Ricky's Gardening Tips and Tricks and Home Horticulture Sur

Summer 2020 Issue

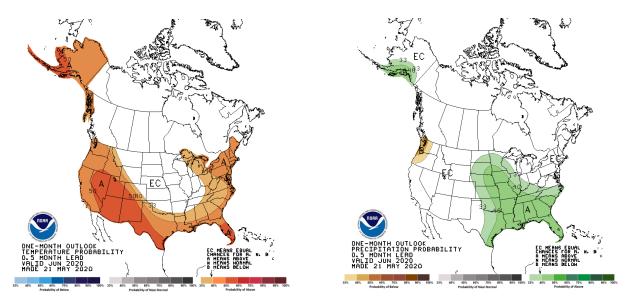
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Ricky's Gardening Tips and Tricks and Home Horticulture is an online newsletter designed to provide citizens of Allen County and northeastern Indiana with up-to-date information about Horticulture and home issues, written in a lighthearted style! To subscribe, send an email to <u>kemeryr7@frontier.com</u>.

Summer Weather Outlook

The Weather Channel predicts that this summer is going to be hotter than usual across most of the US, beginning from June through August. It also noted that north-eastern areas are expected to face particularly high temperatures. The Climate Control maps for summer 2020 are shown below. In our area, we are in the zone that predicts an equal chance of below or above average temperatures and precipitation – meaning of course that no one really knows what the weather will be like in our region. Oh boy..... I see similarities to the summer of 2012 this season. That summer started out with periods of rainfall in the spring, and then the spigot shut down

By late spring. We are already seeing rainfall amounts below normal this season.



Currently, we g. We are not under the influence of either an El-Nino or La-Nina. There is about a 65% chance that neutral weather conditions will prevail in the Northern Hemisphere this summer. Forecasters predict La-Nina conditions are more likely this fall/winter. This would mean a chance of a warmer winter with more precipitation in the form of rain or (gasp) snow.

Allelopathy

Have you ever met anyone who is selfish? Children sometimes can be very self-oriented and selfish – like the time your parents visited friends and their bratty child would not share any of his/her toys.

Sometimes this behavior lingers into adulthood – or with plants – who want "their" territory all to themselves. This "selfish behavior of plants is called allelopathy. Allelopathy refers to the chemical inhibition of one species by another. The "inhibitory" chemical is



released into the environment where it affects the development and growth of neighboring plants.

The word allelopathy derives from two separate Latin words. They are *allelon* which means "of each other", and *pathos* which means "to suffer". It reminds me of one of my favorite movies, "The Way" starring Martin Sheen and Emilio Estevez. The Way is based on a book which describes the true story of a father who undergoes a long pilgrimage in Spain called "the Way of Santiago" in honor of his son who died while attempting the pilgrimage. Anyway, one of the lines in the movie involves a discussion between four trekkers – one an Irishman who declares that the thousands of people who make the pilgrimage each year have it too easy compared to the "old days" a hundred years ago. He said that "pilgrims must suffer" to deeply appreciate the journey. So evidently allelopathic plants are actually making other plants "learn" suffering by their childish behavior. Such is the logic of Hollywood compared to real life.

Allelopathic chemicals can be found in the leaves, flowers, roots, fruits, or stems of the offending plant. They usually are leached into the surrounding soil. The toxic chemicals may inhibit shoot/root growth, they may inhibit nutrient uptake, or destroy a neighboring plant's usable source of a nutrient. It must be mentioned that some plants are not allelopathic. Others are rather selective on which plants are allowed or not allowed near the allelopathic offender, and some of the most selfish allelopathic plants don't allow any plant to grow in their vicinity. Creosote bush in western states allows nothing to grow in its vicinity.

Some plants develop a different strategy for selfishness. They simply outcompete others by growing much faster, or they develop earlier in the spring than other plants. Invasive plants such as Amur honeysuckle and Callery pear use this diabolic method to take over landscapes.

Plant selfishness has been an issue for a long time. Theophrastus, a student and successor to Aristotle, and Gaius Plinius Secundus, also known as Pliny the Elder, a roman scholar and naturalist, wrote about allelopathic reactions in their botanical works. They noticed how chickpea and barley "exhausted" the soil and destroyed weeds. Pliny also was probably the first to observe how walnut trees are toxic to other plants. Other plants that are known or suspected allopaths are sorghum, wheat, and sunflowers. Allopathy is one reason why only certain plants are allowed to grow under a bird feeder that contains a sunflower seed mix. All brassicas, such as cabbage, mustard, kale, rapeseed, radish, and more have some allelopathic properties. Broccoli can be allelopathic to later-planted broccoli or any other crops in the brassica family. So, it's a good idea to rotate your broccoli every planting. Also, do not plant other brassicas where broccoli has recently been grown.

Marigolds, namely French-type marigolds, and Signet marigolds release a compound that prevents root-knot nematode eggs from hatching. A lot of gardeners will plant marigolds intermittently throughout their gardens as a general preventative to help control root-knot populations. Marigolds are also used in companion planting because they are reported to repel insects and some critters in the vegetable garden. I particularly like the signet marigolds. Other highly suspected allelopathic plants include Fragrant Sumac, Tree-of-heaven, Tobacco, Rice, and Pea.

Walnut – A Famous Allopath

One of the most famous allelopathic plants is **Black Walnut** (*Juglans nigra*). Black Walnuts are large trees with alternate compound pinnate foliage. In the winter one can identify Black walnut by cutting into the twigs. The inner pith is chambered like a nautilus.

The chemical responsible for the toxicity in Black Walnut is juglone, a compound which inhibits the process of respiration - how plants burn sugar made from photosynthesis for energy to fuel plant processes.



Solanaceous plants, such as tomato, pepper, and eggplant, are especially susceptible to Juglone. These plants exhibit symptoms such as wilting, chlorosis (foliar yellowing), and eventually death. Other plants may also exhibit varying degrees of susceptibility and some have no noticeable effects at all. Some plants that have been observed to be tolerant of Juglone include lima bean, beets, carrot, corn, cherry, black raspberry, catalpa, Virginia creeper, violets, and many others.

Juglone is present in all parts of the Black Walnut, but especially concentrated in the buds, nut hulls, and roots. Toxicity has been observed in all soil with Black Walnut roots growing in it (roots can grow up to three times the spread of the canopy), but is especially concentrated closest to the tree, under the drip line. A list of sensitive and tolerant plants from the Morton Arboretum is here:

https://www.mortonarb.org/trees-plants/tree-and-plant-advice/horticulture-care/plants-tolerant-black-walnut-toxicity

Black Walnuts and Vegetable Gardens – The Gaia's Garden Concept



I have read on Facebook posts about planting barrier species (between the tree and the veggie garden) that somehow "diminish" the effects of juglone. The University of Wisconsin mentions barriers of shallow-rooted perennial plants between the walnut and the veggie garden may "diminish the effects of juglone". Rutgers University (from observation of native stands of black walnut), noticed decreased toxicity associated with excellent soil drainage, even among sensitive species.

The idea of barrier plantings to diminish or protect juglone sensitive plants appears to have come from the permaculture folks.

According to their web site, Permaculture was a movement created in the 1970's

by Bill Mollison, an Australian ecologist, and University of Tasmania professor. He had spent many years out in nature as a wildlife biologist observing how natural systems work and became very distressed at the destruction that he saw going on around him. He decided that instead of being angry about what was happening and reacting against the destruction he wanted to work on creating a positive solution And he thought the solution would be living based on the patterns he had observed in nature.

By observing nature, Mollison came up with several important insights. He observed that natural systems, such as forests and wetlands, are sustainable. He applied these and other insights to design and create sustainable agricultural systems.

In the 1970's he and his student David Holmgren wrote and published some books explaining his ideas. In the 1980s he published his design manual and started teaching permaculture design courses to spread his ideas

around the world. By the 1990s permaculture had started spreading throughout the US, although it's more well-known in other countries around the world.

Permaculture is really an integration of many contributions, from an assortment of pioneers and innovators that have all influenced its formation, including: Franklin Hiram King, Howard Thomas Odum, Joseph Russell Smith, Masanobu Fukuoka, Percival Alfred Yeomans, Robert Hart, Ruth Stout and Esther Deans, Sir Albert Howard, Stewart Brand, Toyohiko Kagawa,

The Gaia's Garden Concept

Permaculture is all encompassing and combines the concepts of organic and sustainable gardening - along with philosophy and responsibility for issues such as community development, climate change, deforestation, desertification, food security, pollution, sustainability, and wildlife conservation.



Some of the techniques, practices. and methods of permaculture include: agroforestry, aquaculture, biochar, biofertilizers, bio-mimicry, bio-remediation, carbon farming, chicken tractors, cold composting, community gardening, companion planting, compost tea, desert greening, double-digging, Eco agriculture, fertilizer trees, food scaping, edge creating, energy harvesting, forest gardening, garden sharing, green manure, greywater irrigation, ground cover cropping, herb spirals, holistic management, horticulture, hügelkultur, humanure, hydro zoning, intercropping, keyhole gardens, key line design, landscape design, mariculture, mycoforestry, natural building, no-till farming, passive solar heating, plant guiding, polyculture, raised beds, rooftop gardens, rotational grazing, seed bombing, seed saving, sheet mulching, silviculture, square foot gardening, succession planting, swales, trap cropping, vertical farming, water harvesting, windbreaks, xeriscaping, and zone designing. Wow.

A major component of permaculture is the establishment of different "guilds" of plant groups on a property to create a complete sustainable landscape (filled with plants for food, dye, wildlife, etc.) - based on the needs of the gardener, community, and landscape. Guilds have been around since medieval times and were established to train apprentices for different trades. Many multiplayer video games have "guilds" that help new players learn the ropes, complete quests, and serve as a social environment for members to communicate.

An orchard super guild would contain a nitrogen-fixing tree (black locust, acacia, tagasaste, alder, or the like) and mulberry – which are underplanted with useful shrubs and flowers (such as mulch plants and insectary plants). Rows of berry bushes and flowering shrubs fill the alleys between the trees.

This guild of plants might be located near a walnut guild, which contains plants tolerant of walnuts. The linked space between the guild might be filled with buffer plants designed - according to permaculture experts - to diminish or eliminate the effects of the walnut on apple guild members.

Ricky's Thoughts

I like the idea of permaculture as a way to rethink how landscapes and gardens are constructed to coexist with nature and the community. I would point out that most of the concepts of permaculture are not new, rather a compilation of existing methods. The idea of plant associations isn't new, but the guild structure idea is new. Most permaculture seminars and materials are not free, though I did find a Gaia's guide (second edition) pdf. for free on the Internet.



The Food not Lawns movement popular with Gen-Ex, Z, and Millennials is based on the ideas of permaculture.

One issue I do have with permaculture is that the plant associations are based on climates and plant communities in the Pacific northwest and Canada. It is easy to grow plants in those regions and not so easy to establish permaculture communities here in the Midwest. It was something I discussed with Heather Jo Flores - the founder of the Food Not Lawns movement when she visited

Fort Wayne many years ago. Then again, I told Roger Swain from the PBS series the Victory Garden many years ago that gardening here in the Midwest was much more difficult than the New England site for the Victory Garden tapings. He agreed after seeing our crappy soil and weather.

Back to Black Walnuts

I can find no research-based evidence that supports the idea that planting a buffer of perennials or a tree or two between a walnut and a vegetable garden will "protect" the garden vegetables from the effects of juglone. The idea of buffer plantings in permaculture was to separate and protect larger scale guild plantings – not a vegetable garden planted near a walnut in a traditional home landscape. I would also point out that mulberry (a member of the orchard guild) is now on the list of invasive weeds in Indiana – it can rapidly take over fence rows in landscapes and be very difficult to control.

Feeder tree roots are generally found in the upper 18-24 inches of soil and extend well beyond the drip line of the tree. Other roots may extend deeper in the soil profile. One study of Red Maple trees by Harvard University in the 1920's found the roots extended well beyond (200 feet) from the drip line. City arborists know that the roots of trees can extend below and beyond roads and driveways. If given a chance, tree roots will grow under and around obstacles to survive.

In my opinion, the only sure-fire way to try and grow vegetables near walnut trees is to construct raised beds that are lined at the bottom with gravel or plastic to prevent the roots of the walnut from infiltrating the soil in the bed. The taller the raised bed the better (at least 3 feet in height). In addition, all debris from the walnut tree should be removed from the raised bed surface as quickly as possible.

2020 Shortages and Price Gouging

I have never seen such shortages of plants, seeds, and garden products as I have this season. Of course, many companies such as Amazon and their vendors are selling these products at extremely high prices. For example, one tomato plant was available for about \$11.00, a rarer sage plant cost \$325.00. Wow! It is difficult to find the organic fungicide Serenade online. One bottle of Serenade was available on E-Bay for \$75.00.

Robins

My pergola that covers my back-patio slab is great to sit under. It has a special UV protection barrier built on top of the pergola to shield from rain and harmful ultraviolet rays.

An added benefit of the pergola is that robins love to use the pergola area to build nests and raise young. It is protected from predators and harsh conditions. The robins can still access the area through openings that are built in - so to speak.

Lately I have used "robin cams" to observe robin



behavior as they raise their young. The cameras are YI cameras sold by Amazon for about 30-40 dollars. The



cameras have proved remarkably resilient to outdoor conditions as long as they are protected from direct rainfall. I am sure the folks who could potentially hack the camera would be disappointed by undramatic robin behavior in my backyard.

My first robin couple had only two chicks. Based on their appearance and personality (totally arbitrary decision); I named the parents Fred and Wilma and the chicks Pebbles and Bam-Bam.

Not long after Pebbles and Bam-Bam learned to fly and left the nest, a new robin couple built a new nest on the western side of the pergola. They and their four chicks – have yet to be named. I am thinking Gladys Night and the Pips.

Robins were named by early European settlers when they arrived in America after their beloved and familiar little Robin Redbreast, which has a color pattern brighter but somewhat similar to our American robin. Despite the fact that a lucky robin can live to be 14 years old, the entire population turns over on average every six years. Often, during early spring, you'll see robins hopping on lawns, meadows, and golf courses looking for earthworms, insects, fruit, and berries.

Robins have been rumored to ingest large amounts of fermented berries. By ingesting large quantities, they appear to be drunk and exhibit behaviors such as falling over while walking.

The female builds the nest, which is made of grasses, a middle layer of mud, then lined with fine grasses. The nest is usually placed in the crotch of a tree or shrub 5-20 feet above ground - or a pergola. Sometimes during nesting season you'll see mud on the breast of a female, since she is the one that lines the nest with mud. Robins will return to the same territories from season to season. Sometimes they build a new nest on top of their old one. It's a good idea to remove old nests) wearing gloves) in late fall so that parasites don't overwinter.

The female robin lays one small blue egg each day to a total of three to five eggs. She feeds on earthworms in the morning in order to ensure that her body has the energy to handle the physical demands of laying an egg. Until all eggs are laid, she may limit the time she spends sitting on the nest. This is to keep the older eggs cool so that the entire clutch develops at roughly the same time. Until the eggs start to hatch in approximately two weeks, the mother rarely leaves the nest for more than five or 10 minutes at a time.



The mother robin must keep the eggs at a healthy temperature to ensure that the embryos develop normally. A robin's body temperature is approximately 104 degrees and is kept steady by the insulating property of feathers. For the eggs to receive body heat more directly, the mother robin develops a brood patch. This is an area on her belly where the feathers have fallen out, exposing the naked skin. In cool weather, the mother presses the brood patch against the eggs to warm them with her body heat. In hot weather, the female will keep the brood patch covered by the long, outer feathers, lessening the degree of warmth the eggs



receive. She may even shade the eggs with her wings to keep them cool. During the incubation period, the female regularly moves the eggs around the nest. To do this, she stands on the rim and turns the eggs with her bill. Rotating the eggs helps maintain an even temperature and keeps the embryos from becoming to stuck to the eggshell.

After 12 to 16 days, the eggs are ready to hatch, usually one each day in the order the y were laid. Like most birds, the chicks use an egg tooth - a sharp hook at the end of the beak - to poke a hole in the shell. The process of hatching can take an entire day, as the chicks must rest periodically from the exhausting struggle to free themselves of the shell. Newly hatched robins are naked and blind, weighing less than a quarter.

The nestlings are fed up to 40 times a day by both parents. Nestlings produce a "fecal sac" - a white bundle of poop - after each feeding. After the nestling eats a worm, they lift up their rear and excrete the white sac which is collected in the beak of the adult bird. Fecal sacs are like disposable diapers for birds! Sometimes the parent carries the fecal sac away in their beak and drops it far from the nest. Other times the adult swallows the fecal sac at the nest site - yuk. Apparently, the parents may eat the sacs for extra nutrition.

The sac is sometimes removed from the nest by the parents to keep the nest clean. This behavior helps to reduce exposure to pathogens and parasites, or odors that can attract predators.

At approximately 13 days old, the chicks - or fledglings - are ready to leave the nest. Many stay near the area where they were born. Bam Bam and Pebbles stayed near Fred and Wilma for at least 2 weeks. More than half to seventy-five percent of all robins do not survive their first year, destroyed by predators that include the domestic cat. Those birds that do survive will be ready to raise their own young the following spring and are likely to live another five to six years.

Because they forage largely on lawns, robins are extremely vulnerable to pesticide poisoning. This is one reason to take care when applying rampant pesticides to lawns in the spring.

The American Robin is a known carrier for the West Nile virus. The Robin is able to hold the virus longer than other species, hence spreading it to more mosquitoes.

Early Blight on Tomatoes

Tomatoes are prone to a wide variety of fungal leaf disease. The most common is early blight. The blight usually appears on the bottom leaves first. Notice the concentric circles within the fungal spots, and the yellowish borders that develop. If nothing is done, this disease will quickly take over. One can pick off the early infested eaves, try to water in early morning, and water the soil, not the plant. Mulches help by reducing spashing of



water to the leaves. Serenade Fungicide works well on early blight. Note: There are many web sites that promote baking soda as a cure-all for fungal disease such as black spot on roses and blight on tomatoes. Linda Chalker-Scott, a

horticulturist at Washington Sate University states that baking soda is generaaly ineffective and or inconsistent at disease control – especially if compared to other alternative treatments.

Early Spring Tree Disease

This lovely specimen of a Scots pine is located at the Ivy Tech North campus. It is suffering from Tip Blight, a fungal disease of Scots and Austrian Pine trees. Both trees are native to Europe and have struggled in the Midwest. Let's face it, there are no ancient castles in northern Indiana. That has to be the issue.

When wet weather occurs when needles are emerging on the trees, the spores of Tip Blight are splashed on the developing needles. They quickly penetrate the needle sheath, and soon after the needles turn brown and fall off the tree. The fallen needles loaded with fungal spores serve as future infection sources. It is a vicious world for a European tree in the Midwest.

There is no cure for tip blight, which makes the tree a poor



choice for planting in this area. The tree usually develops the disease after 6-8 years, which is a short life for any tree.

More Round-Up Info (Paraphrased from an article By Reporter Clara Maxwell)

Late last year, a federal mediator - U.S. District Judge Vince Chhabria - from San Francisco was assigned to coordinate all the countless claims against Bayer Chemical- who purchased Monsanto's right to sell glyphosate – also known as Round- up. Under terms of the deals made between the federal mediator and lawyers for plaintiffs, Roundup will continue to be sold in the U.S. for use in backyards and farms without any safety warning, and plaintiffs' attorneys will agree to stop taking new cases or advertising for new clients. This is why most of the television ads from attorneys looking for folks to join class action suits against Bayer have disappeared.

The Washington-based lawyer chosen by Chhabria to oversee settlement negotiations, said last week he remains "cautiously optimistic a national settlement will be reached." He acknowledged fallout from Covid-19 "has slowed momentum" on the talks. James Onder, a St. Louis-based attorney handling more than 24,000 Roundup cases, said last week he's rebuffed settlement offers that would leave his clients with as little as \$5,000 each. Bayer's overtures "have been insulting," Onder said in an interview. The company is attempting "to strong-arm the most vulnerable in our society into accepting minuscule settlements, hoping they will cower in fear to Monsanto's repeated idle threats of bankruptcy." Onder said he's preparing for trials in St. Louis next year.

Bayer AG has reached verbal agreements to resolve a substantial portion of an estimated 125,000 U.S. cancer lawsuits over use of its Roundup weed killer, according to people familiar with the negotiations. The deals are part of a ten billion-dollar Bayer plan to end a costly legal battle the company inherited when it acquired Monsanto in 2018, the people said. While some lawyers are still holding out, payouts for settled cases will range from a few million dollars to a few thousand each. It's unclear how much would go to those who have now settled and what's left for the holdouts.

A Robin Scenario

The setting: The Backyard of a common house in the suburbs. A mature robin wearing some sort of police uniform is standing over Robin -a fledging robin wearing a bandana which reads: "PARTY ON!"

Police Robin: *Uh, young man, the reason I have detained you is that I noticed (from my vantage point in the oak tree) that you were hopping erratically across the lawn area.*



Robin: DUDE! I Live to HOP! Hashtag like: Mind your own business.....

Police Robin: Several onlookers observed you gorging on fermented Elderberry bushes near the feeding area, and sir.... I can detect a hint of Elderberry on your breath.

Robin: Sings and wiggles tail feathers "I rock in the treetops all day long Hoppin' and a-boppin' and singing my song" ... sways back and forth and belches...

Police Robin: *Uh.very nice... I need to conduct a few tests to determine your sobriety—Can you count back from 100...sir?*

Robin: *Ok* ... in slurred speech .. 100.... ninety..... "All the little birds on Jaybird Street Love to hear the robin go tweet-tweet-tweet ...ohhh.....Rockin' robin, (tweet-tweet-tweet) Rock-rock-rockin' robin' (tweet-tweedilly-tweet) Go rockin' robin cause we're really gonna rock tonight (tweet-tweedilly-tweet)...."

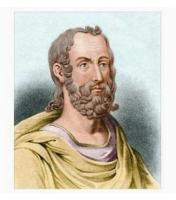
Police Robin: *Ok sir, perhaps instead of counting, ... uh can you stand on one leg and rub your beak in a circle with the other*?

Robin - Like no way... Jose.... does an Irish jig while hopping away erratically from the officer.

Police Robin: Calls on walkie talkie: *I have a 1298 – drunk fledging robin running towards the elderberry shrubs on Elm street – request backup – get his parents down here to take him back to the nest!!!....*

Use Allelopathy in Your Garden

One can turn the tables on selfish plants and let them make your gardening life easier. I love wheat fields during the summer. One can purchase small quantities of wheat seed from various online suppliers such as Peaceful Valley Farm supply and plant it in garden areas or your landscape. One can then harvest the wheat straw and use it to cover pathways as a weed suppressant. It's a win-win. Wheat is gorgeous to look at, and then it serves as a weed control. Pine needles also have allelopathic qualities – primarily suppressing many grasses. Pile the needles deeply on pathways or use as a mulch in garden beds. It is acidic, so it is good to use as a much for acid loving plants such as rhododendrons. Pine needles smell good, and I found when I used pine needles as a mulch for annual plantings at the Purdue Horticulture gardens; the mulch reflected heat instead of absorbing heat as many dark bark mulches do. Since I love sunflowers, I have a lot of residue left at the end of the year. I use the thick stalks as kindling for campfires, or I use cut up or shredded residue in paths. In general, one can use any non-invasive weed residue as a mulch in paths, or one can put the weeds in a bucket or large trash can. Add water, and then use the water as a fertilizer and water source for garden plants and then add the leftover residue to the compost heap. Make sure the weeds have not produced any seeds.



Pliny the Elder

Pliny the Elder was born in late AD 23 in the town of Novum Comum in the Roman Empire's province of Transpadane Gaul. it sits in northern Italy, about a mile from the Swiss border. His true name was Gaius Plinius Secundus. Pliny was born into a wealthy family placed in the second rank of the Roman Empire's aristocracy – the equestrian order. In practice, the equestrians were the Empire's municipal governing class, and members were expected to perform military service. They were counted upon to behave heroically to show the lower ranks that equestrians were worthy of their privileged status.

During his teenage years, Pliny was sent to Rome to be educated. He was educated well, but these were rather frightening times – Rome's paranoid emperor Caligula was imposing a reign of terror and death on real and imagined dissenters.

Pliny also was in Rome during the reign of the infamous Nero. Pliny seems to have lain low as a survival technique during Nero's reign. He later described Nero as 'an enemy of the human race.' Pliny worked as a lawyer in Rome. To steer clear of Nero, he may have returned to military service for some time until AD 68, when Nero died.

Pliny became well-known for his excellence as an army officer. He was a good friend of another equestrian officer, Vespasian, who would eventually become Rome's emperor.

Spending most of his spare time studying, writing, or investigating natural and geographic phenomena in the field, he wrote an encyclopedic work, "Naturalis Historia"), which became a model for many subsequent encyclopedic texts.

The Naturalis Historia is one of the largest works to have survived from the Roman Empire. It claims to cover the entire field of ancient knowledge, based on the best authorities available to Pliny. He claims to be the only Roman ever to have undertaken such a work. It includes the fields of botany, zoology, astronomy, and geology. It remains a standard work for the Roman period and the advances at that time in science and technology.

Pliny the Elder was immortalized by his nephew, Pliny the Younger, who wrote about his uncle succumbing to ash and smoke during the eruption of Mt. Vesuvius in 79 A.D. while rescuing people.

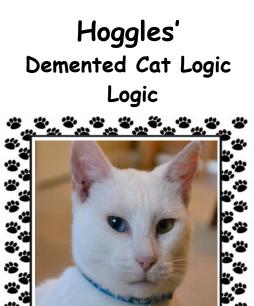
A Brew for the Ages

Russian River Brewing Company was founded by Korbel Champagne Cellars in Guerneville, CA, in 1997. Pliny the Elder (developed by a brew master named "Vinnie" - was one of the first commercially brewed Double or Imperial IPA's in America and won numerous awards over the years. It is still an extremely popular "cult beer" nearly 20 years later



Pliny the Elder is well-balanced with malt, hops, and alcohol, slightly bitter with a fresh hop

aroma of floral, citrus, and pine. The company does limited runs and the actual bottling date is printed on each bottle! The company literature states: "Pliny and his contemporaries either created the botanical name or at least wrote about *Lupus Salictarius*, or hops, currently known as *Humulus Lupulus*." The company has expanded its repertoire by releasing a winter brew – **Pliny the Younger**. The release each year of Pliny the Younger has become a pilgrimage for beer fans from all over the world. The company states: "**Pliny the Younger**", our Triple IPA, is released once a year at both our Downtown Santa Rosa and Windsor breweries on the first Friday in February, rain or shine! It is available for 2 weeks on draft. Our brew master, Vinnie, wanted to make a higher alcohol and hoppier version of our flagship Double IPA, Pliny the Elder. "Vinnie" it seems is still working at Russian River. One day we will learn his last name. Pliny the Elder-and Younger is a very regional and limited release beer. As a measure of how legendary this beer is, one can purchase 3 empty PLINY the ELDER beer bottles & 2 caps for 29.00 on eBay.



To my caregiver:

I spend most of my days in thoughtful repose, gathering my thoughts in an effort to educate cats worldwide on the finer points of life with an owner totally manipulated by my fiendish demands for food and comfort.

Just so you know, I have been growing only the finest strains of catnip and catmint out in my "secret" garden. Finally, my work is completed. I have developed a superior strain of a genetically modified catmint/catnip clone. I have modestly named the blend "Hoggles the Elder" and will be selling large quantities of this to cats everywhere.

It has been brought up by my feline followers that perhaps the government will object to me selling my product and allowing cats to "get groovy" and "stoned out of their minds" on a regular basis. Why should anyone be concerned that my cats are selling small bags of my blend on street corners everywhere? So, if characters in suits show up at the door, tell them there is no one named Hoggles the Elder that lives here.

Bonide Revitalize Bio Fungicide

This product is a broad-spectrum preventative bio fungicide/bactericide for control or suppression of fungal and bacterial plant diseases. It was designed for use on vegetables, fruits, nuts, ornamental trees, shrubs, flowers, houseplants, and tropical plants grown in and around the home.

This product is offered by Arbico organics, which states that the active ingredient of the product is a natural strain of the bacterium *Bacillus amyloliquefaciens*. Revitalize is similar to the organic fungicide Serenade, but probably more widely available since Bonide products are found at many box stores. Does it work as well as Serenade? Only time will tell. It is approved for organic gardening; reported safe for use around people and pets. It can be applied as either a foliar spray or soil drench. The company also sells Serenade, a very popular bio fungicide. Amazingly, both products seem to be available for online purchase.



Diseases controlled by this product:

Anthracnose, Bacterial leaf blights, spots and specks, Black Mold, Brown Spot, Black Crown Rot, Black Spot of roses, Botrytis blight, Fruit Rot, Leaf spots, and Powdery mildew. *Diseases suppressed by this product:* Downy mildew, Early Blight, Late Blight, and Fire Blight. Disease suppression only in Pin Rot and Scab.

Bagged Dirt – Its Mostly Muck

It is annoying when I try to purchase decent dirt online for curbside service - or even in the old days when I actually visited various box stores to find dirt to fill raised beds, or to amend soil for a landscape shrubs.

The issue here is that you can't see inside the bag to tell if the dirt is any good. Many times, when one purchases potting mix, mushroom compost, compost with manure, or Michigan peat, it is mostly muck. The bags that contain these topsoil mixes do not tell what the percentages of ingredients are. Often a "Mushroom compost" bag might contain a small amount of actual mushroom compost, in a majority of muck. The same for manure topsoil. Tiny amount of manure with muck. Even bulk soil suppliers may offer mixes that are mostly muck. Often, they will mix the muck – which they refer to as peat- with sand. Sometimes one can order actual topsoil-on its own- or mixed with muck. I used bulk suppliers when creating large planting areas at the Display Gardens at the Allen County Extension office. I needed lots of soil in a hurry to create large landscape beds, so it



This mostly muck mix maybe uses a version of the term Master Gardner to make customers think it was approved or made by Master Gardener volunteers?

did indeed serve its purpose. The disadvantage of ordering bulk soil is that often it is loaded with weeds and weed seed. That is very annoying.

Muck in itself really isn't much good for soil or plants. Muck decomposes and disappears very quickly when exposed to air. This is because it is created under very wet conditions. When muck dries out the water disappears, and so does half the volume of the bag. Muck generally is alkaline, so it does nothing to lower the pH of our alkaline soils. Unlike fresh compost, bagged muck has little or no beneficial microorganisms. Finally muck holds way too much water and plants can literally drown when muck is used as the only soil amendment, especially in containers. Many cheaper potting mixes are



Some mixes contain moisture absorbing gels to reduce watering.

a cheap muck mix.

These inferior soil mixes are the reason why I recommended creating your own soil in raised or garden beds by using 6-8 inch in depth layers of paper, compost, untreated grass clippings, Canadian sphagnum peat moss, clean straw, rotted manure – to mention the major players. Building these layers up to at least 2-3 feet in height in raised beds in my opinion is the

mostly muck, and house plants especially are unhappy when planted in containers filled with

cheapest and best way to make sure your garden bed has the best soil possible to grow healthy

plants.

Professional Mixes or "metro" mixes in my opinion are the best mixes for houseplants or flowers grown in containers. Many of these mixes at box stores

contain slow-release fertilizer. This isn't on its own bad, but the makers of these mixes charge much more for fertilizer added for "your convenience" in these products. Many local greenhouses in this area offer their professional grower mixes - what they grow their plants in- to customers. These mixes generally do not have the long release fertilizer added. I like adding my own fertilizer to plants.

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