



Bermuda Botanical Society

P. O. Box HM 834, Hamilton HM CX, Bermuda
Tel: (441) 236-5291 • Fax (441) 236-8970 • Email: bdabotanical@logic.bm

NOVEMBER NEWSLETTER 2010



From the President's Patch

Greetings members and friends!

We are in the midst of Autumn and the scenery is changing. This is a time of transition for our gardens and parks, chief of which is the Botanical Gardens & Arboretum. Soon the once magnificent canopies give way to reveal beautiful dark frameworks & unique architecture of our oxygen producing friendly trees.

We survived the threat of the very powerful Hurricane Igor and as a community watched in amazement as this super storm fizzled out on its final approach to our tiny archipelago. One could say that Igor was intimidated by the extreme beauty of our environment and like the Biblical Samson he yielded to her and gave up his strength. Whatever the reason we were very fortunate and damage was kept at a minimum and the gardens soon bounced back.

The soil temperature is dropping and the sap will soon deplete, giving us gardeners the opportunity to begin our hard pruning so that new life will appear in the Spring and can continue to shape our areas of responsibility to look the way we desire.

...And so this is a time of reflection for each of us; we take all of our achievements and failures, set them in priority and learn from each of them to become better people which in turn will make a healthier society.

So much transition has occurred this year. Bill Ingham handed over the Presidency in May; we have new Board members; our dear Lyn Vaughan retired and we wish her well in all of her endeavours; we have great new staff; we have reduced the shop stock from an overwhelming 4000 items to a more realistic figure. Our executive team is developing new strategies for success.

I started my term as President by fostering a meeting with Parks officials and joined by Nigel & Marijke, which later

resulted in the drafting of a 21-year letter of understanding regarding our use of the building called the Visitors' Centre.

Part of my mandate is to ensure that board members are kept up-to-date with good governance, healthy board development & 'best practices'. Thus we are participating in "Board Building" workshops which are hosted by the Centre on Philanthropy. So far different members have attended two; we report back to the committee on our experiences which range from informative to helpful. I have also arranged for a business consultant to meet with the board to provide professional guidance for moving forward and with Best Practices; our first meeting was in October.

With a shortage of volunteers (man 'people' power) plus the grand October Green Rock event, we have decided not to have the Fall Festival. We are aiming to hold a **Thanksgiving BBQ on Thursday November 25th, 2010** to kick off our 25th birthday! (Please look out for notices.) That's right – a recent discovery of an old binder revealed that on November 25th 1985 was the first official meeting of the Bermuda Botanical Society (BBS). We wish to invite everyone to this fun night of family & friends, fellowship, food and fun at the Visitors' Centre.

Stay tuned for special activities throughout the next 12 months celebrating 25 years as an agency dedicated to the promotion of the botanical sciences and the development of the Botanical Gardens & Arboretum.

Congratulations!...

To Lisa-Dawn Johnston and her staff who received an award from the National Trust for their achievements.

Thank you's...

A big thank you to all our volunteers: we cannot survive without altruism, and I want to thank my fellow Board members who also give so much to ensure that BBS stays strong. Thank you also to those who donated financially this

year. A special thank you to Sophie and Arthur Whiteman for their donation of toddler toys to create a cool Kiddie Corner in the 'VC'.

The long awaited Herbarium has now been completed and is a working entity; housed in the

former rear kitchen of the Visitors' Centre – thank you, Neville Richardson.

Myles Darrell has been bringing soft and hard changes to the exterior of the 'VC' as we have a new walkway to Camden; the parking lot received a well-deserved face lift and new attractive planting areas – thank you.

I pray that the rest of the year be filled with good health & happiness for your households and some botanical wonder as well.

Best wishes always,



Paul Harney
President

A good understanding of plants is crucial to the future of human societies as it allows us to:
Produce food to feed an expanding population
Understand fundamental life processes
Produce medicine and materials to treat diseases and other ailments
Understand environmental changes more clearly

President's Appeal

The subcommittees that I created are in need of your support. We need members to consider taking a more active role and volunteering 1-2 hours maximum per year...without everyone pulling together we may not be able to continue as an organization because the Executive Committee are regular people and the majority of us have fulltime jobs besides volunteering for BBS. Your specified help would be greatly appreciated ~ thank you ☺

Committees

- Operations – chairperson – Barry Gibbons -
- Scholarship – chairperson – Nigel Chudleigh -
- Events – chairperson - Marijke Peterich -
- Finance – chairperson -Samantha Bromfield -
- Fundraiser – chairperson - Paul Harney -
- Building – chairperson - Neville Richardson
- Governance -



2010 PLANT SALE

STOP PRESS! Our plant sales topped \$6,000 for the first time in many years (maybe all time)!

This is a gratifying result given the challenges of climate - rough winter, drought in spring into summer and a hit from Hurricane Igor, just six weeks before the sale - and the struggling economy. Also, this year we really had no 'big ticket' items to sell, so had to forgo the usual Silent Auction.

Congratulations and thanks to our many volunteers who, year after year, donate plants and turn out to set up and man the sale, our biggest one-off fundraiser.

Grateful thanks, also, to the following :

Aberfeldy Nurseries and Hollis Seedlings for donating fine bedding plants and vegetable seedlings.

The Parks Department for providing the venue, Tulo Valley nursery director, Quincy Burgess, for a variety of plants and Botanical Gardens Curator, Neville Richardson, for his support and encouragement.

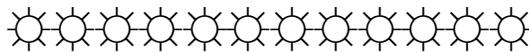
The SOS organisation, led by Stuart Smith, which raised so many of the native and endemic plants now thriving on National Trust properties and throughout Bermuda and who donated a fine selection to us.

And finally, of course, they also served who merely came to buy!

Nigel Chudleigh



Enthusiastic supporter Elaine Harris



PUMPKIN TIME

BY SARAH VALLIS PIETILA

I decided to grow pumpkin this year! I nurtured the plant through June and hoped for the best when I went on holiday in early July and then was so busy with visitors I didn't really have a chance to spend time in the garden until I was thinking about preparing the soil for the fall planting:

NO PUMPKINS! And it was already September!

I was sad – but I should have been paying attention to all those articles about the trouble the bees are in. The vines were healthy – lots of flowers – it did look like a productive garden.

What to do? I had to step in and do it myself – **HAND POLLINATION**. Luckily it is actually very easy with pumpkins since they are such large flowers. First you need to know that there are two types of flowers – male and female (the plant is dioecious). The female flowers have an ovary below



the flower and the males do not!

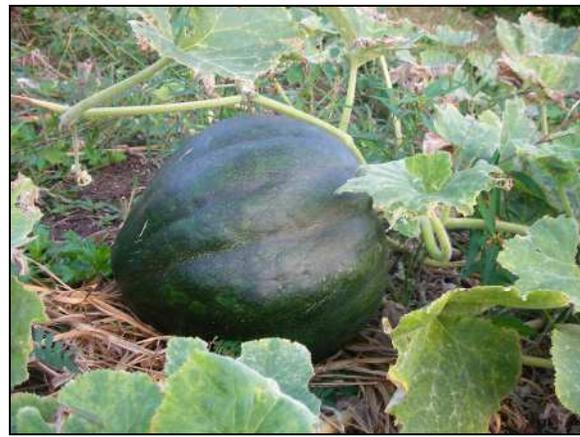


Pick a male flower, break the petals gently (so as not to shake all the pollen off) and then turn it over the female flower making sure to gently rub the pollen from the stamen onto the

stigma. Now you are a pro and ready to tackle other fruit / vegetable flowers while the beekeepers do what they can to help the bees. By the way – if you want to save seed for next year – be sure to check the flowers are from the same vine (if you have several different squash / pumpkin varieties growing they may get cross pollinated – but species shouldn't) and cover the flowers the day before opening and immediately after pollination with a muslin bag – this can be removed once the flower has dropped off and the fruit starts to grow. ...



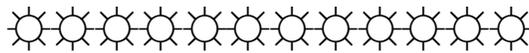
and then wait a few days. If you see the ovary starting to grow (a baby pumpkin) you have been successful!



Yippee!

Did you know:

Pumpkin extract may be a very good product for pre-diabetic people, as well as those who already have diabetes since recent research suggests that it promotes regeneration of damaged pancreatic cells, resulting in increased bloodstream insulin levels. And pumpkin seeds, also known as pepitas, have many health benefits, which includes being a good source of protein. One gram of pumpkin seed protein contains as much tryptophan as a full glass of milk.



TREASURER'S REPORT

BY SAMANTHA BROMFIELD

As we come into the “winter” season we are quietening down and there isn't much to report on the finances, except for the Plant sale that took place on Saturday, which we did very well with, even better than the prior year. Thanks to Nigel for all of his organization and efforts (and his plant growing).

I would like to give a warm welcome to our two new employees Patricia Best & Shawnette Smith, who are now running the Visitors' Centre for us on a daily basis.

Our winter opening hours will be Mon to Fri 9.30am – 3.30pm and closed on Saturdays – however until Christmas we will be open on Saturdays from 10am – 2pm (depending on amount of traffic, we may have to close a little earlier).

We are in the process of ordering new items for the shop, with a more botanical / gardening theme, so look out for those over the next month.

Wishing you all a happy holiday season.

Samantha



Plant expert Nell Johnston and displays at the plant sale



WATERCRESS

BY NIGEL CHUDLEIGH

Watercress is my favourite cool-season salad crop. To my taste, it is the king of all the pungent, peppery group of vegetables such as mustard, arugula, mizuna etc.. And it grows well in Bermuda, except in the summer months.

It's often a surprise to people that this plant can be grown other than in cool running streams. But it lends itself very well to growing in a container. As shown above, I use an old washing-up bowl, with a few holes for drainage and to allow ingress of water from the 'saucer', an old trash bin lid. As a container-grown plant, you do not need a garden to enjoy this succulent, tasty and nutritious vegetable, though it can be grown in the ground if kept moist.

Watercress is a member of the Brassica family, which includes mustard, cabbage, turnip and cresses. Despite its botanical name, watercress is not related to the nasturtium flower, *Tropaeolum majus* and *T. Minus*, widely naturalized in Bermuda.

Watercress has a very high vitamin C and iron content and contains numerous amino acids, making it popular in alternative medicine concoctions. It can be used in salads, sandwiches, stir-fries, soups and as a garnish.

Though a perennial, watercress has to be treated as an annual in Bermuda. I grow from seed sown in the fall, on the surface of a pot of compost saturated with water by standing in a saucer filled with water. I have not seen the seed on sale here in recent years so it has to be bought by mail order or when travelling. Sometimes, imported watercress is sold in bunches in supermarkets and pieces should root readily if stood in water in a jam jar on a windowsill.

The plant has a great propensity to put out runners and roots, so

one plant can soon be multiplied by 'layering' the runners into the compost.

Seed in packets stored in sealed containers in the fridge remains viable for several years. A couple of years ago, I came to sow my watercress, but found there were only six seeds left in the packet (and they are very tiny)! But all six germinated, so all was well.

I grow the crop in commercial potting mix and keep the container in full sun during the winter, but partial shade in the fall and spring. Fertilize sparingly but regularly. Keeping the compost wet is crucial. Always have water in the saucer but change it frequently to avoid growth of algae or mosquitoes. Also regularly flush the whole mass through with plain water to wash out excessive mineral build-up.

It is best to harvest whole shoots rather than snipping behind the growing tip, which causes the plants to branch out into too many small sprigs. The ideal sprig is about 6 inches long, sturdy and dark green.

Eventually the compost becomes root-bound and oxygen-starved causing loss of growing vigour. It is then necessary either to start afresh from cuttings or with plants culled from the existing container. From April onwards the plants start to flower and eating quality declines. That's your cue to sow your Malabar Spinach!

We sold out of watercress seedlings at our recent plant sale, but for anyone contacting me by email, below, I should be able to provide starter plants within a few weeks.

nchudlei@ibl.bm

WEEDS

BY GEORGE PETERICH

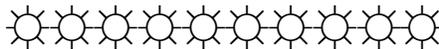
The year 2010 has not been without difficulties for gardeners. We have had prolonged periods of drought. A bed of begonias in our garden suffered badly and at the end of the summer one plant after the other died. Weeds came up in the open spots and when I finally gave up watering, they took over.

I decided to attack the nut grass that was sprouting up abundantly. It is a tough sort. You cannot simply pull them out – you have to get them up with the root. At the base of the root there is actually a tuber: the “nut” from which, if not removed, rhizomes will grow, sometimes spreading horizontally, but always going for the light again. It is an uphill battle. To keep the spirits up, I counted the ones I dug out – literally a few hundred.

While I was at this I looked at some other plants that had come up. I thought they would be worth a bit of research. With the help of botanist Christine Watlington, I identified two Spurges, recognisable by the white sap that comes out when the stems are broken. One is Blodgett’s Spurge, also called Limestone Sandmat, *Chamaesyce blodgettii*. The other one is *Chamaesyce hyssopifolia*, Hyssop Spurge or Hyssopleaf

Sandmat. The “Chamae” in the genus name is from the Greek and means “on the ground”. Of the two the Limestone Sandmat really spreads flat on the ground, whereas the Hyssop Sandmat sticks its neck out a bit more. Both plants have tiny white flowers and particularly the Blodgett’s Spurge produces many seeds, also very small. Leaving much of these spurges in the ground I did get my moment of not seeing nutgrass any more. Albeit brief, I must add.

The nutgrass operation was spread out over several days and meanwhile another plant had come up abundantly: Purslane (*Portulaca oleracea*), a lovely plant with shiny leaves, and succulent rosy coloured stems. It has small yellow flowers. This really should not be called a weed, because for some people it is a valuable vegetable. Someone gave me the definition of a weed: it is “a plant that grows where you do not want it”. To this we might add “and has no use for humans”. Well, one man’s weed is someone else’s delight. I have not eaten purslane since my childhood, but remember that well. No, I am not giving you any recipes! I hope however to come back and write on this and some other edible plants that can be found in the wild in Bermuda.



LYN'S FAREWELL PARTY



Margaret Ingham & Lyn Vaughan



Bill Ingham & Daphne Taylor

SPANISH MOSS, AKA OLD MAN'S BEARD, *TILLANDSIA*

USENEOIDES

BY LISA GREENE

Spanish moss is an epiphyte (a plant that grows up in another plant) and is in the same family as pineapple and bromeliads.

According to the Kew Plant and Fungi Species file, "Spanish moss possesses striking adaptation to its environment. The entire surface of the shoot is covered with highly specialized trichomes (scales) which absorb water and nutrients from the atmosphere; they also reduce transpiration and reflect strong light. It prefers moist habitats and is often abundant near rivers, ponds and lakes. It can survive well in dry habitats too,... It can survive two months without rainfall but will die within three to four months of drought. In dark forest it hangs suspended from the higher limbs of trees (most commonly on trees that are dead). Spanish moss grows on a wide range of trees, both wild and cultivated, which have a high rate of mineral leaching. It does not appear to favour any hosts. Many tropical trees, however, release chemicals, making conditions unfavourable for the growth of Spanish moss.

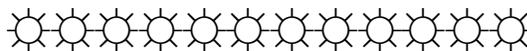
Epiphytic plants such as Spanish moss are very useful bioindicators for air quality. Since these plants obtain all their nutrients and water from the air, these tissues contain nearly the same levels of elements, including pollutants, as the atmosphere they grow in. Research has shown that Spanish moss is a particularly reliable indicator of metal pollutants in the air.

Spanish moss yields a tough, elastic fibre from the non-living vascular tissues of the stem. This fibre resembles black horse hair and was once of major economic importance. To obtain the fibre, festoon of the plants were harvested from trees using long poles (up to a tonne from one tree) and 'cured' by burying the plant material in pits or trenches until the living, greenish tissues decayed and only the black vascular tissues remained."

If you have given us your email and are not receiving notices from us, please send an email to elgreene@ibl.bm

.....

Does anyone have either of these two plants?
I am looking for them for the landscape at Somersfield School New Zealand Flax, *Phormium tenax* (not to be confused with another plant popular now in Bermuda called flax lily: *Dianella tasmanica*) and flax, *Linum usitatissimum*. Flax apparently comes up in outdoor bird cages occasionally and New Zealand flax is popular with flower arrangers. Please give me a call at 299 2329 x2123 or email me at elgreene@ibl.bm



LYN RETIRES

After nine years of service at the Visitors' Centre café and gift shop, from volunteer to manager, Lyn Vaughan has retired, to take better care of her BFAB cats and to dabble in new interests. She has provided the Bermuda Botanical Society with stalwart service and put in hours upon hours beyond the call of duty, and we are happy that she remains a member of the society and may therefore be tempted back ... as a volunteer?

Our visitors and volunteers will miss her, and her successors have big shoes to fill. Who else knows so well that visitors from Canada and Scotland are happy to tour in any weather, that April is the month we need the largest number of volunteers, that to get from A to B you

need to catch the bus to C and get a transfer to D route? Who can provide the answer to which plants in the Gardens flower in which month? The comfort of her customers was always paramount to Lyn, who would spare no pains to make sure that everyone left contented.

Her popularity was evident from the numbers of BBS members and volunteers who turned out to toast her on the afternoon of her last day. Thank you, Lyn, for your service and your knowledge and your readiness to share it with us all. We're glad that you will remain a BBS member and hope to see you active in our causes.

