Home Horticulture Ricky's Gardening Tips and Tricks Summer 2019 Issue

Written and compiled by Ricky D. Kemery, Allen County Extension Educator Retired, phone: 260-431-6893 **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 kemeryr?@frontier.com.

Weather and Watering

The folks at the National Climate Prediction Center still insist that this summer will be cooler than normal. I am going to respectively disagree with their prediction based on my own experience. We are currently still under the influence of a weak El Nino weather pattern. Every spring El Nino I have experienced over decades results in a hotter and drier summer. Following is information about summer watering just in case I am correct.

Watering Tips:

Most plants need about an inch of rainfall per week to grow really well. The amount of water needed by plants does vary however- by soil type, exposure, and even the type of plant that is grown. Let's review a few essential rules of watering so that everyone waters efficiently and sustainably.

- 1. Try not to water plants in the late afternoon or evening. This practice promotes disease and wastes water. Watering in early morning is the most efficient way to water plants
- 2. Contrary to popular belief- watering when it is hot doesn't "burn" plants. It is inefficient- and cold water can sometimes stress hot plants.
- 3. Most established trees and shrubs really don't need much watering- even during drought periods. It is best to water deeply and infrequently- if at all. There are exceptions of course. Hydrangeas in particular need more water than most-especially if they are planted where they receive afternoon sun. Placing plants such as hydrangea, rhododendrons, azaleas, dogwood, Japanese maples, on the east side of a home or under other trees and shrubs is more sustainable because the plants simply do better with less water.
- 4. Annual flowers and vegetables usually need watering about every 2-3 days during summer drought periods. Use a hand trowel to dig down six inches near the plants. Water when the soil at this depth is dry. Water long enough so the soil becomes moist at that depth. This can take a while, because generally an average faucet only produces a gallon of water every 30 seconds. It will take several gallons to water an area properly. Newly planted trees with a 2-inch trunk diameter need about 5-10 gallons of water per week.
- 5. Most established perennials will need deep watering about once a week during hot dry periods. There are exceptions- Astibles and clematis are touchy when it comes to drying out. Other plants, such as sedums- barely need water at all.
- 6. Mulching conserves soil moisture. Remember, three inches of mulch is all you need to help conserve moisture. Please do not pile mulch around the trunks of trees or the crown area of perennials.
- 7. Rainwater is best for plants -so do your best to conserve it by using rain barrels if possible.
- 8. Final rule: Most plants die from overwatering- not under watering. Keep this in mind as we deal with summer drought periods.

Strange Alien Beings in my Garden

Sometimes I have my morning coffee under the pergola that looks out on my garden. It is strange how one can feel such peace and tranquility observing the flowers, birds, sun and sky and wait a second...

Attached to the wicker bench I am sitting on is something strange, something weird...something sinister.

What I observed were small white capsules with an opening on the end. Something green was poking out of the opening. Intrigued, I took one of the capsules and pulled it apart. Inside there were small threadlike caterpillars that would wiggle slightly when I placed one on my palm.

This warrants further investigation, I mused... Could these structures be some new life form, never discovered? Perhaps these are Mind Flayer larvae (from the series Stranger Things), or Borg babies from Star Trek. As it turns out, truth is even stranger and more macabre than fiction. These are potter wasp egg incubators.....



Figure 1 Photo by Gwendra Turney



Potter wasp adults feed on flower nectar and collect small caterpillars to

feed their young. The caterpillars are paralyzed with the wasp's sting and piled into the brood cell which is the compartment in which the wasp larvae develop. The female wasp then lays an egg on the stored caterpillars. When the wasp larva hatches, it drops and starts to feed upon the supplied prey for a few weeks. The Potter wasp larvae consumes from 1 to 12 caterpillars as it grows. The complete lifecycle may last from a

few weeks to more than a year from the egg until the adult emerges. Adult potter wasps then feed peacefully on floral nectar. What a relief.

Potter wasps belong to a group of wasps called Eumenine wasps. These wasps are very creative nest builders. The different species of Eumenides may either use existing cavities such as beetle tunnels in wood, abandoned nests of other wasps and butterflies, or even man-made holes like old nail holes and screw shafts on electronic devices that they modify. Sometimes they construct their own either underground or exposed nests. The nest may have one or several individual brood cells. The most widely used building material is mud made of a mixture of soil and regurgitated water. Some species use chewed plant material.

The name "potter wasp" derives from the shape of the mud nests built by species of Eumenes and similar genera. It is believed that Native Americans based their pottery designs upon the form of local potter wasp nests.

All known eumenine species are predators, most of them solitary mass provisioners, though some isolated species show primitive states of social behavior and progressive provisioning – whatever that means. I would define it as aggressive antisocial non-progressive behavior.

All I could think of as I researched potter wasps, were the poor caterpillars(probably innocent hemlock caterpillars), beginning their young lives full of hope and promise – only to be paralyzed – taken away – and stuffed into a papery structure to be consumed one at a time by a developing wasp baby. My dreams will be filled with their screams as they perish – one by one in a senseless macabre ...

Oh well..... time to finish my coffee.....

To Use... Perhaps Peruse Chartreuse

According to Wikipedia, Chartreuse is a shade between the colors green and yellow, but it is typically considered a sub-category of the color green.

I can almost visualize the meetings that occurred over this topic. Chairperson: "Let's see, today we have gathered this committee to discuss whether chartreuse is "green" or "yellow" – Any Thoughts?. Committee members argue extensively: "Green, Green I tell you! No! Yellow! You fools! Wild scuffling occurs between committee members... packets of crushed granola bars fly across the room...

Chairperson" Ok then... subcategory of green it is" Amid cries of protest from both sides....

The color was named after a French liqueur called "chartreuse" which has a greenish-yellow hue. The liqueur was first produced in 1605 by the Carthusian monks of France, but likely not marketed to the public until the 1730s. The name of this drink was first used as a color name in the year 1884 when it was mentioned in a British fashion newspaper. During the late 1800's silk and velvet fabrics



Figure 2 Photo by Penny Alles

were being produced in chartreuse and used to make such stylish items as feather fans, gowns, purses, shoes, and hats. In the roaring 1920s, chartreuse was a very popular choice for dresses because of its bold and rebellious nature. Chartreuse resurged in the late 1950s as a common color choice for clothing and furniture. In the 1960's, its boldness appealed to young people.

In the 2010's, chartreuse became once-again favored as a decorative color in offices of tech companies because the color reflects individuality and creative thinking which are highly valued attributes in the field of technology.

Chartreuse can be seen throughout nature in many different plant species. Some common foods are considered to be chartreuse colored including pears, green apples, pistachios, limes, and avocado flesh. The gemstone tourmaline can be found in the shade of chartreuse. Because it is bright and easy to spot, chartreuse is used for tennis balls, fishing lures, and reflective safety vests.

People who like chartreuse are energetic and creative above all else! Their enthusiasm and positivity make them lovable, and they make friends easily. Chartreuse lovers enjoy challenges and seek adventure. On the negative side, people who gravitate to chartreuse struggle to find balance in their lives. They are caught between the calmness green offers and the excitement of yellow. This struggle can cause them to have high levels of anxiety.

I love to use chartreuse in the garden. I mix in the herb dill in with flowers such as poppies, zinnias, and sunflowers. Chartreuse blends well and compliments deep blues, reds, and greens. In fact, this color works with almost all colors. I love the combination of the chartreuse flowers of Lady's mantle with Hosta. Anytime I find a plant with chartreuse flowers or foliage; I try to incorporate it in my garden and landscape.

I plan to hold public meetings in the future in an effort to make chartreuse its own color – by golly- instead of being a demeaning sub-category. It is time to give sub-category colors the recognition and importance they truly deserve. Represent!!!

More Roundup Drama

Long ago, a person came to meet with me at the Extension office. As it turns out, he had worked for many years for Monsanto developing the herbicide glyphosate – sold as Round-Up. He didn't understand why these "organic gardener" folks didn't want to use "chemicals" in their gardens. "Hell, I can drink a cup of glyphosate right now and it wouldn't hurt me at all", he remarked. "I have some Round-Up in the shed out back", I said, "I can pour you a glass if you want". He declined.

Several popular breakfast foods, including Cheerios and Nature Valley products, continue to test positive for trace amounts of a controversial herbicide that may increase the risk of cancer, according to a report released Wednesday by an environmental advocacy group.



Figure 3 Photo by Gwendra Turney

The Environmental Working Group found that all 21 of the products it tested had levels of glyphosate that were "higher than what EWG scientists consider protective for children's health."

Manufacturers maintain that their foods are safe, and the findings aren't unprecedented: The group also found in October that most of the breakfast cereals it tested contained glyphosate, the main ingredient in the weed killer Roundup.

The new report follows two prominent legal verdicts that determined the herbicide caused cancer in plaintiffs.

Opponents of this study argue that the small amounts of glyphosate in cereals does no harm to humans and that the amounts in the cereals are below government standards for this pesticide.

General Mills, which manufactures all of the products tested in the EWG report, said in a statement that its "top priority is food safety." The company noted that "most crops grown in fields use some form of pesticides and trace amounts are found in the majority of food we all eat" but said it was working to "minimize the use of pesticides on the ingredients we use in our foods." General Mills did not directly respond when asked why it is reducing pesticide use when it already considers its products to be safe. As it turns out spraying glyphosate on oats is not really necessary – glyphosate is sprayed directly on mature oats simply to kill the crop completely so oats can be harvested earlier to make cereal—thus saving money.

So the issue here is that if a person eats cereal for breakfast, has a granola bar for lunch, and some sort of pasta or wheat product for dinner – along with 3 glasses of tap water (multiplied by 365 days a year) - is the amount of glyphosate ingested over the course of a lifetime above safe standards for human consumption – especially children? It is not about just one exposure to a pesticide -it is about exposure over a lifetime – no one talks about this type of chronic exposure.

In My Garden

One of the things I like about seeding annuals is that one never knows what flowers will appear in any particular year.

Last year, sunflowers and cosmos and zinnias did very well. This season poppies, nasturtium, and dill have performed exceptionally well. I also planted some clematis in several spots this year, and that has just taken off. I have heard similar reports of fabulous clematis in other gardens this year. Hydrangeas have also done well – the hydrangea pictured here is

"Limelight". Pictures by Advanced Master Gardener Penny Alles (Clematis by Gwendra Turney). The poppies are mostly Bread seed Poppies – with a few Corn and California Poppies.









Sudden Oak Death and Rhododendrons

Rhododendrons and azaleas are common items in just about every garden center and box store in Indiana. People love them which is why these plants are sold even though rhododendrons and azaleas tend to be short-lived in our area because they just don't like our climate and soils.

There is some confusion regarding azaleas and rhododendrons. Azaleas tend to be smaller, but not always. One saying that helps understand their relationship is "All azaleas are rhododendrons, but not all rhododendrons are azaleas". Rhodos are the larger group- azaleas are just a subgroup of rhodos.

It was recently discovered that rhododendrons harboring the disease sudden oak death were found at some garden centers in Indiana.

According to the Indianapolis Star, The fungal pathogen called sudden oak death was detected in several varieties of rhododendrons being sold in what was first believed to be in about 30 stores across the state. That number has now tripled, and infested material was sent to more than 70 Walmart's and 18 Rural Kings in Indiana. What's more, it's been discovered that the infected plants were delivered to nine other states, according to Megan Abraham, director of the DNR's Division of Entomology & Plant Pathology. Indiana has the most locations with infested plants of all the states, Abraham said. "We are still in the thick of this," she said, "and we are making it our top priority."

The fungus — which has killed large tracts of oaks along the West Coast and affected hundreds of thousands of acres — has managed to be kept out of the Midwest to date. Plants with the disease can transmit it if planted within about 6 feet of a standing oak. Not all oak trees that are infected with the disease die, but many do. There is no treatment for sudden oak death.

The infected rhododendrons sent to Indiana and other states came from Park Hill Plants in Oklahoma. Some stores around Indiana still have the infected stock, according to Abraham. Indiana's DNR team has destroyed more than 1,500 rhododendrons and have put another 1,500 other plants on hold from the stories they've been to.

The DNR does not know how many people may have bought plants from the affected stores. They are encouraging people who have bought plants, particularly rhododendrons, from stores in Noblesville, South Bend, Columbus, Sullivan and Tippecanoe in the past four weeks to contact the DNR. They should call 1-866-NO-EXOTIC (663-9684) for instructions.

Since rhododendrons are often short-lived in the Midwest; it might be a good idea not to purchase one this year until the smoke clears and scientists can learn more about the extent of the problem. One can always call the IDNR to find out more about this issue. You can also ask if the plants at your favorite garden center or nursery have been inspected and tested to be free of the pathogen that causes sudden oak death.

Review – Job's Organic Fertilizer

The problem: Peppers planted in two separate beds with different soil mixes. In one raised bed consisting of a manure and compost mix the peppers were stunted and yellow. This yellowing first occurred on the old growth of the peppers and eventually encompassed the entire plants. In the other raised bed, filled with a mix of peat moss and professional growers mix -the peppers were lush and green and three times the size of the peppers in the manure/compost bed. The conclusion: The manure/compost mix purchased at a box store probably had very little of either in the bag. Often bags of soil that claim to contain compost, mushroom compost, manure and other ingredients just contain muck with just a trace of the other ingredients. The manufactures don't actually have to list the percentages of ingredients in the bag. Nice.



Often mixes are pasteurized or sterilized to make sure no harmful pathogens are in the mix. Unfortunately, many beneficial bacterial are destroyed in the process. This is why homemade compost is always better to use in your garden.

I used all my compost, hence the poor purchase of box-center mixes. As I told someone recently – I am not perfect.

I purchased the organic fertilizer shown below because it also contained a cocktail of beneficial bacteria and fungus. I studied beneficial fungus called mycorrhizae at Purdue University when I was a graduate student there, along with research on the establishment of prairie plants along highways. Anyway, I knew how important beneficial organisms are to plants-especially in poor soils.

This fertilizer did not disappoint. After 2 applications of the fertilizer, the paltry peppers began to turn a deep green, and

F1262 ANALYSIS Bacteria: Arthrobacter globiformis 27.8 CFU/gram 27.8 CFU/gram Azotobacter chroococcum SS rillum lipoferum 27.8 CFU/gram Pseudomonas fluorescens 27.8 CFU/gram Endomycorrhizae: 0.033 propagules/gram Glomus intraradices 0.033 propagules/gram Glomus aggregatum 0.033 propagules/gram Glomus mosseae 0.033 propagules/gram Glomus etunicatum

have almost caught up with the peppers in the other raised bed. Note to self – don't purchase crappy soil and compost. Photos by Penny Alles.

Epsom Salts, Vinegar, Dish Soap - A Weed Control Option

I recently tried out the Epsom salt, vinegar (white vinegar is most recommended), and dish soap solution that is currently the Internet rave for organic weed control. The recipe is one gallon of vinegar, 2 cups of Epsom Salts, and a quarter of a cup of dishwashing detergent. Put the whole mixture in a sprayer, and then spray the foliage of the weeds you want to control.

I used this solution on a small area where there was lambs quarters, pigweed, and a few grasses. The weeds turned brown by the next day. It is important to note that this solution does not actually go within the plant. It only burns the foliage for a period of time. Eventually the weeds might regrow, especially if the weed is a perennial such as quack grass. In this case, the grasses in the area have grown back after about a month.

It is important also to realize that the solution will burn anything it comes into contact with, so one must be careful not to spray on any desirable plants or turf. The vinegar especially can burn skin or irritate and damage the eyes, especially if stronger solutions of vinegar are used.

Finally, repeated use of Epsom salts over the same area could potentially sterilize the soil so nothing will grow, so I used the vinegar soap solution in some areas where I wanted the soil to remain viable. In my opinion, this solution would be especially effective on weeds in a driveway. The alternative is Round-Up, and folks are wary of this product because of its alleged links to cancer. In addition, though Round-Up is effective, often the weeds can regrow, or other weeds just grow where the original weeds were killed. Resistance is also an issue with Round-up as its use in farm fields has resulted in super weeds resistant to the herbicide.

Interestingly enough, free-lance writer Steve Bender wrote a scathing article in Southern living magazine about the Epsom salt weed control concoction. He correctly states that the mixture does not actually go within the plant systemically to kill it completely." See, the big advantage that "chemical" weed-killers like Roundup, Brush Killer, and Weed-B-Gon have is that when you spray them on green leaves and stems, the weed absorbs the chemical and carries it down to the roots.

Thus, you truly kill it, roots and all." Not always in the real world, Steve. It is also true that salts (especially table salt that he mentions inexplicably in his article) can potentially sterilize soil, and potentially damage concrete, though there is no evidence of that actually occurring. Vinegar, especially stronger formulations can damage the eyes or skin – but so can conventional herbicides. Mr. Steve's takeaway message is "I don't care which side of the chemical argument you're on. The bottom line is that mixing vinegar with Epsom salts or table salt and liquid detergent does not make a safe, effective weed-killer. No matter what you just read on Facebook."

The negative tone and pro-conventional herbicide slant of this article does not correctly represent the benefit of using a mixture that can burn down weeds in a manner that is less harmful to humans, kids, and pets. The Epsom salt mixture may not be quite as effective as the conventional systemic herbicides used for weed control, but I think that normal people desperately want a product that can work – without worrying about potential harm to themselves and the environment.

Hoggles Demented Cat Logic



I have always admired the Cheshire cat in the book "Alice in Wonderland" However, I - in my traditional humble fashion - propose something even better. I will take it upon myself to become the Chartreuse Cat. After dying my fur a brilliant chartreuse, I will announce that I am available for personal appearances, movie and other acting opportunities, and have already begun my memoirs, The Diary of a Humble Chartreuse Cat-available at booksellers everywhere.....

Mosquitos

So far there have been surprisingly few mosquitos in my landscape on the N/E side of Fort Wayne. I am sure wooded low-lying areas are probably heavily infested. Mosquitoes do provide a nutritious snack for many animals, but the diseases carried by mosquitos are nasty for humans, livestock, and pets.

Here are some tips: Reduce standing water by making sure gutters are clear and reduce standing water in any container scattered around the landscape. Standing water-even in birdbaths and rain barrels- can be treated with the organic control Bti (Bacillus thuringiensis israelensis), (sold as Mosquito Dunks) which target larvae.

Avoid using bug zappers to control flying adults. About 90 percent of insects killed with bug zappers are not mosquitoes. Insect foggers and sprays only work to reduce adult mosquitos in an immediate area for only a few hours. The sprays also have toxicity to humans and pets and other animals and kill beneficial insects in the area. A relative newcomer in mosquito control, Attractive Target Sugar Bait (ATSB) is a spray that may be applied to non-flowering foliage. Non-toxic to people and pets, an area treated with this bait can see significant reduction in mosquito population over a few weeks.

Mosquito repellant bug sprays on the market – including ones with DEET – are effective but can be toxic- especially to children. Here are some natural bug repellent alternatives. Keep in mind there is a ton of information by so called "experts" who each claim that their concoction (often for sale) is effective and safe. Unfortunately, most of their claims are undocumented.

- Soy-based products. A 2002 study of mosquito repellents found that the soy-based Bite Blocker for Kids was the
 most effective natural alternative to DEET. This natural bug repellent offered more than 90 minutes of protection,
 better than some low-concentration DEET products.
- Oil of lemon eucalyptus This natural oil, which comes from the lemon eucalyptus tree, is recommended by the CDC as an alternative to DEET. Several studies have found this natural bug repellent as effective as DEET in repelling mosquitoes. It may also work well against ticks. Oil of lemon eucalyptus may be toxic if ingested in high quantities. According to the CDC it should not be used on kids under 3.

A 2002 study showed that various formulations of citronella could keep mosquitoes at bay, but only for up to an hour. **Avon's** Skin-So-Soft Bath Oil – long rumored to be an effective bug repellent – only kept mosquitoes away for 30 minutes or less.



New CD "Ocean of Stars" Available.

Many of you are aware that my other passion (besides gardening) in life is music. I have been a songwriter and guitar player since the age of 16. I am a member of a trio of musicians called The Kitchen Table Players.

Ocean of Stars is our second CD of original folky/country music that we recently released. You can listen to the songs on our Facebook page kitchentableplayers/facebook.com and also look at videos there and on YouTube under Kitchen Table players. You can purchase a digital copy if you are so inclined

on Amazon or Spotify, or pick up a hard copy at Blue Jacket Thrift Store & Boutique, 2826 S. Calhoun, for \$10.00 with 100% of proceeds going to <u>Blue Jacket</u>, or Rhapsody Art Gallery in the North Anthony Corridor, 3400 N. Anthony Blvd., with 100% of proceeds supporting the gallery! Rhapsody is open Wednesday thru Saturday from 12-7 pm and on Sunday from 12-5 pm. We are also on Instagram now! Follow us at @kitchentableplayers!

Donations to support the cause are accepted – any amount in the form of checks is fine to cover some expenses. Thank you to all who have sent donations and kind comments and feedback they are greatly appreciated. Send to Ricky Kemery 5929 Lorman Court Fort Wayne, Indiana 46835. *To subscribe to this electronic newsletter, send an email to kemeryr7@frontier.com - or text 260-431-6893. I will not share information with others.* 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 turf, the environment, sustainability. I will also diagnose plant disease or insect issues. Just contact me at 260-431-6893. *Ricky Kemery will not knowingly discriminate in any way based on race, gender etc...though he does prefer a well-behaved cat over other creatures.*