



THE GARDEN SPADE



A monthly Gardening Publication of the University of Missouri Extension -- Southeast and East Central Regions

Bonsai

by Sarah Denkler

What exactly is Bonsai? The word comes from Japan from *bon*, a tray, and *sai*, planting. According to the Encarta dictionary, bonsai is “the art of growing miniaturized forms of trees and bushes by rigorous pruning of roots and branches.”

Rigorous is not the word I would use although the art of bonsai does require you to be precise and exact. Enjoying, amazing, and sometimes unexpected are words that better describe this art.

Furthermore, when the word miniature is used remember that small is relative to the original size. You might have a bonsai that is taller than you but is still much smaller in size from the native growth habit.

You do not have to be an advanced gardener to start your own bonsai. You do have to realize that bonsai is a continual work in progress that is never really finished. Patience is key.

Any type of shrub or tree can be used for bonsai. Some trees are well suited for the annual or biannual pruning required to shape and guide your

form. You may want to start with a tree that you can readily get for free or at little cost and once you have built your confidence move onto something a little more challenging. Selecting the species for your bonsai is a personal choice. Look for a plant that has interesting leaves or bark or that produces many branches for you to work with.



Picture from www.bonsai-trees-review.info

You will also need a shallow pot, pliable wire and cutters, sharp scissors and well-aerated soil. You may also need screen, a wood dowel and moss. Before planting use the wire to cover any large holes in the pot to prevent soil from falling

out.

The thing to remember when doing a bonsai is that you must keep the root to shoot ratio the same as if it were a full size tree. You will need to repot your bonsai on a regular basis in order to achieve this. Root and shoot pruning are done when you first start your bonsai and continue throughout the life of the plant. Start by pruning the roots, planting your

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bonsai in the pot and then pruning the shoots.

The art in bonsai begins when you decide on the shape of your tree, and how it will sit in the pot. Wire is used to guide the tree to fit the desired shape. Make sure that the wire is not left on the tree more than necessary, up to 6 months for deciduous trees and up to 12 months for evergreen.

You will need to fertilize your plant but you must figure out the correct balance to prevent rapid growth. Solid fertilizer in a slow release form works well. Watering should be done daily through the growing season and be carefully monitored to ensure that the plant is receiving a good balance of moisture. Roots should not be

allowed to dry out. As you can imagine this can be a challenge in a shallow pot.

Plants are sometimes embellished with rocks or statues to aid in the miniature appearance. This too is part of the art, allowing you to be as creative as you see fit.

For more information, check out these websites:

The Art of Bonsai—Virginia Coop Extension
<http://pubs.ext.vt.edu/426/426-601/426-601.html>

Bonsai—University of Georgia Extension
<http://www.caes.uga.edu/extension/cobb/anr/Documents/bonsai.pdf>

Bonsai Society of St. Louis
<http://www.stlbonsai.org/>

Planting Hardy Kiwi (*Actinidia arguta*)

by Donna Aufdenberg

Hardy kiwis recently have gained popularity as both ornamental vines and fruiting vines. Hardy kiwis are not the same species of kiwi that produces the fuzzy brown fruits available in grocery stores. The fruits of hardy kiwi are smaller and smooth-skinned.

Kiwis are vigorous vines that will need strong support. Once vines are established, they may grow as much as 20 feet a year. A fairly high trellis is needed to support them, usually very wide and up to 6 or 7 feet so fruit can be picked easily. They will grow well in both heavy and light soils, but need irrigation during hot, dry weather. A windbreak will provide them with protection from winter damage if conditions become particularly severe. They leaf out very early in the spring, so both flower buds and young shoots are subject to spring frosts.

The species most likely to produce fruit in our climate is *Actinidia arguta*. Like most kiwis, plants

are male and female so they are often sold in quantities of three, one male and two female, to ensure pollination. 'Issai,' a newer variety from Japan, is self-fruitful so the home gardener with only space for one vine might want to try it. 'Issai'

is also a smaller, more compact vine than other kiwis. Most ornamental of the kiwis is 'Artic Beauty,' a variety of the species *Actinidia kolomikta*. Fruit are smaller, the size of a large grape, but the leaves contain pink and white variegation. This species flowers earlier than the others, so do not expect to use it as a pollinator for other species.



Photo Courtesy of University of Illinois Extension

Kiwis are a new plant for the Midwest, and much still needs to be learned about growing them. It currently appears that their value as vines for ornamental purposes and screening outweighs their dependability for fruit production, because of their early growth during times when spring frosts are still frequent.

Taken from MU Guide 6840 Selecting Landscape Plants: Ornamental Vines

March Gardening Calendar

By Donna Aufdenberg

Outdoor Plants and Ornamentals

- Clean up beds by removing all weeds and dead foliage at this time.
- Tree, shrubs and perennials may be planted as soon as they become available at local nurseries.
- Fertilize woody plants before new growth begins, but wait until soil temperatures have reached 40 degrees.
- Apply superior oil spray to control scale insects & mites on landscape plants.
- Divide and transplant perennials, such as ajuga, shasta daisy, daylily and liriopse. Rework beds before planting, adding organic matter and fertilizer.

Vegetable Gardening

- Cultivate weeds and remove the old, dead stalks of last years growth from the asparagus bed before the new spears emerge.
- Delay planting if garden soil is wet. When a ball of soil crumbles easily after being squeezed together in hand, it is dry enough to be safely worked.
- Plant peas, lettuce, radishes, kohlrabi, mustard greens, collards, turnips, Irish potatoes, spinach and onions outdoors.
- By the end of the month, plant beets, carrots, parsley and parsnip seeds outdoors. Set out broccoli, cabbage, brussels sprouts, chinese cabbage and cauliflower transplants into the garden.
- Start tomatoes indoors now for transplanting around May 1st



Fruits and Nuts

- Gradually remove mulch from strawberries as the weather begins to warm.
- Continue pruning grapes. Bleeding causes no injury to vines. Tie vines to the trellis before the buds swell to prevent bud injury and crop loss.
- Continue pruning apple trees. Burn or destroy all pruning to minimize insect or disease occurrence.
- Apply dormant oils by the end of the month. Choose a dry day when freezing temperatures are not expected.

Turfgrass

- Mow lawns low to remove old growth before new growth begins.
- Apply controls for wild garlic. It will take several years of annual applications for complete control.
- Apply crabgrass preventer now before it starts to warm and before seeds germinate.
- Thin spots and bare patches in the lawn can be overseeded now.

Garden Quote: "Weeds For Sale...Pick Your Own!"

Submitted by Diana Jo Thompson

Did You Know...

Lettuce

Lettuce is a member of the Sunflower Family.

Americans eat about 30 lbs of lettuce each year.

Over 73% of lettuce grown in U.S. is iceberg lettuce

Lettuce is second most popular fresh vegetable in U.S.

Lettuce has been in cultivation since 550 B.C.

There are 4 types of lettuce: crisphead, butterhead, leaf and romaine.

Lettuce consists of 95% water by weight and that is what makes lettuce crisp.

Darker green lettuce is more nutritious than varieties with lighter green leaves.

Thomas Jefferson grew over 15 varieties in his garden at Monticello

Bulbs That Not Only Come Back - But Multiply!!!

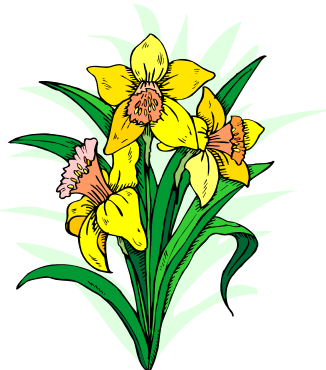
By Jaime Willmann, Master Gardener

Who doesn't love the sight of a hundred well placed tulips in a display? Are you in love with the daffodils that are naturalized on a hillside? Luckily for those of us in the northern zones, we can grow these beautiful plants. Unfortunately for quite a few of us, our soils are less than ideal.

Truth be told, those large tulip displays are painstakingly replanted every year – with new bulbs taboot. Don't have the time and money to plant hundreds of tulip bulbs every year? Neither do I! While we are drooling over the beautiful tulip and daffodil displays this spring, let's make a few mental or garden journal notes. If we do this, we can make the right decision come planting time in the fall.

Have you planted tulips only to have them not return the following year? Modern day tulips aren't the best for naturalizing or multiplying to begin with. Throw in waterlogged winter soil and high lime content, and you really won't see your bulbs flower the following year. As usual, bed preparation is essential. Make a raised bed, (mine are probably mounded 4-12") and amend your topsoil well with compost and/or peat. Just any tulip or daffodil won't do. To get even better results, select bulbs that actually have naturalizing tendencies to begin with and fertilize in the fall and the spring. You have to research what types will spread, naturalize and perennialize. Luckily, I have done a little research for you. Here is what I have found:

Daffodils, Jonquils, and Narcissi are the best for those with heavy, calciferous soils. But go a step further. Choose this natural hybrid antique: Narcissus Tazetta 'Grand Monarque'. Try these Jonquil hybrids: 'Trevithian' and 'Golden Sceptre'. Daffodils that will do well are: 'Fortune' and



'Carlton'. Keep in mind that generally these bulbs will need a periodic division and replanting so that they will continue to bloom well.

Tulips are perennial plants that should come back every year; but due to extensive breeding and less than ideal soil and climate conditions (and maybe a few squirrels), many tulips not only fail to multiply, but also fail to come back entirely. Try planting your bulbs in a sunny spot and in a well prepared bed. Don't let your flower go to seed and don't remove the foliage until it is good and dead. This will be a good start, but selecting the right plant is an even better one. Choosing Tulipa 'Red Hunter', 'Clusiana Tubergen's Gem', and 'Clusiana Lady Jane' will better your chances of having return blooms.

Most of the original tulips come from Iran, Turkey, and Afghanistan. The original tulips are less ornamental than modern day hybrids, unless of course you have a dramatic naturalized or mass display!

With the soil many of us have, bed preparation and the careful selection of plants will help prevent failures, heartbreak and wasted money. Take your time and plan ahead. Start looking now and take notes while you are watching them come up gloriously in the spring. Start preparing your beds early to ensure proper soil nutrients and pH. You may not be able to get the plants you need at the home improvement store. Order some catalogs specifically from companies specializing in bulbs. Relax and sip some tea while you pick out your bulbs. You will wish you were back relaxing after planting your 40th of 500 daffodil bulbs!

Trap Crops

by Katie Kammler

Cake is good, but I would rather have cookies! Just as we have food preferences, insects do too. That is what trap cropping is all about. Many growers and gardeners have planted trap crops to protect a main cash crop from a pest. To be effective, a trap crop has to be more desirable to the pest than the main crop. Trap crops work best on pests that are abundant and destructive every year rather than periodic pests.



Traditionally trap crops were planted as one row next to the main crop. Now the recommendations are to grow the trap crop all the way around the main crop so the pests are intercepted on the border, regardless of which way the insects come in. Since the pest is concentrated in the border area, this area can be sprayed to prevent pest from moving into the main crop after they eat the trap crop. This method is also effective because you are reducing

the amount of insecticides used by just spraying the trap crop and also protects beneficial insects in the main crop.

Examples of Trap Crops:

- Blue Hubbard squash is used as a trap crop for any cucurbits. It is highly attractive to cucumber beetles, has vigorous seedlings, and is not as susceptible to bacterial wilt as other varieties.
- Prizewinner pumpkin is a trap crop used to protect other pumpkin varieties from cucumber beetle.
- Collards can be planted around cabbage to protect it from diamondback moths and cabbage worms.
- Asian eggplant 'Vittoria' can be used as a trap crop for Colorado potato beetle and eggplant flea beetle for standard eggplant varieties and tomatoes.
- Early varieties of potatoes can be planted around the main potato crop to capture Colorado potato beetle.

Garden Helpers: The Cheaper the Better

By Julia Taylor, Master Gardener

I often see expensive "gizmos" for garden jobs, but these little money savers mount up for a new plant or other items.

- A potato peeler on its way to being replaced in the kitchen makes a great tool to strip and pare woody plants for sprouting or rooting in water and plant food.
- Knitting needles (the old singles with no hope of finding the mate) will make great plant supports in or outdoors. They can also protect a new plant from being bumped.
- The same is true for inexpensive kebab skewers which come in packs the store. They can also be sturdy row markers.
- 2-2 1/2" swivels from a hardware store are wonderful for hanging plants in or outside. They are easier to turn and water without spinning.
- We found some old and wonderfully rusted bed springs that were not attached. They made terrific holders for straw, string, and other nesting materials for the birds. In the winter they hold apples, oranges, or a suet concoction.
- We are now using the craft popsicle sticks in two sizes to mark pots, plants, singles, and plants needing dating. They come about 100 to the pack in 2 sizes at many stores.

Plant of Merit - *Corylus colurna* Turkish hazel

by Sarah Denkler

The Plant *Corylus colurna* is known as **Turkish Hazel** or **Turkish Filbert**. This deciduous tree is pyramid in shape from 40 ft. tall and 25 ft. wide. Growing in zones 4 to 7 it provides thick shade. The most interesting features include dim yellow fall color, flaky bark, textured leaves and small spring blooms. It has no serious pest or disease issues and is tolerant of dry and urban areas. It produces nuts in autumn that will attract wildlife. For more information visit: <http://www.hort.uconn.edu/plants/c/corcol/corcol1.html>



PEST OF THE MONTH - Marmorated Stink Bug

by Sarah Denkler

The Brown Marmorated Stink bug known as *Halyomorpha halys* feeds on a wide variety of host plants such as apple, peach, fig, mulberry, citrus fruit and persimmon. Fruit may become distorted if feeding occurs as the fruit is forming. This damage is known as 'catfacing'. Further damage occurs inside the fruit as brown, rotting areas.

Adults emerge in spring (April/ May), mate and deposit eggs (May/August) hatch into black and red nymphs (see below), become adults and find sites to overwinter (September/ October). Adults emerge in spring and can be distinguished (far right)



from other stink bugs by lighter bands on antennae and darker bands on an overlapping membrane at the rear of the front pair of wings. They have patches of coppery or bluish-metallic colored depressions on the head and pronotum.



This true bug has also been reported on many ornamental plants, weeds, bush beans, blackberry, sweet corn, field corn, tomatoes, lima beans, green peppers and soybeans. It will also enter the home in search of overwintering sights. Seal cracks and holes with caulk and screen to prevent entrance.

Pictures from Penn State University <http://ento.psu.edu/extension/factsheets/brown-marmorated-stink-bug>. Other sources of information include: <http://ppp.missouri.edu/newsletters/ipcm/archives/v20n20/a3.pdf> and http://ohioline.osu.edu/hyg-fact/pdf/FS_3824_08.pdf

March 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Contact your local Extension Center if you have questions about any event on the calendar or if you have a horticultural event for the calendar.		1 Poplar Bluff MG, 6:30 pm @ PB Ext. Center	2	3	4	5 Parkland MG symposium, Mineral Area College, Park Hills, MO, 8-4pm. Fee \$8
6	7 Parkland MG, 6:30pm @ Courthouse Annex (3rd floor) Landscaping Tips - Ste. Gen. Community Center, 6-8pm Fee \$10	8	9	10	11	12 Native Plant Seminar, Cape Girardeau Conservation Nature Center, 8:30am-2pm.
13	14	15 Turf the Natural Way - MG Advanced Training, Mineral Area College, Park Hills, MO, 6-9pm.	16	17 Cape Girardeau Co. MG, 7 pm, Cape Co. Ext. Center Butterfly Gardening, Sikeston Public Library at 6:30 p.m.	18	19
20	21 Ste. Genevieve MG Meeting, 6:30pm, at the Ste. Fruit Production - Ste. Gen. Community Center, 6-8pm Fee \$10	22 Bloom Sequencing, Sikeston Public Library at 6:30 p.m.	23	24	25 Berry School - MG Advanced Training, Highland Blueberry Farm, Perryville, MO, 1-4pm. Fee: \$20	26
27	28 Perry Co. MG meeting, 6:30 pm, Perry Co. Ext. Center	29 Growing Herbs, Sikeston Public Library at 6:30 p.m.	30	31 Pests in the Garden, Bollinger County Library at 6:30 p.m.		

Upcoming Events....

April

- 5 - Poplar Bluff Master Gardeners 1st Tuesday at 6:30pm, Butler County Ext. Center
- 4 - Parkland Master Gardeners 1st Monday at 6:30pm, Farmington Courthouse Annex (3rd Floor)
- 14 - Delta Area Master Gardeners 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO
- 16 - MG plant sale, 7-2pm. Arena park Conservation Shelter, Cape Girardeau, MO
- 21 - Cape Girardeau County Master Gardener 3rd Thursday at Cape County Ext. Center at 7pm.
- 18 - Ste. Genevieve Master Gardeners 3rd Monday, at Ste. Genevieve County Ext. Center at 6:30pm.
- 19 - Vegetable Grafting - MG Advanced Training, 9am—noon. Fee: \$15

23 - Shitake Mushrooms - MG Advanced Training, Cape County Extension Center, Jackson, MO, 9am—noon. Fee: \$50

25 - Perry County Master Gardener 4th Monday at the Perry County Ext. Center at 6:30pm.

?? - Organic Gardening - MG Advanced Training, Black River Electric, Fredericktown, MO, Fee: \$15

May

?? - Tree ID - MG Advanced Training, Perryville Seminary, Perryville, MO Fee: \$10

2 - Parkland MGs 1st Monday at 6:30pm, Farmington Courthouse Annex (3rd Floor)

3 - Poplar Bluff MGs 1st Tuesday at 6:30pm, Butler County Ext. Center

12 - Delta Area MGs 2nd Thursday at 7:00pm, Medical Arts Building, Sikeston, MO

16 - Ste. Genevieve MGs 3rd Monday, at Ste. Gen. County Ext. Center at 6:30pm.

Editor's Corner

The Spade is published monthly by University of Missouri Extension staff for individuals and families living in Southeast and East Central Missouri. This newsletter is provided by your local extension council.

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We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email News to: kammlerk@missouri.edu,
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