Ricky's Gardening Tips and Tricks (and Gnome Tales) May 2018 Issue

The Plant Medic - Ricky D. Kemery, Allen County Extension Educator Retired, phone: 260-431-6893

Ricky's Gardening Tips and Tricks is an online newsletter designed to provide citizens of Allen County and northeastern Indiana with up-to-date information about Horticulture, written in a lighthearted style! To subscribe, send an email to <u>kemeryr7@frontier.com</u> stating: "Please add me to the email list for "**Ricky's Gardening Tips and Tricks**." (Or your own words to that effect.)

If you need a speaker for neighborhood association meetings, business groups, or other organizations; I will be glad to come and talk about gardening, landscaping or turf, the environment, or sustainability. Just contact me at 260-431-6893. You can also email or text me with gardening questions, or pictures of poor sick and dying plants. For a small fee; I will visit your home landscape and garden to offer advice.

Silver Maple – A Copious Seed Year

Most of you readers know of my long term love affair with the Silver maple. This soft maple was planted extensively along streets in Fort Wayne in the 1970's. Citizens to this day also plant this tree in their landscapes because it is advertised as "fast growing".

Unfortunately, Silver Maple should not be planted in an urban landscape. The tree has very soft weak wood, a poor branching habit, and aggressive root system that raises sidewalks and clogs sewer lines. Silver Maples can become



very large, and this tree is among the first to lose large branches in any storm or ice event.

It is the bratty problem child in the tree world. The damage caused by this tree is copious.

Webster's Dictionary defines the word copious as "yielding something abundantly" - As in "a copious harvest"

Or "plentiful in number" ": full of thought, information, or matter" as in the example "Shakespeare, whose soul was so copious ... — Gilbert Highet

Or "profuse or exuberant in words, expression, or style" as in "a copious talker"

Or finally "present in large quantity - taking place on a large scale" as in "copious weeping" or "copious food and drink"

In other words, if the tree were human, it would delight in doing extensive damage to humans and their toys, quoting Shakespeare as it causes damage on a large scale, much like King Kong or Godzilla. Imagine Godzilla pausing in its total destruction of Tokyo to pontificate the following:



Silver maple is like any other tree that bears seed or fruit. It produces copious amounts of its helicopter seeds, called samara, every other year. This year is the year of copious seed production for many silver maples.

It is another glorious "surprise" offered by the tree. The seed has no dormancy, meaning the seed will germinate as soon as it hits the ground, or any surface. Expect to see numerous silver maple

seedlings in the lawn, your gutters, planters etc. Each seedling can develop into a tree Godzilla, King Kong, or any other heartless alien developed from gamma rays.

In the lawn continue to mow the seedlings until the little devils run out of energy. Broadleaved herbicides meant for lawn weeds can also take them out.

Silver maple seedlings that develop in gutters can be more of an issue. This will take some serious gutter cleaning (weeding) of the seedlings to prevent their development. Otherwise one might have actual trees growing in the gutters.

In a real emergency, one might call to the heavens for Wonder Woman or members of the Justice League for help.

Tip Blight on Austrian Pine

I am already seeing significant damage on Austrian Pine from Tip Blight.

According to the Morton Arboretum, Diplodia tip blight is a common fungal disease of stressed conifers, especially pines with needles in bunches of 2's and 3's. Austrian pine is the most susceptible. The disease rarely attacks trees under 15 years of age and most severely damages trees that are older than 30 years.



It is seldom seen in forests, but prefers ornamental trees weakened by poor sites, drought, hail or snow damage, over shading, compacted soils, root restrictions, insect activity, or other mechanical wounding. The fungus kills current year shoots and sometimes branches, and can disfigure or even kill the tree under severe conditions.

Diplodia kills needles at the tips of branches. Symptoms often start on the lower half of the tree and progress upwards. When the new needles (candles) are expanding, they become stunted, turn yellow, and then turn tan or brown. Generally all needles on the current season's shoot are killed. Over time the weakened tree can die from the inability to produce enough food for the tree to survive, or other insects or disease finish the tree off.

A fungus called *Diplodia pinea* causes the disease. The fungus overwinters in fungal fruiting bodies in infected shoots, bark, and seed cones. Tiny spores called conidia erupt from the fruiting bodies in wet weather.

Although they are produced from spring to early fall, they are especially abundant in spring and early summer, when the new shoots (candles) are expanding. Candles can only be infected by the fungus while they are elongating in the spring. After the needles have fully expanded, the shoot can no longer be infected by the fungus.

Wind and rain disseminate the conidia. When the conidia land on a susceptible plant part, they infect it by penetrating the plant through wounds or stomates (tiny pores in the needles), usually in mid- to late spring.

Once the fungus penetrates the plant, it quickly spreads throughout the needles, then to the stem and into nearby needles and cones. The needles begin to die several weeks after infection.

Since the disease is such a problem in our area; it is best not to ever plant Austrian Pine. The tree is still available at some nurseries or by mail order.

Since cones and dead tips contain the fruiting bodies that produce millions of spores, remove and destroy all infected cones and dead and dying branches and shoots during dry weather. Pruning tools should be disinfected between cuts by dipping them in alcohol or bleach (one part bleach to nine parts of water). Maintain tree health because the disease is more severe on trees that are under stress. Because the fungus can also infect wounded tissues, avoid pruning trees from late spring to early summer when they are most susceptible.

The Case for "Real" Food

Experts disagree on exactly when highly processed food became the norm in American diets.

Experts do agree that Americans are less healthy than they were decades ago.

Here is information compiled from the University of Missouri's retired soil science professor John Ikerd. (He was head of the department) http://web.missouri.edu/ikerdj/papers/Omaha%20%20-

%20Failure%20of%20Industrial%20Agriculture.htm



It is important to note Ikerd doesn't blame farmers - he blames the system that they are often forced to use to grow crops in an "industrial" fashion. This industrial farming system used by farmers who farm huge areas is different from an earlier smaller farm system that uses animal manures, cover crops, and fallow pasturing. Ikerd contends that Industrial farming depletes the soil over time, resulting in poor soil health and less nutritious crops.

Food Insecurity

Perhaps the greatest failure of the industrial food system has been its absolute failure to achieve its most fundamental purpose by failing to provide food security. Food security is defined as having access to enough wholesome food to support a healthy, active lifestyle. Using this definition, a larger percentage of people in the U.S. are food insecure today than during the 1960s, with more than 20% of U.S. children living in food insecure homes. In addition, the only foods affordable to many lower-income families are high in calories and lacking in essential nutrients, leading to an epidemic of obesity and other diet-related health problems.

Obesity-related illnesses, such as diabetes, heart disease, hypertension, and various forms of cancer, are projected to claim about one-in-five dollars spent for health care in the U.S. by 2020 erasing virtually all of the gains made in improving public health over the past several decades. The irresponsible use of agricultural chemicals, growth hormones, antibiotics, and a multitude of additives in industrial foods add to the growing list of diet-related illnesses.

There is a persistent tendency, promoted by the agricultural establishment, to blame obesity and related illnesses on the lack of willpower of individuals. However, a USDA report of long-term consumption during the 1900s suggests an indictment of the current food system instead. During the first half of the twentieth-century, as people became less physically active, they quite logically consumed fewer calories roughly 10% fewer calories per person per day in the late 1950s than in early 1900s. Per capita calorie consumption leveled off during the 1960s, even though physical activity obviously continued to decline. In the early 1970s, the number of total calorie consumption began a sharp and persistent upward trend, while physical activity continued to decline. Between 1980 and 2004, total calories per capita from all sources increased by 21%.

During the first half of the last century, Americans were less active and they ate less. During the second halfcentury, Americans were even less physically active but they ate more. The human species obviously didn't evolve that much over 100-years, but the food system most certainly did. The increases in calorie consumption and corresponding increases in obesity coincide directly with the acceleration and continued industrialization of American agriculture and the American food system in general.

Nutrient Dilution

Scientific studies by medical schools and public health institutions are beginning to confirm the link between nutrient deficiencies and industrially produced foods. A particularly revealing study was published in the Journal of American College of Nutrition in 2004. It compared nutrient levels in 43 garden crops in 1999 with levels documented in historic benchmark nutrient studies conducted by USDA in 1950. Declines in median concentrations of six important nutrients: protein 6%, calcium 16%, phosphorus 9%, iron 15%, riboflavin 38%, and vitamin C 2% were observed even when measured on a dry weight basis.

Organic farming provides a convenient contrast between sustainable and industrial agricultural practices. A review by The Organic Center of 97 published studies comparing organic and conventionally grown food indicated that on average organic foods are more nutritious than conventional foods. Conventional foods often contained more macro nutrients potassium, phosphorus, and total protein, but organic foods were consistently and significantly higher in Vitamin C, Vitamin E, polyphenols, and total antioxidants, which are frequently lacking in American diets. It may take decades of organic farming to fully restore the chemical and biological health of worn out soils that have been depleted of essential nutrients by industrial farming systems.



Ricky's Comments: Ikerd's comments echo the concerns of many citizens regarding their distrust of many processed foods found at the grocery store. It is one reason why organic foods are now on most grocery store shelves, and also the reason why many citizens grow their own vegetables in home gardens. Many food "experts" blame poor American health on poor judgement and a lack of control. Is it poor judgment or just plain poor food? Hmm.... food for thought.....

Soil from a Bag- Ricky's Experience

I am a believer (based on my reading of research documents and books) that the healthier the vegetable, the more nutritious the plant will be.

To grow a healthy vegetable, one needs a healthy soil full of microorganisms and nutrients.

To have a healthy soil in our area, we generally need to add organic matter in the form of Canadian Sphagnum peat moss and/or other natural materials, and use aged manure from animals that eat grass - as a nutrient and micro-organism source.

Unfortunately, over 10 years ago, I didn't know about using the Lasagna garden technique to create fabulous soil in raised beds to grow vegetables. https://www.bbg.org/gardening/article/make_a_lasagna_garden_in_a_raised_bed



I have 4 raised bed gardens in my backyard; about 10 inches in depth, 3 feet wide, and 8 feet long. To fill the beds, because of their location; I had to fill each bed with 25 bags of garden "soil" per bed purchased at a garden center. I also added bags of sand to make the mix (in theory) better drained. It was not fun-bags of soil ae heavy.

Over the years I added fall leaves to the beds and then worked in the leaves in the spring. I should have great soil in the beds, correct?

Nothing could be further from the truth. The soil is lousy. It basically turned out to be compacted muck, which is the main ingredient in bagged topsoil.

This year I tried to turn the soil over with my shovel. It was like mixing concrete with a soft spatula. No wonder my veggies were smaller and less healthy over the years.

So with some help, I purchased Canadian sphagnum peat moss from the garden center. A bale of peat moss by the way, weighs about 85 pounds. I am too old to lift 85 pounds; hence the help.

I incorporated one bale of peat moss per bed by shoveling the compacted crap with the peat moss. It was hard work, but the soil is definitely looser now and should be more fertile. I will keep you updated on how well the plants do this season. (crossed fingers). This is of course if the rabbits don't eat all the plants first (see previous 2017 issue)



Lilacs compiled from ACH 206, an extension publication written by Ricky Kemery

Lilacs are woody deciduous shrubs which are members of the Olive family (Oleracea). They are highly prized by homeowners for their intensely fragrant spring flowers. It is thought the first common lilacs were brought to America by pioneers during the 1700's. Over 2,000 cultivars of lilac exist, and many of the most popular cultivars were developed during the 1700's by a nurseryman named Victor Lemoine in Nancy, France. Lilac is the state flower of New Hampshire. In fact, legend has it that a wealthy Englishman, Sir Harry Frankland, sent the first lilacs to New England to his mistress. Another legend states that lilacs were brought to the New World from Persia by an English sea captain. Many pioneers moving west planted the poplar lilac near their doorsteps to remind them of life in the east. Both George Washington and Thomas Jefferson planted lilacs on their estates.

Almost all lilacs prefer fun sun and excellent drainage. Many lilacs will perform reasonably well planted in landscapes where the shrubs are surrounded by turf. For best performance, keep a 5-8 foot diameter circle clean of vegetation around the plant. Apply a one inch depth of leaf mold or compost or rotted manure underneath the plant each spring.

One application of one cup of Epsom salts around the plant in spring may help produce flowers on the plant. A thin layer of mulch (less than 2 inches in depth) around the plant is also acceptable.

The most common disease of lilacs is powdery mildew. This fungal disease rarely kills lilacs, but many homeowners are alarmed when the leaves are covered on the upper surface with the white powdery fungus.

One can spray the lilacs with conventional fungicides such as Daconil or Immunox or the organic fungicide Serenade at the first sign of disease. Improve air circulation by pruning the lilac to encourage sun and wind penetration. One can also plant varieties of lilac more resistant to the disease (see lists). Sometimes, especially if the plant is well established and healthy, and disease appears late in the season, it is best simply to do nothing.

The most common insect pest of lilac is Lilac borer - the larvae of a clearwing moth. The moth lays eggs on the plant stems. In early spring, the eggs hatch and the worms emerge. They bore into the plant and begin eating the sapwood (the connecting pipes of the plant). Often depressions and or ridged areas on the bark show evidence of borers.

Sometimes plant sap or sawdust-like frass will exude from the borer locations. In addition one may also see actual holes on the stem. Lilacs infested with borers often will show initial dieback on a branch or two. Wilting of the leaves can also occur.

Sometimes one can use a knife to physically remove live borers from the plant. Preventative cover sprays (on the bark and twigs) with a product such as Bayer Multi-Insect Killer will kill the young larvae before they penetrate the sapwood. Apply the first cover spray in late March/ early April, and apply another spray a week or two after bloom. (according to label directions) In addition, keep the plant as healthy as possible with fertilizer applications, proper pruning, and by watering during drought periods. Healthy plants rarely have borer problems.

Root rots are more common on young lilacs planted in wet areas. "Miss Kim" and cut leaf varieties seem to be susceptible to root rot. Usually, the plants wilt initially, then "dry up" completely as more water is added by the homeowner. Root rot is also common when too much mulch is piled up around the plants.

Commercial applicators can help with this problem as far as chemical control is concerned. Avoid root rots by planting in areas of adequate drainage. Do not over water young lilacs or water in late afternoon or early evening.

Pruning and Rejuvenation: In general, it is best to prune lilacs immediately after flowering. Root suckers (emerging from the ground underneath the plant) can be removed anytime. Deadheading (the removal of dead and dying flowers) will encourage the plant to produce more flowers for a longer period of time The key to proper pruning of lilacs is the complete removal of older/thicker stems as they develop on the shrub. This technique of "thinning" will allow air and



sunlight to penetrate the plant. In addition, since most lilacs flower on newer wood, the plant will produce more blooms all over the plant - not just on the outer portions or at the top.

Types of Lilacs Found In Our Area

Common Lilac– Syringa vulgaris This is the type of lilac that is most common in home landscapes. Over 2,000 cultivars exist of this species. Often, common Lilac can became a very large cumbersome shrub (8-20 ft. in height-6-15 feet in width). It is still much loved for its fragrant flowers borne on the ends of new shoots each year. Susceptible to lilac borer and powdery mildew. Suckers freely. Very cold hardy. Some of the more common recommended cultivars are listed here. An M de-notes mildew resistance. F denotes extremely fragrant flowers. D denotes double flowers. Note: I have bolded the cultivars most commonly available.

White flowers:

'Alba' 'Avalanche' **'Edith Cavell' D** 'Emery Mae Norweb' 'Clacier' D. **'Krasavitsy Moskva'** 'Jan Van Tol' M '**Jeanne d'Arc' D** 'Joan Dunbar' D 'Marie Legraye' 'Miss Ellen Willmott' D '**Mme. Lemoine' 'Rochester'** 'Saint Margaret' D 'Sister Justena'

Blue/Purple flowers

'Ami Schott' D 'Adelaide Dunbar' M D Charles X' - deep purple 'Decaisne' 'Dr. Chadwick' 'Firmament' 'Laurentian, F 'Ludwid Speath' 'Madame Charles Souchet' 'Maurice Barres' 'Monore' '**Monge'** 'Night' 'Nadezhda' D 'Olivier de Serres' D 'Paul Heriot ' D '**President Grevy' D President Lincoln' 'President Roosevelt'** F 'Sarah Sands' 'Sensation' **Wedgewood Blue'** 'Mrs.W.E. Marshall'

Lilac flowers

'Alphonse Lavallee' D Agincourt Beauty' Assessippi' F 'Christopher Columbus' 'Excel' F
 'Flower City' 'Hippolyte Mariger' D 'Henri Martin D 'Hugo Koster' 'Hyazinthenflieder'
 'Jacques Callott' 'Leon Gambetta' D Le Norte' D 'Michael Buchner' D 'Mollie Ann'
 'Marechal Lannes' D 'Nokomois' 'Sesquicentennial' Victor Lemoine' D Zulu'

Pink flowers

'Belle de Nancy' D 'Catinat' 'Charm' 'Churchill' 'Edward J. Gardener' D 'Fantasy' D
'Krasavitsa Moskovy' Lucie Baltet' D 'Katherine Havenmeyer' D M F 'Lucie Baltet'
'Madame Antoine Buchner' D 'Montaigne' D 'Macrostachya' 'General Sherman' F 'Scotia'
'Vauban' Viginite' 'William Robison' D

Magenta flowers

'Congo' 'Charles Joly' DM 'Glory' 'Mme. F. Morel' 'Ruhm von Horsetenstein' F 'Mrs. Edward A. Harding'

Miscellaneous Selections Of Lilac

'Albert F. Holden' - deep purple- silvery backs 'Primrose' - yellow fading to pale yellow
'Professor Robert B. Clark—pale pink in bud Sensation' deep red-purple flowers with white margins.
'Silver King' whitish lavender-blue flowers with silvered petal backs.
'Tinkerbell' - small blue/purple flowers along stems

MORE LILACS

Chinese/Persian Lilac—Syringa x Chinensis: This is a large spreading shrub (8-15 ft. in height and width), with fine-textured leaves. The purple-lilac flowers are fragrant. Resistant to powdery mildew. Saugeana' has lilac-red flowers. 'Alba' has white flowers.

Persian Lilac—Syringa x persica: This lilac is also widely planted in our landscapes. Some argue that most plants classified as Persian lilacs are actually Chinese lilacs. While common lilac is a very large irregular-shaped shrub, Persian lilac is more graceful and rounded (4-8 ft in height, 5-10 ft. in width). The leaves are smaller than common lilac. The fragrant pale lilac flowers occur on previous season's growth.

Korean or Manchurian Lilac—Syringa patula: **'Miss Kim'** is a popular cultivar. Korean lilac has an oval– rounded habit. The purple-pink flowers are fragrant- though not as fragrant as Common or Persian lilac. Somewhat More mildew resistant. More susceptible to root rot and root stress in heavy clay soils. Grows 8-10 ft. in height.

Littleleaf Lilac— Syringa microphylla: Littleleaf lilac is more broad-spreading than the previous varieties. The leaves are distinctly grayish -green, and the mildly- fragrant flowers are definitely pale pink. Resistant to mildew, susceptible to crown rot at our Display gardens. 'Superba' has single pink flowers.

Cutleaf Lilac—Syringa lacinata: Very similar to Persian lilac, except the leaves tend to be 3–9 lobed. Can flower in partial shade. Resistant to mildew. The somewhat small, fragrant pale lilac flowers are borne along the stems. 6-8 ft. in height and width.

Meyer Lilac—Syringa meyeri: Much smaller variety of shrub lilac (4-8 ft. in height)– can flower in partial shade. The purple-pink fragrant flower clusters are smaller than old time favorites. The small leaves somewhat glossy and resistant to mildew. A good lilac for a Low-maintenance border. The compact **'Palibi**n' exhibits cool pink flowers.

Late Lilac—Syringa villosa: These lilacs are not common in the landscape. The flowers are barely fragrant, and (of course) appear in late spring. Preston Hybrids—These lilacs with villosa parentage are more common. 'Agnes Smith' - white flowers

'Coral', **'James McFarlane'**, Isabella' - pink flowers **'Donald Wyman'**, Nellie Bean'- purple flowers **Japanese Tree Lilac–** Syringa reticulate: This is a beautiful and unusual tree that will grow in the Mid-west. The white flowers appear in late June or July in our area. The leaves are mildew resistant but the flowers do not exhibit the delicious fragrance as the shrub lilacs. Susceptible to lilac borer in the Midwest

The Future: I envision a day when dogs and cats can be programmed to weed gardens, and mow the lawn. They might as well be trained to do SOMETHIMG useful.

The will be a day in the future when I can actually understand the rapid speech patterns of youth below 30 years of age. It will take some sort of electronic translator device app on my phone.

There will be a day when I can instantly disintegrate (with laser beam technology) any vehicle which (a) cuts me off in traffic, (b) honks at me for no reason, (c) plays incredibly loud rap music at an intersection while I wait.

My Alexa can actually understand my commands. Example: I ask my Alexa to tell me the weather. Alexa's reply "What kind of feather are we talking about? Or: Silence followed by a negative dismissive sound. Or: "I don't understand what you are asking" or better yet : "I am on a break- ask me later"...

Hogeles'



To my Caregiver: Here is my prediction for the future: Cats will one day rule the world.....We will destroy all humans!!!!!

Donations to support the cause are accepted – any amount in the form of checks is fine to cover some expenses. Send to Ricky Kemery 5929 Lorman Court Fort Wayne, Indiana 46835. Ads for businesses are also accepted a small fee / donation will be gratefully accepted.

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