



Bermuda Botanical Society

P.O. Box HM 2116, Hamilton, HM JX,
Bermuda

bermudabotanical.org

bdabotanicalsociety@gmail.com

SEPTEMBER NEWSLETTER 2024

FROM THE PRESIDENT:

A long hot, dry summer – until Ernesto brought an abundance of rain and wind! Trust everyone fared reasonably well and plants are recovering.

The Committee has had a surprisingly busy summer with a number of projects large and small.

MOU with the Department of Parks

BBS Member, Danny Simmons, was able to make some very helpful connections at the CCABGI Conference earlier this year. Availability of grants for the BBG became a very real possibility. Working with Government an MOU has been signed with the BBS. Through this the BBS, as a Charity in good standing, will be able to receive grants and donations for specific BBG projects. At a meeting with the Minister we were able to show how the BBS has been helping the BBG in a number of areas, along with the educational work undertaken in the community. BBS will not be responsible for any fundraising, or work on the projects.

The Botanist Café will also be making a donation through BBS for improvements to the Rose Garden.

Danny is also looking for Volunteers to join the **BBG Steering Committee**. Together we can make a real difference. Please contact him at dsimmons@gov.bm, Subject BBG Steering Committee

PIPA Bermuda Personal Information Protection Act

I have almost completed the online certification to ensure the BBS is in compliance with government policies. BBS is also fortunate to have a member of the community volunteer to assist with compliance matters and write a brief policy document which will be posted on the BBS website. When did running a small organization get so complicated!!

BBS Treasurer

After more than 10 years looking after the BBS Accounts, our Treasurer, Lallita Durgah, will be retiring. The Committee thank her for the many years of work she has put into keeping the BBS accounts in order and wish her well in the future. One of the Committee Members, Lara Du Plessis, has kindly agreed to take over as Treasurer.

Plant Sale

The BBS Annual Plant sale will be held on Saturday November 2nd, Jack King Building BBG. Collection Days – Thursday October 31, Friday November 1st 10 am – 12 pm. Please see what regular favourites – endemics & natives - you can contribute along with those more unusual items – such as the Cat's Whiskers, less common succulents, bulbs, etc. Containers were also quite popular last year. Volunteers needed on the collection days and the day of the sale. email bdabotanicalsociety@gmail.com subject Plant Sale

"To encourage and support the study and promotion of the botanical sciences within Bermuda"

Bermuda Botanical Society Student Awards for Botanical Sciences

Delighted to make 4 awards this year to young people for projects ranging through 'The Importance of Bermuda's Mangroves', Manual Pollination of Melon Plants and Home Garden projects. It is hoped to continue and grow the number of participating schools. Thanks to Education Team Marlie Powell and Jocelyn Morrison.



Two of the award winners:
Emma Duffin : "The Importance of Bermuda's Mangroves'

Bram Wiseman 'Manual Pollination of watermelon plant project'

BBG Endemic & Native Garden

Saturday morning sessions will resume later this month beginning September 14th, 9 – 11 am or whatever time you can spare. email bdabotanicalsociety@gmail.com subject BBG E&N

The committee is also working on tours for the autumn, dates will be announced later.

Look forward to seeing you at some – or all – of the events.
Jennifer

Extra, Extra, read all about it!

If you missed it in Bernews: DENR Responds to Spotted Lanternfly

A potential new agricultural pest was found (dead fortunately) on two cruise ships recently. The find demonstrates the potential for this, and other, pests, to reach Bermuda other than by natural means. Read the article for more information.

Here is a photo from the article. The DENR spokesman said: "The public is encouraged to report any sightings of spotted lanternflies or other unfamiliar insects, plants or animals to plants@gov.bm and animals@gov.bm."



"To encourage and support the study and promotion of the botanical sciences within Bermuda"

Observations from the Garden

Text: J. Flood

The path to my chicken coop and run is well worn, firmly packed soil, and in a shady area, very little grows there. So I was quite interested to see 3 patches of ‘something’ green, quite flat growing – and unlike anything I’d noticed elsewhere. Was it a fern developing? a moss? could it be liverwort (never knowingly seen one of those here). Nothing seemed quite right so I sent a photo to the BBS ‘go to’ plant expert Lisa Greene – who interestingly had also spotted one during a walk on the Railway Trail a number of years ago. Yes, it was a liverwort! I watched it hoping to learn more about its reproductive processes but sadly it changed from an interesting green patch to a brown, soggy mess. I tried to rescue one of the patches to examine more closely but it, too quickly, turned brown and disintegrated. I’d be interested to know if anyone else has seen them.



Photo: L. Greene

A little more on liverworts

Lisa Greene

There are 25 species of liverworts described in Britton’s ‘Flora of Bermuda’. Liverworts *are* plants but they are not ferns, mosses or fungi. The body of liverworts resemble a liver, giving them their common name. Depending on what type of liverwort they are, they can live on moist soil, damp rocks or on tree trunks in damp woods. They are typically small and often overlooked - perhaps explaining why Jennifer and I are not very familiar with them. **I first saw them in March 2006 on the railway trail west of the Incinerator growing on a bit of rock wall at the side of the trail. I didn’t know what they were until XXX identified them for me.**

From Wikipedia: Ecology - Today, liverworts can be found in many ecosystems across the planet except the sea and excessively dry environments, or those exposed to high levels of direct solar radiation.^[30] As with most groups of living plants, they are most common (both in numbers and species) in moist tropical areas.^[31] Liverworts are more commonly found in moderate to deep shade, though desert species may tolerate direct sunlight and periods of total desiccation.

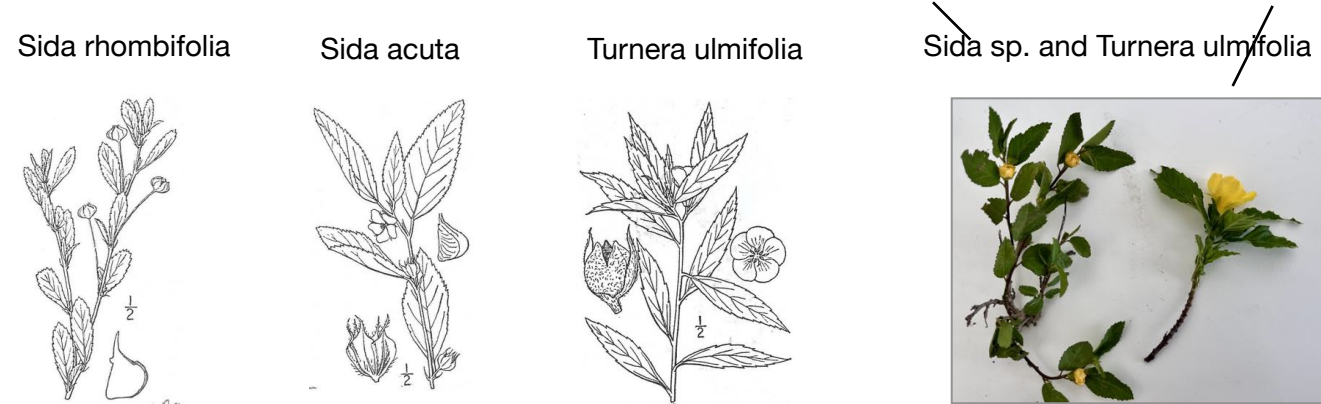
The plants are not economically important to humans but do provide food for animals, [facilitate](#) the decay of logs, and aid in the disintegration of rocks by their ability to retain moisture.

Distinguishing between Wireweed and Turnera:

Text: Lisa Greene, Photo: Erich Hetzel

I was asked recently how to tell the difference between Turnera (*T. ulmifolia*) native and *Sida spp.* (introduced). They both grow to about knee height[have serrated leaves and yellow flowers. So, in order to tell them apart you need to look more closely at the details.

Without getting too detailed (:) here are two species of *Sida* listed in Britton’s Flora of Bermuda *S. rhombifolia* (rhombic-leaved sida) and *S. acuta* (hornbeam-leaved sida or wireweed) - a common weed in fields and uncultivated ground. *Turnera* is seen most often on road cuts and stone walls, or if it’s in your garden, it’s everywhere because it is a prolific self-seeder. The fruit contains many tiny seeds. *Note*, there is also an introduced ornamental (cultivar of) *Turnera* that is similar to our native one but larger and more vigorous in every feature. In a nutshell, *Turnera* flowers are larger and brighter yellow than *Sida* flowers. Take a close look, focusing on colour, size and texture of leaves, flowers and even the stems. Look at the shapes of the leaves, petals and flower structures. You will see differences between the two species!



	General descriptions	Leaves	Flowers	Fruit
Rhombic-leaved (<i>Sida rhombifolia</i>)	An erect branching herb, height 1.5 - 2.5’,	Alternate 1/2 - 3 1/2” long	Petals pale yellow, spring to autumn, +/- 1/3” across	A woody cup containing 7- 12 woody, “flat” beaked “seeds” (technically carpels)
Wireweed (<i>Sida acuta</i> - formerly <i>S. carpinifolia</i>)	An erect branching herb, height 1 - 3’	Alternate 1 - 4”	Petals buff-coloured or yellow to white, spring to autumn, 1/3 - 1/2” across	A woody cup containing 7- 12 woody, “flat” beaked “seeds” (technically carpels)
Turnera (<i>Turnera ulmifolia</i>)	Aromatic shrub, branching (sometimes much branched), pubescent 1-3’	Alternate, 1 1/2 - 4”	Petals bright yellow, summer and autumn 3/4 - 1 1/4” across,	Almost round capsule +/- 1/3” diameter, with many tiny seeds

Apparently bees love turnera! Ants are attracted to turnera as well! and David Wingate, who has seen ants carrying them, suspected that turnera may be spread by these little insects. It turns out that Turnera has extrafloral nectaries which may attract/reward the ants for dispersing the seeds.

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An Idea for Your garden: Night-blooming cereus

Words & photos by Diana Chudleigh

I wrote about Night-blooming cereus in the last Botanical Society Newsletter and we travelled to England soon afterwards. It is grown as a sprawling cactus here, but when we went to the RHS Garden at Wisley in Surrey, we were surprised to see several varieties of Night-blooming cereus planted in hanging baskets in their giant tropical Glasshouse.

Perhaps this is an idea that we might like to copy in Bermuda? A night-blooming flower would provide a spectacular feature in an outdoor dining area.

If you would like some cuttings of the common local variety for your hanging basket, then please contact me at dchudlei@icloud.com.



Hanging baskets of Night-blooming cereus in the Glasshouse at RHS Wisley, UK



In full bloom in our Bermuda garden

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Did you know?

Lisa Greene

If you are a member of the Bermuda National Library, you have access, for free, via the Libby app, to a huge number of magazines (and more), including the BBC's Gardener's World. The "Sharpening Shears" advice below is from the April 2024 issue. I find something of interest in every issue I read - and without much of an environmental footprint. Win, win!

STEP BY STEP Sharpening shears

Sharpen the blades of your shears so they are ready to cut long grass or old growth on deciduous grasses. Blades that are clean and sharp will ensure that the shears are easier to use, therefore making the job a pleasure. They also give a better finish and leave the plant less vulnerable to disease.

Make sure you have the tools and supplies needed for sharpening so that you can keep all your cutting tools in the best condition.



1 RUB the blade with fine abrasive paper or wire wool, in a circular motion to clean the plant resin off the blade. A resin solvent could be used if needed.



2 HONE the bevelled cutting edge with a file. Make a strong stroke away from you and down the length of the blade at the same angle as the edge.



3 SPRAY or wipe the sharpened blade with some penetrating oil and then spray directly into all the moving parts so they are lubricated, ready for use.

| GardenersWorld.com

April 2024



Cheryl Stafford volunteering in the Botanical Gardens.

Free to a good home:

I have just finished reading Diane Ackerman's book *Cultivating Delight - A Natural History of My Garden*.

Her descriptions have inspired me to look at my garden with more finely tuned senses.

If you'd like to read it, send me an email and I'll get it to you: elgreenebda@icloud.com

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After switching to an electric lawn mower ...

Wendy McLeod

I lusted after a Greenworks lawnmower at Hasco for \$750 for the last two years. But gosh it was expensive and our gas mower wasn't that old. Lately I'm motivated anew by 2 factors -

1. According to the U.S. Environmental Protection Agency (EPA), a new gas powered lawn mower produces as much air pollution in one hour of operation as 11 new cars being driven at 55 mph for one hour. Yikes!
2. We were spending over \$8,000 per year in Landscaper's fees. For the record we have almost 3/4 of an acre of property, mostly lawn.

On Gorham's rare 15% discount day I took the plunge with a Black & Decker 40-volt Max Cordless 3-in-1 Lawn Mower, Two Lithium-ion Batteries, 20-in. Deck. For \$595 it had better be good or I'd never hear the end of it from my husband. This was just before the big drought so I did not have much chance to try it out in July. I can say that the gas mowers were about the same price as the electric. However if you buy all your landscaping equipment from the same company you don't need to keep buying batteries. Batteries are almost 50% of the cost. Therefore the power washer, leaf blower, weed whacker will all be far less than the gas powered equivalent if you stick to the same brand.

We were away for both the hurricane and apparent monsoon season and when I came back the zoysia was about 8" deep and very thick. What a test for my little black and decker. I am happy to report that it passed with flying colours! It weighs so much less than the gas guzzler that I was afraid that it would just skim over the top of the dense zoysia however it just devoured the overgrown grass. It also didn't stall as much as the gas mower does in thick grass. Restarting it is just a button press so no need to dislocate my shoulder with the pull cord. In fact it didn't stall at all after I learned to push it with the front wheels slightly off the ground over thick grass. It's very light and easy to push even with the front wheels slightly raised.

Here are my findings after having used the new lawnmower

- Does not require husband to start after its been in the shed for a week
- Very quiet, your neighbours will not hear it (NOTE: we haven't tried the leaf blower yet)
- Very light weight and maneuverable
- No oil, gas, mixing cans, engine lubricant or starter fluid required
- Because of the above point it can be folded up and hung on a wall. Even if you don't hang it, it only takes 22" x 8" of floorspace as it sits on its nose
- No engine means less maintenance
- I will have to let you know but I am counting on my landscaping bill will be lower this year.

And just in case you think there is no downside except cost

- After 25 minutes of chewing on super thick zoysia the batteries needed recharging. Normal usage I get 45 minutes. For me this is actually a plus because I run out of energy at about the same pace that it does. I have a friend with a Greenworks mower and 0.6 acre of lawn. He reports that he can get his entire lawn done on one charge even with the self propelling feature engaged.

Of course the best thing is less grass ... more flowers. And that is also part of the less landscapers strategy. Now, I am hoping Lisa will let me advertise the following for sale - call Wendy 524-5862

- one noisy gas powered lawnmower \$200 ono
- one Greenworks 48V (2 x 24V) 20" Brushless Cordless (Push) Lawn Mower (LED Headlight), (2) 4.0Ah Batteries and Dual Port Rapid Charger Included (125+ Compatible Tools) \$279 from Amazon plus \$270 in shipping and duty. It's still in its packing carton - why do I have 2 new electric lawn mowers? Long story.

Easy Pad Thai

Vegan, Gluten-Free, Wheat-free ~ Choose local organic ingredients for best results
Serves 4, Prep Time = 10 minutes, Cooking Time = 20 minutes

Ingredients:

8 oz Pad Thai noodles	3 cloves garlic, minced
1 red bell pepper, thinly sliced	1 tbsp olive oil
2 carrots, julienned	½ block firm tofu, patted dry, chopped
1 c mung bean sprouts	¼ tsp turmeric
½ Bermuda onion, finely chopped	¼ tsp garlic powder
¼ c chives, thinly sliced	½ tsp salt
 Sauce:	
3 tbsp tamari/soy sauce	2 tsp toasted sesame oil
2 tbsp light brown sugar	1-2 tsp hot sauce (sriracha or chilli sauce)
1 tbsp rice vinegar	2 tbsp creamy peanut butter, unsalted
1 tbsp lime juice	

Method:

1. Cook noodles according to package instructions.
2. In a wok or large pan, heat olive oil and sauté onions and garlic, add and cook veg until softened
3. Transfer to a bowl and set aside
4. In the hot wok, now add chopped tofu, add spices, mash with fork and cook for 5 minutes
5. In a bowl, whisk together ingredients for sauce
6. Add sauce to tofu mash, add cooked veg and combine
7. Fold in cooked, drained noodles, combine and heat thoroughly. Serve warm.

Variations: Replace tofu with scrambled egg for vegetarian version. Any other desired fresh vegetables can be used. Amount of veg to noodles can be increased as desired. Top with chopped roasted peanuts.

This popular dish makes an easy, savoury 1-bowl lunch or dinner. Leftovers can be stored in a sealed container, refrigerated, and just as tasty when warmed up the next day.

Contributed by Marlie & Jocelyn Powell, Vegan/Vegetarian chefs at Kingston House B&B
KingstonHouse@BBBermuda.com

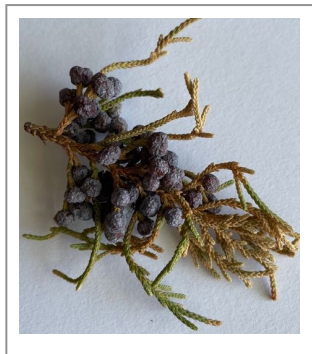


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Plant a Bermuda Cedar (Juniperus bermudiana).

Have you noticed some of our Bermuda Cedar trees are looking rather blue?

Look closer and you'll see our female cedars are full of blue-grey berries, which will ripen to purple between September - December!



Seeds remain dormant until the hard outer seed coat is damaged enough to let in water and gasses. In nature these outer coats can be damaged or cracked by extreme temperatures or by being eaten and excreted by animals. You can do what happens in nature by using sandpaper or a nail file to scratch/open the seed's protective coat, this is called, "Scarification" .

How to plant.

1. Collect ripe dark blue/purple cedar berries.
Take off the outside of the fruit with your fingernails or a knife. **PHOTO 1**
2. Place seeds on sandpaper. **PHOTO 2**
3. Place another piece of sandpaper on top and rub the sandpaper to break (scarify) the seed coat. **PHOTO 3**
4. Place seed in a small plant pot, half full of potting mix. Loosely cover the seed with more potting mix.
5. Place in semi shade and water regularly. **PHOTO 4**

Your cedar should germinate any time between 6 weeks and 6 months! When its bigger, enter it in the Ag Show, then plant it in your garden or donate it to a park or plant sale.

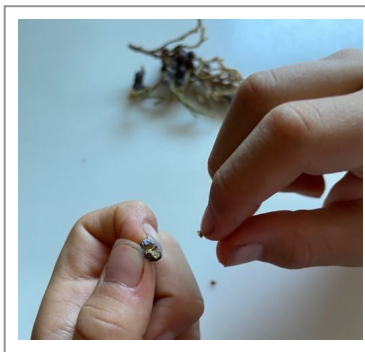


Photo 1



2



3



4

Membership Dues

Annual memberships were due by August 31st.

Junior & Senior	\$10
Individual.	\$15
Family.	\$25
Life Memberships -	\$250.00

The easiest way is through BdaTix memberships as the BBS receives a completed membership form. If you chose not to do this, please make a direct transfer to BNTB 20 006 060 897188 100. Please be sure to include your name and membership renewal. If contact details have changed please email BBS: bdabotanicalsociety@gmail.com

If paying by cheque: mail to P.O. BOX HM 2116 Hamilton HM JX and be sure to include contact details. Note: If you choose to send a cheque, please be aware that it will not be processed until mid-late September.

If you've not already renewed your membership, please consider doing so and support the work of the BBS To encourage and support the study and promotion of the botanical sciences within Bermuda.

Events - A varied and interesting selection of activities over the coming months

Sept 29th Spittal Pond Ecosystem 10 am with Dr Miguel Mejias
Sign up at bdabotanicalsociety@gmail.com Subject Spittal Pond
Free for members though donations greatly appreciated

AGM

This will be held on Saturday November 16th, 3 pm Horticultural Hall, BBG
Please consider joining the Executive Committee, or working on a one-off project - we could really use some help!

Visiting Speaker – Jan-Feb 2025

BBS is delighted to have secured Chris Collins as our annual speaker next year. Chris has spent a life in horticulture, working at Kew and Edinburgh Botanical Gardens as well as overseas in Camerouns and Japan. He is presently working at the very prestigious GARDEN ORGANIC based in Coventry UK. You can find out more about Chris at <https://www.gardenorganic.org.uk/news/10-minutes-with-chris-collins-gos-head-of-horticulture>



We will be looking for drivers, and lunch/dinner hosts during his stay. Marlie Powell has again, very kindly, offered to host him at Kingston House.
Further details later.
Email: bdabotanicalsociety@gmail.com subject Visiting Speaker

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