply prune or break off the plants. This is best done before flowering to prevent the development and dispersal of seeds. It slows the spread of these hardy plants. Removal of the parasites also helps to reduce the drain on the host tree as pruning prevents the loss of valuable water and nutrients from the host.

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Unfortunately, pruning the mistletoe in this manner usually does not remove all of the plant and buds found at the base of the stem that remains in the plant. In these cases, the parasite will often quickly grow back to full size. For this reason, frequent pruning is often necessary. You have to stay ahead of it or eventually, when its persistence is greater than your own, it will win out.

There are a couple of ways to prevent this regrowth. One is to prune off the plant as usual, but then to take a sharp knife and trim down slightly into the wood to remove the crown of the mistletoe plant, the part that is right next to the host tree's branch. Some bark tissue may safely be removed during this process, but try not to cut too deeply, or the branch may snap under its own weight or in a wind.

Another way is to prune the mistletoe down to as close to its point of attachment as possible and then wrap the site with dark, light-excluding plastic sheeting. The lack of light on the remaining parasite tissue will prevent the regrowth of the pest. As the mistletoe is deprived of sunlight, the parasite will eventually die, hopefully. However, final success may take a year or two, so it is important to check the plastic wrap regularly and replace it if it begins to degrade. Because this becomes somewhat labor intensive, it is usually reserved for the treatment of essential branches or for trunks of trees.

In both of these cases, the haustoria, that is the term we use to describe the "roots" of the mistletoe, may extend down some distance into the wood of the tree which reveals why there might be some incidents of regrowth of the parasite later on. A more permanent step would be to completely prune away infected limbs and branches up to twelve or more inches below the mistletoe point of attachment. This type of pruning works well for younger clumps of mistletoe, but it cannot be done on older growth mistletoe, or where the mistletoe is on large, often essential limbs.

Now for the dilemma imposed upon us by the mistletoe. Many people enjoy the birds that are attracted to the mistletoe seeds and, for that reason, tolerate and even encourage the spread of mistletoe in their trees. This of course invites the presence of a variety of desert birds that come to feast on the seeds. On the other hand, there are those who could care less about the birds, and want their trees to be healthy and strong. Get rid of the mistletoe, they say.

What is the problem, you may be saying. What people do on their property is their decision and right. True, I admit, but the problem and the dilemma lies in the fact that birds and mistletoe know no bounds. They don't care about property lines. A heavy mistletoe population in one yard, with its resulting high bird population, will be a source of seed easily transported to the yard of one who may not be overly excited to see it arrive. I'm just saying here that to avoid conflict between the two philosophies, it will be important for neighbors to work together to maintain a workable balance in their yards.

Mistletoe is common on local landscape trees, particularly mesquite, palo verde, and iron wood, but careful vigilance and proper tree care prevent much of the damage to, and death of, these valuable plants.

Selecting the Right Landscape Tree

Are you thinking about planting a new tree in your yard?

With the fall planting season coming up just around the corner, there are many who are doing just that. Let's paint the picture You have decided that you need a tree to fill in that one spot in your yard and you are in the mood to get it done. Before you make that purchase however, you might want to hold up a bit. There are a couple of choices that need your attention.

Here is your first choice. You can go down to the nursery, look around until you find something that interests you, take it to check out, pay for it, and bring it home. Many people do just that. It is quick and it is easy. In the long run however, that decision could create problems down the road.

Perhaps the better choice is your second choice. You measure first the available space, decide what it is you want the tree to do and what it should look like, and then go down armed with solid facts to make an informed selection. I would suggest that for the good of the plant, and your peace of mind, this second choice is the best approach.

You are probably wondering why I would say that. Let's just leave at this. There have been so many wrecks among newly planted, immature trees resulting from someone choosing the first option that it makes sense to recommend the second. Those that select the second option most often are satisfied with their choice several years down the road. Not only are they generally happier, but there are usually fewer dead trees and frustrated owners because of it.

Once you get down to the nursery, it is much easier to see the wisdom of this. There will be many different types of trees, all with different characteristics, on display. The large number of trees from which to choose often makes the selection a bit confusing, unless we have done our homework ahead of time. In my opinion, it really is a to everyone's benefit to know before purchase the general characteristics that will get the job done like we want it done. While we may not have to know the exact name of the tree that we will finally end up purchasing, at least we should be able to have confidence that what we purchase will be successful.

Why am I suggesting all this? Let's get right down to the facts. Trees add to the value of the property. They bring shade to sunny areas. They play key roles in landscaping design, and they set the mood desired for the landscape. For these, and other reasons, it is in everyone's best interest to choose and plant a tree that will ultimately be able to mature in place. In my experience, there are many more trees that end up having to be removed because it is offending the owner or the neighbors than those that die from natural causes.

So, what should we look for in a tree? One of the most important points to consider is the overall purpose of the tree. We need to clearly define that purpose before we even think about buying a tree. Is the purpose of the tree to provide shade, a swing for children, hide an outbuilding, or frame an architectural view? It is good to have the specific purpose or multiple purposes in mind because some trees are better at performing a service than others. We do not want to select the wrong tree for the job.

Probably the second most important characteristic is size. Some trees can become huge, forty or more feet in height and as wide. If we try to plant a monster tree in a teeny tiny postage stamp yard, we will soon run into difficulties as branches begin scraping on the roof and hanging over into the neighbors yard. Always pick the right sized tree for the space allotted.

Another key characteristic is water use. Some trees need a lot of water to do their best. Without it, they struggle and often die. If we choose a high water use tree, we should be ready to give it the water it needs. I say this because many of the great shade trees fall within this category. The mulberry, weeping willow, ash, and cottonwood are classic examples. If you do not want a large water bill, it will be important to choose a more water efficient species. Trees that use less water include the mesquite, palo verde, and athel trees.

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It is also important to consider how fast a tree will grow. Some of us need a fast growing tree, such as the desert willow or the Brazilian pepper tree, while others are okay with something that grows a little slower. Pine trees and other cone bearing trees tend to be the slowest growing. The Virginia live oak and Texas mountain laurel are also known for their slow growth.

Shade is important in the desert. Some trees, like the heavy water users mentioned above, give dense shade. Desert adapted trees like the native mesquite and the Texas ebony also give good shade but use only a fraction of the water. Palo verde trees and the Chilean mesquite often give filtered shade, which means less shade, yes, but they also allow more sunlight to reach shrubs that may be planted underneath their canopies. That may be an important consideration for some.

Of course we want them to look good too so an attractive appearance is important. Now, I know that the definition of "attractive" is pretty much dependent upon the individual, so your are going to have to work that one out for yourself. However, a key point here is the number of trunks desired. Some people want their trees to look like trees with just one trunk. Many of our desert trees though tend to grow more than one. Please work that one out in your mind also because it really does no good to berate a poor mesquite for doing what it does naturally, or trying to force it to do what its genetics is telling it to do. If you want a single trunk tree, stay with an ash or a citrus and avoid the desert trees like desert willow, palo verde, and ironwood.

Other key characteristics that need to be considered include resistance to local pests and diseases, thorniness, cold hardiness, pollen production and allergies, and messy litter. Each of these characteristics and others tend to define our tastes in trees and should be considered before we make any purchase.

I guess here is one another question we just have to ask ourselves. Is it found in the local nurseries? It does no good to go through all of the hassle of preplanning and then find out the tree we want is not to be found. I would suggest that, if you know the name of the tree, you call ahead to see if your favorite nursery has it in stock. It could save you some time.

Selecting the right tree to fill a specific mission in the landscape can be a challenging task, depending upon the particular characteristics of the site. A good understanding of the important tasks that a tree will be expected to fill, coupled with an understanding of the various types of trees available, can help us create enjoyable outdoor living spaces.

If you have questions about this newsletter, have any plant related problems, or wish to have a publication sent to you, please call (520) 836-5221 x204 or (520) 374-6263 and leave a message. If you have a plant problem and are able to email a picture, please send a picture with any information you can provide about the plant, and your contact information to our diagnostic team at macmastergardener@gmail.com and a Master Gardener will contact you.

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Richard D. Gibson

Extension Agent, Agriculture

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Successful Desert Gardening Series

This will be a practical, in-depth view of the principles required to grow healthy outdoor plants in the desert southwest. Get answers to your gardening questions. The cost of the class is $10 per person, paid by cash, check or money order. (Sorry, cannot accept credit cards). Space is limited, so please RSVP to save a seat by contacting either BJ Seemuth at (520) 431-6167 bjseem@cox.net or Theresa Ellsworth at (520) 836-5221 x202 tellswor@cals.arizona.edu

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