CROSS POLLINATION

Halton Master Gardeners Monthly Newsletter
SEPTEMBER 2023 | VOL. 16 ISSUE 08

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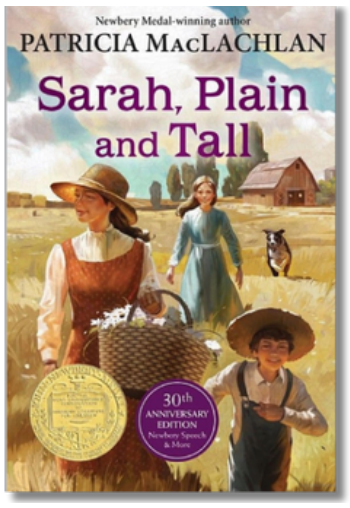
Halton Region Master Gardeners

Image: Revolution Native Plants

Yellow Giant Hyssop—My Sarah, Plain and Tall

By Pam MacDonald, Halton Master Gardener

There is a plant in my garden I call Sarah. Her name came to me when I read this description of her on the Ontario Wildflowers website: "This is not a plant prized for its beauty." Even Lorraine Johnson, who loves all native plants, describes this plant in her latest book, *A Garden for the Rusty-Patched Bumblebee*, as "A tall grower, [that] does not have the showiest flowers."



My Sarah is a yellow giant hyssop. I think of her as much like the character in the book series *Sarah, Plain and Tall* written by Patricia MacLachlan (and an Emmy award winning TV series starring Glenn Close). Sarah is a self-deprecating mail-order bride who describes herself as plain and tall in her letter of introduction.

Over the course of Sarah's trial period on her prospective husband's farm, the farmer and his children fall in love with her. Like Sarah in the story, my Sarah may, on introduction seem unprepossessing—and has a way of growing on you.

Everything has beauty, but not everyone sees it.
-Confucius

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YELLOW GIANT HYSSOP—MY SARAH PLAIN AND TALL (CONT'D)

Yellow giant hyssop (*Agastache nepetoides)* is a Carolinian plant listed in the *Vascular Plants of Ontario's Carolinian Zone Ecoregion 7E*. Ontario's indigenous population, now only found in Essex County, has evolved over thousands of years to function interdependently with other flora and fauna of the Carolinian Zone. There are other wild populations in the wider Great Lakes and Midwest Regions of the United States. The Xerces Society lists YGH among the top 20 plants for supporting pollinators in the Midwest.

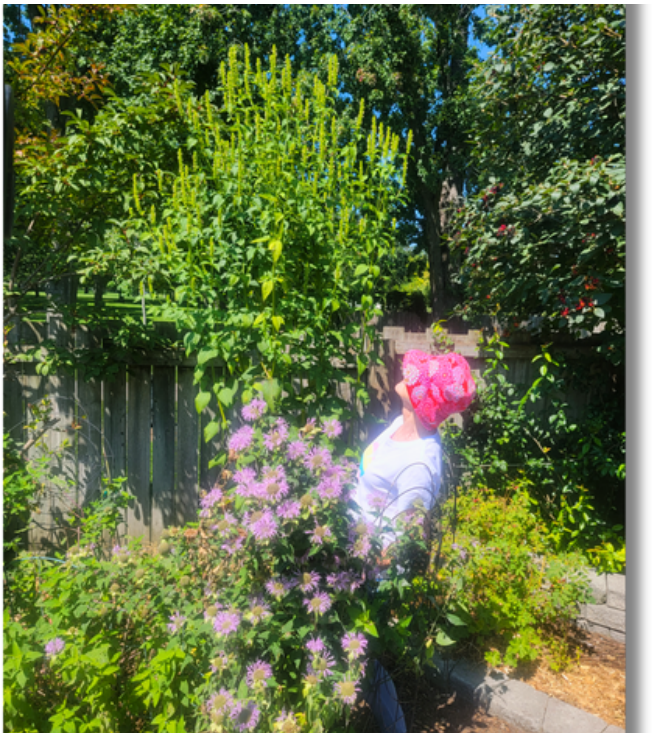
When Sarah is in bloom (from early August to the end of September) she has a constant stream of visitors that include bees, flies, and predatory insects. Whatever you may think of Sarah's looks, she is very attractive in the world of Hexapoda. She is a rich source of nectar at the time of year when insects are bulking up for migration or hibernation. As well as monarchs, several other species of butterflies, some flower flies, and dragon flies, migrate in the fall. The queens of many native bee species would not make it through our winters without the stored energy provided by late season nectar plants like Sarah (Royal Ontario Museum Magazine).

Now, about this plain and tall business. To be sure Sarah is tall. In my garden she is over eight feet, towering above the *Echinacea*, *Monarda fistulosa* —and me. She has perfect posture, never slouching or flopping over. Her candelabra of flower spikes adds to her stature. Tiny yellow flowers appear a few at a time and do not individually make a statement.

Sarah Plain and Tall is a "statuesque" beauty!

The overall effect is one of statuesque beauty. Next year I will plant her among cup plants, giant sunflowers, and cutleaf coneflower at the Victoria Park Pollinator Paradise in Hamilton where her understated beauty will be the perfect foil for these flamboyant flowers.

If you prefer your plants in flats over stilettos, you can reduce Sarah's height by cutting her back in June to about two feet. Not only will Sarah be shorter, but she will be bushier with more flower spikes and thus more nectar to offer. To see Sarah in flats, visit her at the Pipeline Trail Pollinator Paradise, Hamilton.



Sarah Plain and Tall towers over Pam

For more information:

- *A Garden For the Rusty-Patched Bumblebee*, Ontario and Great Lakes Edition
- Illinois Wildflowers Yellow Giant Hyssop
- *List of the Vascular Plants of Ontario's Carolinian Zone Ecoregion 7E*
- Xerces Society – Pollinator plants for the Great Lakes Region
- Ontario Wildflowers - Yellow Giant Hyssop
- MSU Extension Yellow Giant Hyssop

SEPTEMBER 'TO-DO' LIST

by Claudette Sims, Halton Master Gardener

- ☐ **Perennials** – Divide or transplant spring & summer flowering perennials, e.g., iris, peony, phlox, wood poppy, Canada anemone as the weather cools. Water the new divisions well. Other perennials can be transplanted or divided if needed when flowers fade. This is a great time to add plants to fill in any gaps. Consider native grasses to give your garden texture.
- ☐ **Veggies** – Harvest green tomatoes & ripen indoors, freeze or use in recipes. Sow cool weather seeds, e.g., lettuce, spinach, arugula and radishes.
- ☐ **Houseplants** – Prune back woody tropicals such as hibiscus. Spray plants with commercial insecticidal soap as needed as they are moved indoors. Orchids need a drop in temperature of 5 degrees (17/18C at night and 23C in the day) for 2 to 4 weeks to trigger reblooming. Continue to fertilize orchids to encourage healthy foliage.
- ☐ **Amaryllis** – Remove dead, dying foliage & do a general clean up of the pot &/or bulb if leaving bare. Transition pots/bulbs to a cool dark place ideally, 10-13°C (50-60°F) for about 8 weeks. Allow the pots/bulbs to dry out, but do not allow them to freeze.
- ☐ **Collect seeds** from your veggies and native plants. Cut herbs for drying in your microwave, e.g., parsley, thyme, mint, rosemary.
- ☐ **Trees** – Plant new trees and shrubs now to allow them at least six weeks before frost to form roots. Water transplanted trees until freeze up.
- ☐ **Think spring!** – Consider adding some of our native spring flowers such as hepatica, prairie smoke, Virginia bluebells, bloodroot, red columbine or trilliums! Plant spring-flowering bulbs such as crocus, tulip, and hyacinth now, until before freeze up of the soil. Water bulbs after planting. Do not plant or share scilla as it is highly invasive.

> *Create 'soft landings' in your garden by planting native plants under trees. This will allow insects to complete their life cycle.*

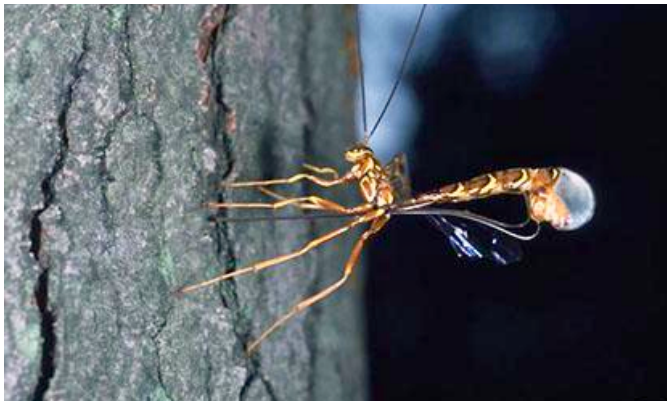
Native wild ginger growing under this tree is attractive, protects the tree roots and trunk from damage, and allows insects to drop down into the soil to complete their life cycle.
Photo: C. Sims

- ☐ **Lawn & Weeds –** Choose a rainy day to overseed the lawn, then cover seeds with a top dressing of fine compost or manure. Half the height of the blades of grass should still be visible. Fall feeding with a slow release mineral or organic fertilizer will increase root growth for an early spring green up. Fall is a good time to aerate lawns (sandy soils do not need to be aerated). Pull, rake or cut off weeds at ground level. More lawn care suggestions from Landscape Ontario.
- ☐ **Leaves –** Attach a grass catcher bag to the mower and collect a ready supply of chopped leaves to layer into the compost pile or use as mulch on your veggie or flower garden.

Wasps: Unsung Garden Heroes

by Olga Marranca, Halton Master Gardener

It's that time of year again, when people wave away those buzzing insects at family picnics. But buzzing is not always a cue to flail one's arms. Watching bees doing buzz pollination (sonification), for example, is a wonderful, relaxing experience. It's fascinating to see bumble bees (*Bombus* spp.) rattle pollen out of inaccessible floral anthers, holding on for dear life with their mouths or forelegs while vibrating flight muscles. But when a *Vespula germanica* (German wasp) is circling your head, eyeing your can of soda, the experience is far less calming.



The long-tailed giant ichneumonid wasp is a parasitoid of wood-boring beetle larvae. Image: Univ. of Minn.

Wasps, bees, butterflies, moths, flies, and beetles are all beneficial insects, important pollinators of plants. Yes, even wasps! Most people know little about wasps and, consequently, fear them. But learning about wasps will help us understand them. As gardeners we should appreciate the tremendous benefits of this amazing group of insects.

Many native Ontario plants are wasp favourites. The August issue of Cross Pollination featured rattlesnake master (*Eryngium yuccifolium*), a thistle-like, odd-looking member of the carrot family. Is it any wonder it's a magnet for the carrot wasp (*Gasteruption* spp.)? It is attracted to the carrot fragrance of the *Eryngium's* stem. The plant's nectar is favoured by at least ten social and solitary wasps.

Hornet nest on a rafter.
Hornets are a type of social wasp

Social wasps, which live in colonies and communal nests, will defend their homes if they feel threatened or intruded upon. Social species include: paper wasp (*Polishes sp*.), yellow jackets *(Vespula sp*.), and bald-faced hornets (*Dolichovespula maculata*). To prevent these wasps from building nests near pathways, entry doors, and children's play areas, routinely patrol these locations early in the season. A strong spray of water to dislodge a newly formed nest will discourage them.

Unlike social wasps, solitary wasps do not build or defend colonies. A mature female solitary wasp will construct a nest in wood hollows, stems, or chambers created from mud. She will paralyze her catch (beetles, caterpillars, cicadas, crickets, grasshoppers, and katydids) to provision the nest. After laying eggs, she seals the nest and leaves. Examples of solitary wasps include: great golden diggers (*Sphex ichneumoneus*) and sand wasps (*Bicyrtes quadrifasciatus*).

Wasps require nectar, which provides them with carbohydrates and water. Both solitary and social wasps with short tongues visit flowers with shallow corollas. They will also chew a hole at the bottom of a long flower corolla, eat aphid honeydew, consume tree sap, and hunt bees.

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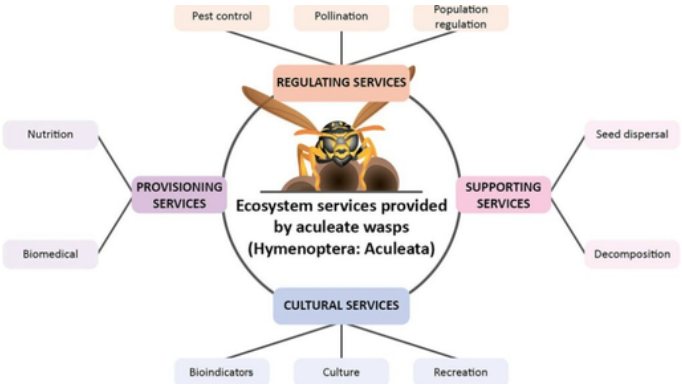
WASPS: UNSUNG GARDEN HEROES (CONT'D)

Cicada killer wasp (top) with cicada prey (bottom). Photo: Ronald F. Billings, Texas A&M Forest Service , Bugwood.org

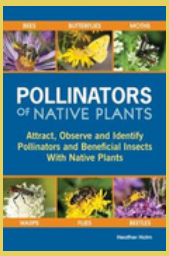
Wasps are predators and parasitoids

Wasps, both social and solitary, consume numerous insects keeping our gardens in balance. Wasps are rightly included in the group we call "beneficial insects." They also aid in pollination and seed dispersal.

A wasp's reproductive strategy can be truly amazing. When it lays eggs on (parasitizes) a host, the larvae hatch on their food and eat until the host dies.



Ecosystem services provided by *aculeate* wasps



This information and more are found in two books by *Heather Holm*: *Pollinators of Native Plants* and *Wasps*.

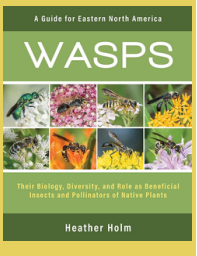


Photo: Erin Andrews
Tomato hornworm (Manduca quinquemaculata) parasitized by a braconid wasp (subfamily Agathidine)

BEES and WASPS
Know the Difference

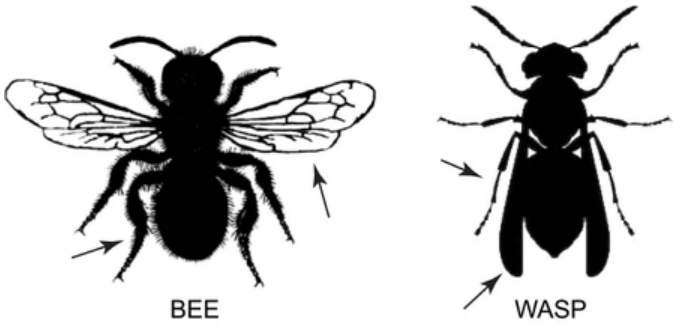


Image: Maryland Grows

Bees and wasps come in different shapes, colours and sizes–from a 1/2" yellowjacket to a 2" hornet. Most wasps' abdominal petioles (waists) are narrow and the easiest to identify. They fly with thin extended legs and are generally less hairy than bees. When resting, their folded forewings give them a long thin appearance. Bees will rub their broader legs together to transfer pollen, where a wasp only inadvertently transfers pollen. Wasps cannot see red, so in order to attract this beneficial insect to your garden, plant yellow or white flowers.

Further Information:
Yellow Jacket Picnic Pests
Toronto Wildlife Wasps
Bee and Pollinator Books by Heather Holm

The Rise and Fall of Boxwood: Box Tree Moth

Claudette Sims & Janet Mackey, Halton Master Gardeners

Image: J. Mackey

Box Tree larva

The Rise and Fall of Boxwood

If you lived in southern Ontario in the summer of 2023, this might be called the summer of the "Boxwood Moth'. Stories began to hit social media in August. "In two days, my boxwoods were eaten!" "I counted 64 caterpillars on my boxwood, before I lost track of where I started!"

Box Tree Moth (female)

Boxwood (*Buxus spp.*) are a hugely popular ornamental non-native shrub. They are prized in formal gardens because they can be neatly trimmed and shaped to frame other plants or features. Boxwoods are the perfect size for growing under windows or around trees and in small front yards, creating a textured understory of shrubs. Many stay green throughout the winter.

However, their popularity has become their downfall. When first introduced, boxwood was carefree and quite disease and pest resistant. The unintentional introduction of non-native pests and diseases has changed things significantly. Boxwood are now susceptible to a number of diseases and pests (more info: Clemson Boxwood Diseases & Insect Pests).

Because boxwoods were so overplanted, these diseases and pests are now able to spread rapidly from one garden to the next. One such example is box tree moth (*Cydalima perspectalis*), an invasive moth from Asia that is currently spreading throughout southern Ontario. Entire boxwood hedges are being decimated by this new invasive pest in a matter of days. While many boxwood shrubs won't die immediately when infested by the box tree moth, they will be severely weakened. If treated early, your boxwoods may survive, but they will need ongoing treatment for box tree moth and other diseases for as long as you decide to maintain them.

There are many great substitutions for boxwoods as landscape plants. These will be covered in a subsequent blogpost. Landscape Ontario has a guide on rejuvenating infested boxwood shrubs.

Continued on next page

THE RISE & FALL OF BOXWOOD: PART 1 (CONT'D)

Making the Call

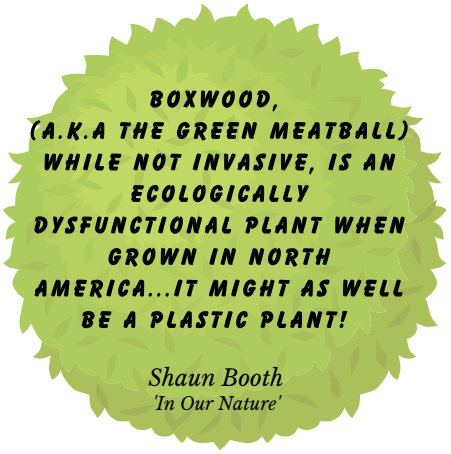
Given the number of pests and diseases that are now affecting boxwood, gardeners will have to decide whether it is worth keeping this non-native shrub, or whether it is time for a change.

Consider the following:

- Boxwoods will need to be monitored and sprayed indefinitely to keep pests and disease away.
- Boxwoods are the hosts for several invasive species and diseases. Keeping your boxwood will only help in their spread.
- While some boxwood pests can be controlled with pesticides, the same pesticides will also kill non-target insects.
- Btk will kill all lepidoptera (butterflies and moths), not just the box tree moth.
- Insecticidal soap will kill boxwood psyllids, but it will also kill many other insects that are caught in the spray.

Sustainable Recommendation

Master Gardeners follow sustainable gardening practices. Boxwood has so many pests and diseases that growing it is no longer considered sustainable. We now recommend that infested boxwood not be treated or replanted and that they be replaced over time. Gardeners should consider alternative plants that have similar characteristics.



Choosing native plants will ensure that complex food webs, important for pollinators and birds, are supported.

"I'm not giving up my boxwood!"

We understand that this may be a difficult decision for some gardeners. For those wanting to keep their boxwood, here are some suggestions:

- When treating boxwood plants, it is important to identify the pest(s) involved before taking any action.

Image: C. Kavassalis

- Since boxwood may be attacked by more than one pest or disease at the same time, different treatments may be required for the same plant. For example, Btk can be used to kill the caterpillar of the box tree moth. But Boxwood leafminer (*Monarthropalpusi flavus*) is a midge (fly maggot), not a moth, so it should NOT be treated with Btk.

THE RISE & FALL OF BOXWOOD: PART 1 (CONT'D)

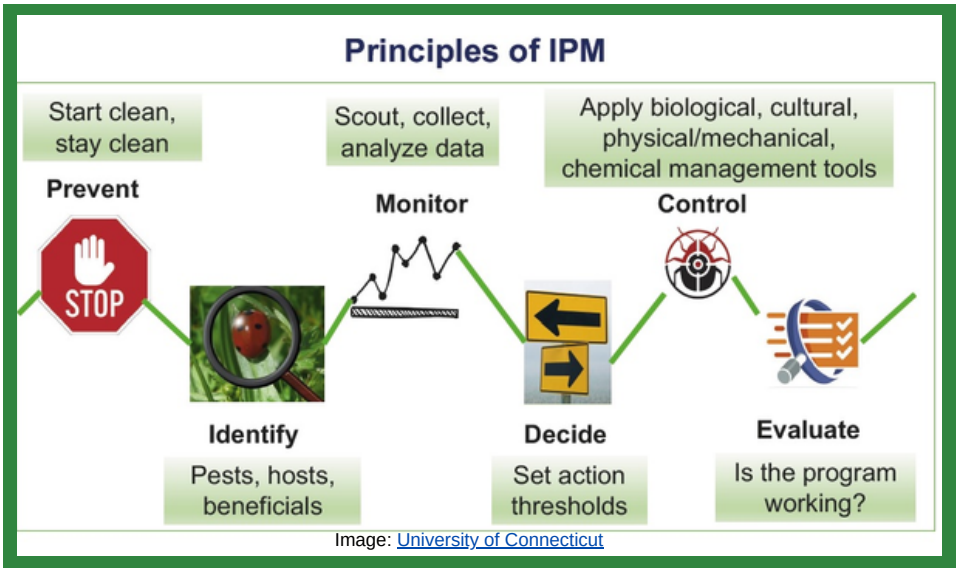


Image: University of Connecticut

Integrated Pest Management

IPM is an ecosystem based strategy that uses a decision-making process for managing pests in an effective, economical and environmentally sound way:

- **Natural control** – Encourage natural predators such as green lacewings and spiders.
- **Cultural control** – Healthy plants are more tolerant of insect damage.
  - Maintain plant vigour by proper watering, fertilizing and pruning.
- **Mechanical control** (boxwood leafminer) –
  - Boxwood Leafminer: Prune the foliage before adults emerge or right after adult flies lay their eggs in May. This reduces the overall population of the leafminer. Maggots: Pinch leaves hard enough to kill maggots in the infested leaves when practical.
  - Boxwood psyllid: "If the infestation is small, do nothing. The damage caused by boxwood psyllids is only aesthetic and rarely affects the long-term health of the plant.
- Prune out and destroy the affected tips. If done before the nymphs mature to adults, this will decrease the number of eggs for next year.
- The damage caused by psyllids is complete by early summer and the shrub will outgrow the injury.
- Spray horticultural oil or insecticidal soap. Apply in early May when new growth occurs.
- Pesticides sprayed before or after that time will not be effective as the eggs are protected by the bud scales and the nymphs are protected by the cupped leaves." More Info: Missouri Botanical Garden – Help for the Home Gardener, Boxwood Psyllid)

Image: C. Kavassalis

THE RISE & FALL OF BOXWOOD: PART 1 (CONT'D)

Maintaining & Treating Existing Boxwood Shrubs for Box Tree Moth

1. Monitor:
   a. Inspect boxwood plants weekly from May to September
   b. Look for signs of infestation, e.g., webbing, black-headed caterpillars, rolled/yellowing leaves, chewed foliage. (See: Box tree moth - look for these signs this spring)

Image: Landscape Ontario

Btk is sold in garden and hardware stores under a variety of brands

2. Treatment: Boxwood can be treated with a Btk (*Bacillus thuringiensis* subsp. *kurstaki*) spray as soon as the black-headed green caterpillars appear. Btk works by killing any caterpillars that have eaten the leaves sprayed with Btk. Spraying is most effective on days where no precipitation is expected for at least 24 hours. Make sure you follow directions on the product label.
   - Timing of Treatment: Btk does not impact the eggs, pupae (cocoons) or adult moths.
   - The Btk spray is ONLY effective when caterpillars consume the leaves.
   - Continue to inspect plants 5 to 7 days after spraying and reapply if actively feeding caterpillars are present. It is likely that ongoing monitoring and continual treatment will be needed each week throughout the growing season to keep your boxwood healthy.
   - Since there are multiple generations of box tree moth each year, plants should be inspected during the following dates:

May 15 – June 15
July 15 – August 15
September 1 – 20

3. Fertilize: Landscape Ontario recommends fertilizing twice each year – early June and mid-October.

4. Pruning:
   - Pruning and removal of affected plant parts are essential to control box tree moth populations
   - Pruning is best done in late winter, but can be done before the first of August
   - Dispose of clippings as though they may have been infected by the moth.

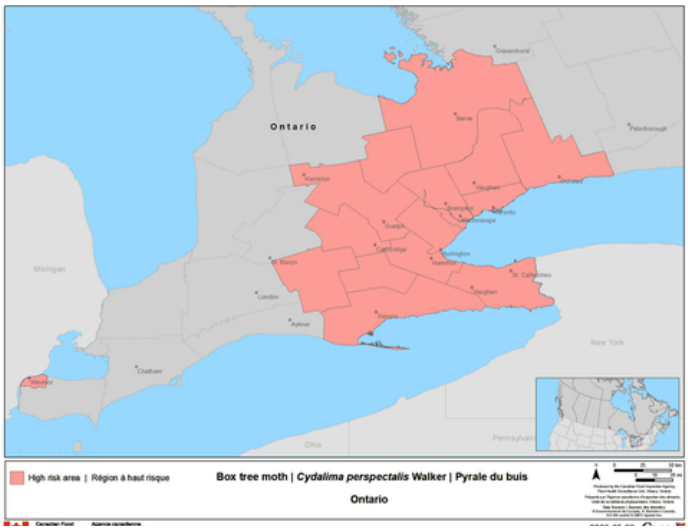
THE RISE & FALL OF BOXWOOD: PART 1 (CONT'D)

Remove & Report

- The CFIA will be interested in the reporting of areas that are **NEW** rather than areas where box tree moth is already present (see map below).

- Report your infestation to the Canadian Food Inspection Agency (CFIA). To determine the extent and distribution of boxwood moth, the CFIA is asking all stakeholders to report sightings of this pest. It can be done online here.

*Dwarf conifers (Thuja occidentalis) may be a suitable replacement for **SOME** gardens (unlike boxwood, cedar/Thuja occidentalis, requires at least part sun). Alternative plants for boxwood will be reviewed in next month's issue of CP. Image: NC State*



The Distribution of Box Tree Moth (Cydalima perspectalis) in Southern Ontario.CFIA 23/05/29

Place infested plants in a tied, plastic bag and leave them in the sun for at least 48 hours.

Image: Landscape Ontario

How do I dispose of infested plants?

- Dig up the plants, roots and all.
- Place in tied, sturdy, black plastic bags.
- Leave bags in the sun for a minimum of 48 hours.
- Dispose of plants in your municipal yard waste stream.

Landscape Ontario Horticultural Trades Association

Further Information:

- USDA – New Pest Response Guidelines – Box Tree Moth
- Box Tree Moth: Look for these signs in spring
- Rejuvenating Boxwood Plants
- What Growers and Landscapers Need to Know about Box Tree Moth
- West Side News: Residents Along Lake Ontario Asked to Report Box Tree Moth
- Boxwoods, Bah! Garden Rant 😉

Mighty, Mite-y Echinacea

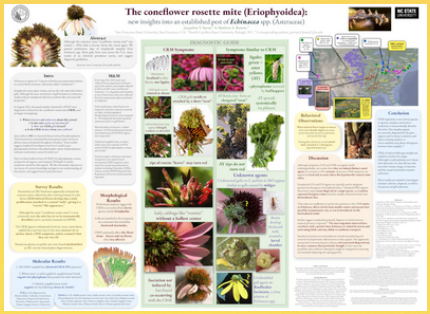
by Bev Wagar, Halton Master Gardener

Photo: Bev Wagar CC BY-NC-ND. Click to enlarge

Echinacea purpurea / purple coneflower, usually a stalwart and undemanding foil to the bossy yellow daisies of summer, is often stricken with strange green tufts protruding from the cones. These deformities are the work of an eriophyid mite that, though pervasive, has eluded the attention of researchers and taxonomists. Commonly called the “coneflower rosette mite” (CRM), these near-microscopic, cigar-shaped arthropods hang out at the base of the flowers, puncture plant cells, slurp up the contents, and prompt the growth of weird spikey hairdos.

Little is known about the origin of CRMs. There is genetic evidence pointing to recent dispersal from horticultural sites. But whether the CRM is native to *Echinacea*, or switched from another native asteraceous host, or was introduced via the horticultural trade—these are questions yet unanswered.

Often mistaken for aster yellows (a phytoplasma vectored by leafhoppers) CRM deformities are, unlike aster yellows, not systemic or destructive. The rosette-like growths (technically *galls*) cause cosmetic damage, reduce the plant’s seed production, and decrease the flower’s ability to provide pollen and nectar.



New research by Jacqueline Sarratt, SFSU
Click image to view/download full-size, two-page pdf (7 MB)

The CRM's life cycle has not been studied in depth. Many species of eriophyid mites, though, reproduce continuously over the growing season, with new, overlapping generations every two to three weeks. When the plant begins to senesce in the fall, fertilized female mites seek shelter under bud scales and protected areas on (or near) the host plant. In the spring, at bud break, the mites emerge to lay eggs. The new generation finds its way to the juicy flowers in the cone, and the breeding cycle continues.

These tiny, wingless mites rely on the wind for dispersal. They may also be seasonally phoretic. That is, they attach themselves to other organisms (usually insects or birds) and are carried to new plants.

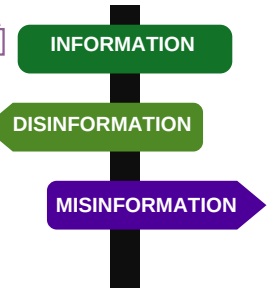
Removing affected flowers will, over several seasons, reduce CRM damage. Snip off the affected cones and add them to your compost or bag them as yard waste. They are obligate feeders, only surviving on *Echinacea* species. So if your home compost is not thermophilic (hot), discard the affected cones or don’t use that compost on the *Echinacea* patch.

Pesticides are available for many classes of mites that affect commercial crops, but there is no published research on miticides for CRMs. Pesticides should never be the first choice, for mites or any other garden “pest”.

SOURCES / FURTHER READING

Excellent articles with photos and description of CRM: https://bygl.osu.edu/taxonomy/term/1626
Overview of eriophyid mites: https://extension.usu.edu/pests/research/eriophyid-mites

GARDENING Myths



UNDERSTANDING FACT FROM FICTION

by Kirsten McCarthy, Halton Master Gardener

MYTH: Washed rice water can be used as a homemade fertilizer and for irrigating plants.

Washed rice water (WRW) is the water discarded as waste after it has been used to rinse rice before cooking. Does it make sense to reuse water to irrigate our gardens and reduce water use and billing costs? A 2018 study in *The Journal of the Science of Food and Agriculture* found that washing rice reduces the concentrations of heavy metals such as lead, arsenic, and cadmium that get into rice plants via the polluted groundwater used to flood rice paddies. Information is scarce on the potential danger of those leached chemicals from WRW into the soil. The focus seems to be on the downside to human health rather than plants.

Research by the FDA shows that cooking rice in excess water, similar to how pasta is cooked, can reduce 40 to 60 percent of the inorganic arsenic content, depending on the type of rice. However, this method—using six to ten parts water to one part rice and then draining the excess water—also lowers the nutritional value of enriched, polished, and parboiled rice.

Specifically, cooking in excess water reduces the levels of folate, iron, niacin and thiamine, by 50 to 70 percent. These nutrients are added to polished (white) and parboiled rice as part of the enrichment process.

In 2021, researchers at The Universiti Putra Malaysia and The Federal University Dutse published a literature review on the nutrient content of WRW: (PDF) Wastewater from Washed Rice Water as Plant Nutrient Source: Current Understanding and Knowledge Gaps (researchgate.net).The reported studies found plant nutrients and growth-promoting bacteria that resulted in increased height and stem diameter of various vegetables. The nutrients were nitrogen, phosphorus, calcium, and magnesium. The reviewed studies described *Bacillus* and *Lactobacillus* spp. as beneficial to plant growth by inhibiting plant pathogens, producing phytohormones and siderophores, and fixing nitrogen. WRW was reported to increase the height and stem diameter of tomatoes, eggplant, pak choi, lettuce, mustard greens, and chili plants. It sounded too good to be true—and it probably was.

The researchers concluded these studies lacked depth and scope and, more importantly, were all sourced from “gray literature”—written work that has not been formally published or scientifically peer reviewed. Using WRW for irrigation and liquid fertilizer remain popular practices in some Asian countries, but most reports of benefits are anecdotal. Gardeners who use waste water from washed rice may simply be wasting their time.

Q&A

By Hariette Henry, Halton Master Gardener

> *I've discovered that slugs have been eating my hostas. How do I get rid of them or stop their munching?*

Slugs and snails can certainly be a problem. These molluscs can cause quite a bit of damage eating up to 40 percent of their body weight in a day.

They feed on the soft, thin leaves of a variety of ornamental plants that grow in part to full shade as well as some herbs, fruits and vegetables. They create the irregularly shaped holes in the leaves of plants that become more commonplace as we near the end of the growing season.

Image: Katie McLeish

Many of the modern cultural practices that we recommend to gardeners (such as leaving the leaves and using mulches for moisture retention) make our gardens more attractive to snails and slugs. So, if they are a problem in your garden, it makes sense to reduce their populations. It should also be noted that slugs and snails in most Ontario gardens are introduced species. They should not be encouraged as they generally reduce native biodiversity. Gray garden slugs *(Deroceras reticulatum)* are one of the most common slugs in southern Ontario, and brown-lipped snails *(Cepaea nemoralis)* are one of the most common snails.

The following are strategies to minimize the impact of slugs and snails:

- As they are mostly water and susceptible to drying, reducing the amount of wetness around affected plants will tend to discourage their presence. Using drip irrigation, soaker lines or other techniques to limit water, decrease humidity, and improve air circulation will create a less appealing environment for them.
- Hand picking in early evening requires diligence but can yield results if your problem is localized to specific areas. Using gloves and a flashlight, check the base of plants, tops and bottoms of leaves, as well as under rocks and debris. Then drown them in soapy water or crush them.
- You can create homemade traps with moistened pieces of wood, or cardboard. Place these on the ground in an area adjacent to the affected plants. Each morning, lift the material and scrape off the slugs. Do this for several days until few or none are present. Move to another location and repeat.
- Attracting the slugs' and snails' natural enemies such as toads, frogs, snakes, fireflies, and other beetles is a good strategy. Adding a small pond and introducing native plants that attract nesting birds (who will feed the slugs to their young) should help reduce their numbers.
- Consider diversifying your garden with native shade plants that slugs don't like**.** Not only have you solved the slug problem but you are encouraging the presence of beneficial insects that will result in a healthier ecosystem.
- If you want to continue growing hostas, choose varieties that are selectively grown for slug resistance. These plants typically have leaves that are tough, fibrous, thick and/or waxy.
- Other home remedies such as beer traps, sand, coffee grounds, egg shells, diatomaceous earth, or copper wire are usually not recommended as they can harm nontarget species and they don't remain effective for very long if at all.

Garden Inspiration!

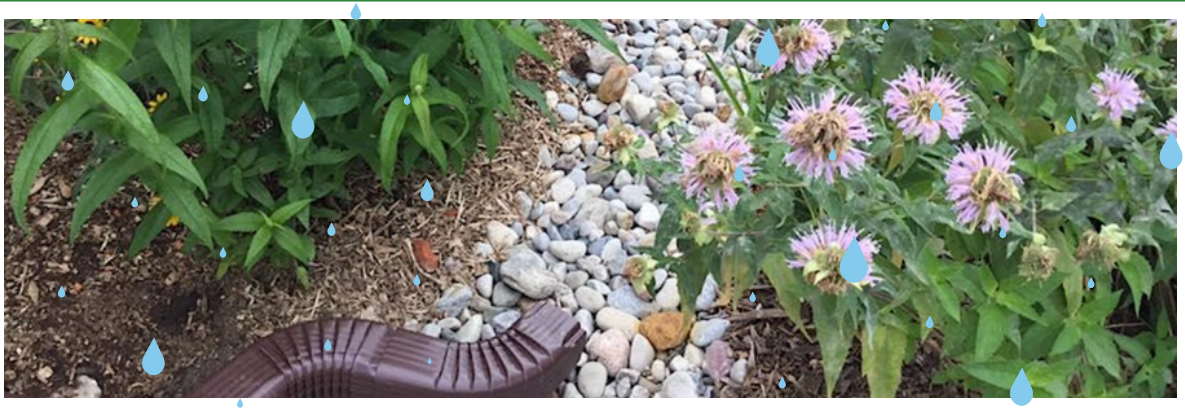
Getting it Right— for Wildlife & Bylaw

Infographic: J. Mackey

1. Add structure with woody trees & shrubs, native of course! Choose a variety of native perennials, planting in large groupings.
2. Create a sitting area with chairs, log bench or boulders.
3. Use repetition to build unity, bringing the space together. This can include species, colours or shapes.
4. Create a 'buffer' zone near public areas, like sidewalks and neighbours. Low-growing plants or a strip of turf grass can be effective choices. Keep the height under 2' for ornamental plants and under 8" for turf, to ensure clear sightlines for safety. Don't use 'flopping' plants.
5. Add a sign (or signs) to show your garden has a purpose.
6. Add ornaments, logs, rocks, sculptures - be creative.
7. Choose plants with seasonal interest. Colour for fall, berries or bark for winter, and blossoms in spring. Be sure to include some evergreens and grasses for winter.
8. Add pathways—it will help with maintenance and gives the garden shape.

Janet Mackey - Halton Master Gardener

What's Growing On ?



***Landscaping for Rain* Workshop**

Wednesday, September 20, 2023

Learn more here

Continue to shop local at Farmers' Markets in September

Learn more here

Arboretum (Guelph) Expo: Tree Day and Plant Sale

Saturday, September 9, 2023

Learn more here

Visit the *Old Seed House Garden* in Georgetown

Open 7 days a week
365 days of the year

Admission is free!

Learn more here

What's Growing On ?

Royal Botanical Gardens

[Telling Tales Festival]

[Oaks and Acorns]

[Exploring Birds]

[Paddling in Paradise]

Learn to Identify Invasive Species Workshop

(Invasive species *Japanese Knotweed*)

Saturday, September 16, 2023

Dundas Town Hall

Learn more here

Check our calendar for events

Halton Region Master Gardeners

Come Grow with Us

Request Help from a Master Gardener

Speakers:

Master Gardeners are available to make presentations to your group on a wide variety of horticultural topics. In the past 12 months our members have presented to horticultural groups, community organizations (ie., Green Venture, Halton Food), private sector lunch & learn events as well as initited our own 'Fresh Look at Gardening' series which was open to the public (virtual).

Learn more here

About Our Newsletter

Cross Pollination is published monthly from February to December and is written and prepared by our dedicated volunteers. Halton Master Gardeners are experienced gardeners who have studied horticulture extensively and continue to upgrade their skills through technical training. We strive to provide science-based, sustainable gardening information to the general public. The information in our newsletter has been verified by our volunteers to the best of our abilities, but given the scope of horticulture and science some concepts may not reflect current knowledge.

Your donations support our work!