



# Bermuda Botanical Society

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## JANUARY NEWSLETTER 2016

### FROM THE PAST PRESIDENT

Dear BBS members,

A very happy New Year and our very best wishes. As you may know we did not find a new President at the last AGM.

For now we, the Executive, have decided to take it in turn to organize an event for the Society.

Lisa Greene and George Peterich suggested a walk through Hamilton at the end of January to discuss the different trees growing there.

Nigel and Diana Chudleigh will be leading an investigation of the plants at Tucker House, Water Street, St George's.

I hope you will all come along and enjoy each other's company and expertise.

Looking forward to seeing you at either event.

With warm regards,

*Marijke Peterich*

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### FROM LISA GREENE

Well, there's no denying that we were having a mild winter – so warm in fact that some varieties of lettuce in my little garden have bolted. Even nasturtiums are flowering around the island. Will the spring's flowering be disappointing? Time will tell.

The University of Illinois Extension Master Gardener publication says that "hot weather can cause cool-season vegetables to bolt, resulting in reduced production and changes in flavor. ... A warm winter may result in a large

insect population the following season." I suspect we'll see more snails and slugs too!

In a December 2015 article in The Wall Street Journal, it was stated that while the warm weather isn't likely to damage plants long term, experts said, there is this not-so-great news: "Almost everything in full bloom now won't put on a second show come spring. Spring-flowering trees, shrubs and bulbs get just one shot—they can't create new flower buds over the next few months. 'You can't turn that

clock back,' said Mr. Sullivan of New York Botanical Garden."

Does the same apply to the plants growing in our sub-tropical climate? Again, we'll have to wait and see.

Other observations:

There was very little fruit on Brazilian pepper this year (were the flowers blown off when Joaquin passed by?) And poinsettia shrubs are only just now putting on their annual show of colour. Usually we see these lovely plants before Christmas and lasting into January.

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## WHAT IS THE FUNCTION OF CAFFEINE IN PLANTS?

BY LISA GREENE

Caffeine in fresh raw coffee beans begins to fulfil its natural function in the plant when the seeds germinate. As germination begins, the embryo coffee plant absorbs all the food stored in the endosperm of the seed and with it the caffeine in the bean. Caffeine is an all-purpose defensive compound that is poisonous to insects, inhibits the growth of bacteria and fungi, kills slugs and snails, and even inhibits the growth of plants. The latter effect does not result in the coffee plant poisoning itself, because caffeine is chemically germinated, some of the caffeine in the seedling leaks from its roots into the soil, where it may have a

protective effect against pathogens and may interfere with the growth of competing plants. The growth of the first, tender leaves of the seedling is crucial to the subsequent survival of the coffee plant. These leaves are heavily protected with caffeine, which is present in their juice at a concentration 10 times that found in a cup of espresso coffee. Mature leaves also contain caffeine, but this is concentrated around the margin of the leaves where insects are likely to take their first bite.

Source: An Orchard Invisible: a natural history of seeds, by Jonathon Silvertown.

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## POLLARDING

BY GEORGE PETERICH

It is good practice to cut back tall trees here in Bermuda so that they do not fall over in storms or get badly damaged. After the storms of 2014 it was nice to see how some trees that had recently been cut back came through without much damage.



Pollarding trees has been done for centuries and for a number of reasons. The first is that you do not have to fell a tree to get some firewood. Branches can be cut off and they will grow back. Another one is that some trees produce more fruit on new growth branches. Olive trees are an example. Of course you can shape a tree by cutting off unwanted branches. After the required shape is established new twigs will grow and selected ones can be cut back again.

In Holland pollard willows are a characteristic feature in the landscape.



Especially in the polders, the watery land below sea level, you'll see them lining the ditches. With their roots they stabilize the ground next to the water, but they have to be kept low, so that they do not fall over.

Pollard willows are still being created. One starts with a willow twig, stuck into the wet ground. It will grow into a small tree and after it reaches a certain height the top is cut off. Twigs will sprout on the top of the trunk and they will be cut again and again. The older they get the more picturesque they become. Rembrandt did a fine etching of one in 1648, with St Jerome in the background.



Another way to pollard is done in Europe with linden trees. First selected branches are led along a wooden framework to shape the tree into a vertical plane. Then the branches are pollarded, year after year. This is typically done in front of a house to keep the windows in the shade in the summer.



Also in Europe, plane trees are shaped annually by pollarding. The trees line the streets in towns, especially in the South of France. The result is that in the summer there is shade in the streets and sunshine in the winter.

The ultimate in creative pruning (or should we call it topiary?) is done in the cities of Japan. There you can see what someone has called “poodle-trees”. You can look them up on the Internet.

To come back to Bermuda: Quite a few trees can be pollarded with success. I name just a few here: Poinciana, Pride of India, Schefflera, all sorts of Ficus trees, Mulberry, and even Plumeria.



### TRIVIUM 15, BY GEORGE!

Nobody would try to count the flowers on the stalk of the *Agave attenuata*, but it is interesting to see how the flowers open. They start at the bottom and gradually move to the top. Bananas flower from the top to the bottom, but the stalks are inverted!



## UPCOMING EVENTS

- Sunday Jan. 31      3pm      An afternoon walking tour introduction to some of Hamilton's trees. Presented by George Peterich, Sarah Vallis, Lisa Greene, and perhaps a special guest (if we're lucky).  
Members: \$5, non-members: \$10.  
Space is limited; please email [elgreene@ibl.bm](mailto:elgreene@ibl.bm) to sign up and receive further information.
- Sunday, Feb. 21      3 pm      Historically appropriate and useful plants at Tucker House, with Diana and Nigel Chudleigh. Please enter from Barber's Alley.  
Members: \$5, non-members: \$10.  
Space is limited; please email [elgreene@ibl.bm](mailto:elgreene@ibl.bm) to sign up and receive further information.  
Rain date: Sunday, Feb. 28.
- Late March (date to be determined)      Tentative: An introduction to some plant families (slide show).  
presented by Lisa Greene and friends.  
Space is limited; please email [elgreene@ibl.bm](mailto:elgreene@ibl.bm) to sign up and receive further information.



Scarlet Cordia – one of the trees found along Reid Street