Bermuda Botanical Society

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

bdabotanicalsociety@gmail.com

MAY NEWSLETTER 2023

FROM THE PRESIDENT:

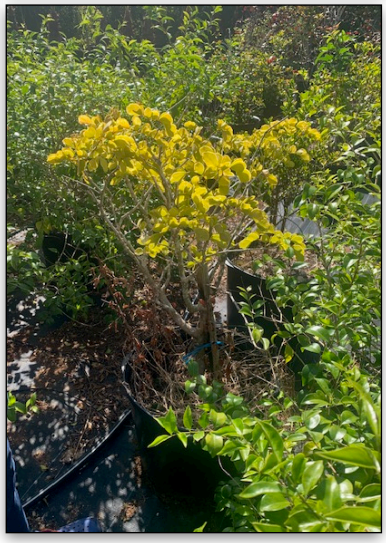
After a somewhat prolonged cold spell - spring has finally arrived! Amaryllis, Easter Lilies and Iris in full bloom. The poor weather saw the postponement of the March activity, a visit to Keren Lomas's garden. This will now be on **Sunday May 7th**. As a few who had signed up for the earlier visit are not available for the May tour, if anyone is interested in attending, please email bdabotanicalsociety@gmail.com, subject Keren's Garden.

The Easter Quiz for children was put in place – many thanks to Marlie for her dedicated work to get this done – several responses were received and a few new junior members signed up. Congratulations to JeShae Daniels, Keiaran Fox, Caroline Mahoney, Raya and Quin Burgess and welcome to the BBS.

Christine Watlington Tree Planting Ceremony: A sturdy, 5' white Frangipani kindly donated by Marijke and George Peterich was put in place on the Saturday morning by Marlie Powell and Jennifer Flood along with the plaque. The weather cooperated on Sunday, Christine's family and friends were there to officially plant the tree, remembrances of Christine were contributed by Jennifer Flood, David Wingate and Peter Lee. Conversations and memories continued to be shared over refreshments in the Montrose building.

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

Tree Farm visit: this was well attended, and all enjoyed an informative morning with owner Kim White as we toured the large farm finding trees familiar, some very unusual ones, and a couple of 'mystery' trees. There is also an extensive palm collection, a variety of shrubs and an endemic/native section. Many thanks to Kim for allowing this visit, for sending us away with iris plants, and also donating a considerable number of Southern Hackberry trees to Buy Back Bermuda's Alton Hill project.



Images: top left clockwise: tour, Lignum vitae and *Gliricida* flowers.

Work at the **Endemic/Native Garden** was affected by poor weather, but a recent Taskforce has done a lot of pruning and weeding. A new addition has been the native Turnera, *Turnera ulmifoli*a. Wood Grass, *Oplismenus setarius*, is spreading slowly and providing ground cover, Darrell's Fleabane, *Erigeron darrellianus,* is going to seed, and the White Stopper, *Eugenia axillaris* has an attractive flush of new red leaves. Volunteers welcome! **Next Taskforce May 6th then May 20th**.

Propagation workshop: Looking ahead to early June we are hoping to co-host a propagation workshop led by Myles Darrell, BNT, focusing on Bermuda endemic and native plants.

cont.

There is a wonderful poem by Kate Wakeling, ‘and a tree’ on the BBS website (bermudabotanicalsociety.org) well worth reading, which beautifully details the extraordinary value of trees – we cannot live without them!

‘and a tree is a promise
safe-kept by a seed,
and a tree is a dance

that is swung by the breeze, …

Jennifer Flood

Trivium no. 42: Marshmallow

Text: George Peterich

F.E. Kohler

The first thing that comes to mind when seeing the word marshmallow is a sweet delicacy, that is most appreciated by children when they can roast one over the embers of a barbecue. But Marshmallow is a plant - a mallow that grows in the marsh, a salty marsh to be precise. The scientific name is *Althea officinalis*.

This plant has been used for medical purposes since time immemorial. 3000 years ago the Egyptians harvested them in the Nile delta and they were the first to make the famous sweets from ground dried roots of the plant, mixed with egg white and honey.

In the Netherlands the plant is now protected, because salt marshes have become rare, due to development of coastal areas.

L. Greene

Ed. note: to my knowledge, *Althaea officinalis* does not grow in Bermuda but the ornamental hollyhock, *Althaea rosea*, certainly has been grown here in the past, but might have gone out of fashion. There is also a shrub known as shrub althaea or rose of Sharon, but it is actually *Hibiscus syriacus*. Perhpas the closest to marshmallow to be found in Bermuda is our rare native, the Virginia kosteletzkya, *Kosteletzkya virginica*. The US. Dept. of Agriculture has this to say about it: “*Ornamental/landscaping:* In addition to the long flowering period providing great color, the tolerance of Virginia saltmarsh mallow to a variety of soils, salt spray, salt affected soils, and a wide range of moisture levels make it a valuable and versatile ornamental plant.” It sounds as though we should we be propagating *this* plant.

Trivium no. 43: Gregor Mendel
Text & photo: George Peterich

Gregor Mendel did research with sweet peas, crossbreeding various colours, and formulating laws of heredity. Years ago, someone that I knew had a German Pincher. The dog had a litter of 4 puppies. Three were like the mother: black with brown markings on the head, but one was totally brown. It was said that the brown had "mendelled out". This meant that an ancestor of the puppy that was brown had manifested itself again. Something similar occurred in our garden. A bush of White Heath Firecracker (*Russelia equisetiformis*), which is a rare variety, had a few red flowers, telling us its ancestry.

Uncommon Ficus
Text & photo: Marijke Peterich

Andrew Street, from the Montgomery Botanical Gardens in Florida, who came to lecture about palms, turned out to be an all-round botanist. On a walk through the National Park, Southlands, he gave us the name of a *Ficus* that for a long time had been an enigma. Now we know that it is the Mosaic Ficus (*Ficus aspera*)! It has that name because of the patterns on its leaves. The fruits have a diameter of about 2 cm (1 & 7/8th of an inch) and can be found both on branches and on the trunk of the tree - cauliflory. (Years ago our member, Helle Patterson, reported she had seen a fig tree with fruit on its trunk - see article below.) The fruit of the mosaic fig look like small peaches, with a pink blush, and also have that soft furry skin, that is very peachy!

Three cheers for curiosity!

Text: Lisa Greene, Photos: Helle Patterson

Marijke's mention of Helle Patterson's *Ficus* tree, that *also* bore its fruit on its trunk, inspired me to search my emails where I found photographs Helle had taken and sent in 2008!! Helle recalls being down on the Saltus field for sports day; she and her students were hanging out in the shade of this tree when she noticed its fruit. She asked around but nobody at the school knew anything about the tree, so she set out to try to identify it. Helle searched the internet and decided that her fig, growing on the Saltus school playing field, was the Cluster fig, *Ficus racemosa*.

You can see that the leaves are not variegated like the Mosaic fig but the cauliflorous fruit on the trunk are amazing! And look at the *size* of this tree's trunk! It makes you wonder how old it is and how it came to be there. If anyone know anything about its story or the history or the property, *please* get in touch.

According to the Wayne's Word website, there are other figs that bear their fruit on the trunk, including *Ficus pretoriae*, and *F. auriculata. And on the Encyclopoedia of Life there are several other species: F. sur, and Ficus sycomorus subsp. sycomorus.* Beware the interesting rabbit hole of *Ficus* on the internet!

Why is Botany and the Botanical Sciences important?

Text by Gary Taylor, M.F.C.

Botany is the study of everything plants and is extremely important in many ways. The mission statement of the Bermuda Botanical Society is, “To encourage and support the study and promotion of the botanical sciences within Bermuda.” Unfortunately, most general biology textbooks have only a brief chapter on botanical studies, so modern students and others might ask why botany is relevant. So, why is botany so important that a society was created to promote it in Bermuda?

Our modern comprehension of genetics began with botany. In the 19th century Gregor Mendel experimented with the propagation and cross breeding of pea plants to better understand biological inheritance. Continued botanical research expands on our knowledge of genes and their roles in many aspects of life.

As the world’s scientists try to develop technology that will capture carbon from the atmosphere in an attempt to mitigate one of the causes of climate change, plants have been doing just that for over 850 million years. Carbon is naturally captured and stored within plant structures. When the plant dies or loses leaves and branches, this carbon is then stored in the soil. Much can be learned from the study of how plants capture carbon.

Our natural environment is affected by climate change, ever-expanding development, and pollution. Air and water are cleaned by plants and many are known to remove toxic chemicals from soils. Plants also play a vital role in ecosystems and are usually the first thought in restoration efforts. Plants provide food and shelter for millions of living organisms. Understanding local native and endemic plants and their importance to local wildlife is extremely critical.

As the world’s population increases the importance of the plant side of agriculture cannot be denied. Understanding the many botanical properties of agricultural plants and using that information can lead to higher yielding as well as pest and disease resistant crops. It can also help to make needed adjustments as the affects of climate change, such as floods, droughts, more frequent natural disasters, and record-breaking temperature fluctuations, threaten food resources around the world.

Botanical studies support the development of medicines. Many of our modern pharmaceutical drugs have been developed using plants. Aspirin is a relatively simple example of this. Properties of chemicals in plants are being researched and tested every day and new plant species are regularly discovered all over the world that are added to that research.

Products made from plants are used in construction and many of the products that we use every day. Most homes are built from timber from trees. Paper, fabrics, rope, carpeting, can all be made from plants. Scientific knowledge in the field of botany can make these and many more products even better. Bioplastic and plant-based petrol are concepts being developed that may one day replace our dependency on fossil fuels.

The examples given here represent a very brief introduction to the importance of botanical studies and the need to continue their promotion in Bermuda and around the world. I hope that it will inspire readers to consider studying botany or to encourage young people in their lives to consider study and careers in the botanical sciences.

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

Children's Corner
from Jocelyn Morrison

Grass-head Friends

<u>You will need:</u>
A knee-high sock or old stocking leg, cut short.
Soil
Grass seed
Strong white glue
2 Googly eyes or 2 circles of card and black marker
A red felt mouth or colour and cut out a card mouth
Pompom nose or colour and cut out a brown card nose
Glass jar with water



How to make your Grass-head friend:
1.Collect the materials together.

2. Holding the sock open with one hand sprinkle a layer of grass seed into the toe. You can ask a friend to help.

3. Holding the sock open fill the sock with soil until you have the size of a tennis ball.



4. Twist the stocking and tie off in a knot.

5. Glue on your eyes, mouth and nose an leave to dry completely.

6. Water!

7. Place your Grass-head friend carefully onto the jar. The water will slowly be absorbed by the soil. As soon as it reaches the seeds the top of the 'head' your 'hair' will begin to grow.

8. Here it is! It might even need a cool trim!

HAVE FUN!!

Toasted Muesli with Pecans & Loquats

Vegan, Gluten-Free, Wheat-free ~ Choose local organic ingredients for best results
Makes 16-18 cups, Dehydrating time = 4- 8 hours, Prep Time = 10 minutes

Ingredients:

32 oz gluten-free rolled oats
6 oz dried pumpkin seeds
6 oz sliced almonds
6 oz pecans, broken
3 oz dried coconut flakes
8 oz buckwheat, sprouted
2 oz hemp seeds
8-10 oz loquats, dried and chopped

Method:

1. Clean loquats, remove seeds, stems and spread out on dehydrator or baking sheets
2. Dehydrate overnight in dehydrator or in slow oven set on bake/convection until dried
3. Soak buckwheat in an ample amount of fresh cool water for 4 hours, drain well
4. Spread out evenly on dehydrator or baking sheets, dehydrate at same time as loquats
5. Combine first 5 ingredients (oats, pumpkin seeds, almonds, pecans, coconut)
6. Spread out on baking sheets and toast in 400 degree oven for 10 min. or until golden
7. When cooled, combine in a large bowl with chopped dried fruit and buckwheat
8. Store in an air-tight container

Variations: Can use any other dried fruits like peaches, bananas, raisins, blueberries, chopped mangoes, dates, cranberries, cherries, or any combinations. Sunflower, chia or flax seeds can also be used. Can substitute broken walnuts for pecans. A drizzle of Bermuda honey or fresh fruit on top are tasty additions as well

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