SIOS

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NEWSLETTER

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The SIOS meets on the
3rd Tuesday of each month at
7:00pm
All Saints Episcopal Church,
2329 Victory Blvd., SI, NY 10314

Next meeting July 19th 7pm

A Message from John

Hi Guys,

Wow! our auction was one of the most successful one in a long time.

Our profit made me very, very happy. $1100
The reason for this is Dick Doran.
He acquired the plants and delighted us as our pitchman.

We are so lucky to have Dick and Carol as members and friends. Thanks Mr. D.

The Buffet was pretty good to. It looked like an Italian wedding. Can't get enough of marinara sauce.

Thanks to Dave who received the shipments. Thanks to Ron for joining Dave on his excursion into the wilds of New Jersey to pick up plants. Thanks to Colman for doing whatever he does so well. And everyone who did anything to make this a wonderful night. I know great deals were made. Enjoy your new babies for many years.

Our next meeting will be a potting workshop. Bring 1 (one) plant only that needs to be divided or moved up to a bigger pot. Also, bring a larger pot for moving up, or 2 pots for divisions. We will provide medium and experts to get the job done. You will get your hands dirty so be prepared.

I'll see you all then.
Be Good and be Well!
~John

Anthony Penza Update

This photo was taken 2 weeks ago

now **He's HOME!**

The S.O.B is walking better the I am WITHOUT a cane, walker or any help.

He moves faster. He climbs stairs.

Barbara and I visited him last Sunday.

My jaw was on the floor for 2 hours.

Anthony Penza is Back!

He plans on visiting us soon.

JULY PROGRAM

~ A demonstration of repotting your orchids to make you fearless in doing so.
~ Bring a plant that you want repotted together with a pot if it's going to be larger.
~ We will provide the repotting medium. Also I hope to have dowels for compressing the bark into the pot.
~ When to repot will be discussed.
Colman and Dave will be demonstrating.

ORCHID AUCTION PHOTOS

AN INTERESTING TID-BIT FROM THE AMERICAN ORCHID SOCIETY

MAY 2011

Sent in by Carl Phillips

Last month's newsletter (AOS) contained an article published some time ago that included the line ".....never water your orchids with softened water....." This prompted one reader to comment that this admonition isn't true because water can be "softened" by several different processes and only one of them produces water that is unsuitable for watering plants. While this reader is correct; deionization, distillation, reverse osmosis and salt-based cation exchange (traditional household water softeners that are charged with salt) are all forms of water softening, it is also true that to the vast majority of hobby growers the phrase water softener means a sodium chloride based water softener common in many homes and most of our hobby growers would be lost in a discussion of deionization.

The phrase softened water technically means water from which the iron, magnesium, calcium and some minor elements has been removed. This can be accomplished by a number of methods. The admonition against using softened water to water plants (and drink for that matter) results because sodium chloride (salt) based water softeners replace the positively charged metal ions with sodium ion. The result is a high concentration of sodium ion in the resulting water and sodium, known to raise blood pressure in humans, is toxic to plants at high concentrations. One can get around the problem of salt-based water softeners by using potassium chloride instead of sodium chloride as the "salt" source or one of the other routes to soften water.

In retrospect, I should have edited the article to state that water softened by a sodium chloride (salt) based water softener shouldn't be used to water plants and I apologize for any confusion the omission may have caused. - RM Last month's newsletter contained an article published some time ago that included the line ".....never water your orchids with softened water....." This prompted one reader to comment that this admonition isn't true because water can be "softened" by several different processes and only one of them produces water that is unsuitable for watering plants. While this reader is correct; deionization, distillation, reverse osmosis and salt-based cation exchange (traditional household water softeners that are charged with salt) are all forms of water softening, it is also true that to the vast majority of hobby growers the phrase water softener means a sodium chloride based water softener common in many homes and most of our hobby growers would be lost in a discussion of deionization.

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COLMAN'S ORCHIDS

Photos by Sage Reynolds

Pat Cammarano's web links of interesting orchid material found on the internet.

http://www.orchidgeeks.com/forum/orchid-pests-and-diseases/16196-ever-wonder-what-spider-mite-looks-like.html

These pictures of what mites look like are the best. ---- Pat

The .pdf file for this document will be attached to your email along with the July newsletter. The document is 54 pages and could not be included in the newsletter. It is an interesting read with lots of photos.

Sent in by Pat Cammarano

Rarer Wildflowers of New York City and Vicinity (1927)

Elizabeth Britton [for David Taft]

Journal of the New York Botanical Garden 28: 248-249 (October 1927 No. 334).

The Torrey Botanical Club began its activities for the study of the local flora between 1865 and 1867, over 60 years ago, and in its Herbarium, which was donated to the Garden, may be found many rare specimens of plants which formerly grew where the city has now completely obliterated the localities where they were found. In Brooklyn, where the Ferry House of the Fulton Ferry was, Curleyheads (Clematis ochroleuca) once grew. Rare orchids were collected on Manhattan Island; Trailing Arbutus (Epigaea repens) and American Holly (Ilex opaca) used to be abundant on Staten Island; Cardinal Flowers (Lobelia cardinalis), Fringed Gentians (Gentianopsis crinita), and Moccasin flowers (= Pink Lady's Slipper Orchid Cypripedium acaule) once grew in Van Cortlandt Park [Bronx]. If cameras had been as common when the Torrey Botanical Club was founded as they are now, it would have been possible to secure many pictures which have vanished; so Mrs. Britton advises all the members of the Walkin g Clubs to go " botanizing with a camera " and "bird-hunting with an opera glass" and to record their finds as Mr. Swift is doing in the New York World in the " News-out-of-doors." She warns us against fire and vandalism and asks for help in making New York State beautiful. A state law protects the birds and some of the wild flowers, particularly American dogwood and Mountain Laurel, arbutus and moccasin-flower.

Excerpt from an Abstract of an illustrated lecture given on Saturday afternoon, August 20, 1927, at The New York Botanical Garden.

Yes 18 orchid species (native) once grew on Manhattan Island...today only one non-native species (Helleborine) grows there, albeit commonly.

Continued from: *Insect and Arthropod Pest Identification and Management* Editor: Ronald Oetting
UGA/CAES/Griffin Campus Handout for Southeast Greenhouse Conference

SCALES

Photos

Description and Biology

Scales are a very diverse group containing several different species/families. The most common families of scales found on greenhouse crops are armored scales, soft scales, and mealybugs. The mealybugs are covered in another chapter in this guide so this chapter will strictly be limited to the armored and soft scales. There are several species in these two groups but the most common are: armored scale- the fern scale, cactus scale, and boisduval scale; soft scale- hemispherical scale and brown soft scale.

The female scale is wingless and is only mobile during the crawler stage just after egg hatch. The crawlers will move a short distance from where they hatch and begin to feed by inserting their proboscis into the plant tissue until it is in the vascular system. Once they start to feed they will remain in that spot for the rest of their life. The male is different from the female in the third immature stage. At this time, they will form a long slender pupal case which is usually white. This is the most noticeable scale on a plant because it is white in color and stands out from the surrounding green plant. The winged male will emerge from this case, only lives for a few days, and spends it's short life looking for females to mate.

Armored scale is covered by a waxy shell that is separate from the body. They secrete wax and incorporating the cast skins at molt into the shell. The insect is flat, close to the plant surface, and often oyster-shell shaped. The female loses its legs and is separate from the wax shell that covers and protects it. Eggs are laid under the shell and each female may produce from 30 to 200 eggs. There can be 8 or more generations per year in the greenhouse.

Soft scales are not covered by a separate wax shell but the wax cover is actually part of the scale body. If wax is present it is tightly bound to the body of the female and it can not be separated from the body. The female soft scale body maybe almost flat in the early stages to spherical and turtle-shell shaped as mature females. Females may either reproduce sexually or asexually and may lay eggs or give birth to live young. Soft scale may lay as many as a 1,000 eggs.

Characters to Separate Species

Flip a mature scale over, if there is a separate soft body beneath the wax shell, it is an armored scale. If there no distinction between the shell and the body, just a plump mass, it is a soft scale. The armored scales are often specific to particular plant group or species. The oyster-shell shaped (flat with one end more narrow than the other) scale are only found on specific species (i.e. fern scale). The boisduval, cactus, and oleander scale are circular or oval in shape (more like the soft scale), but when turned over, the body is separate from the shell. The soft scales are circular to oval and may form a bump or turtle-shell shaped. The hemispherical scale is shiny brown in color and mature individuals are noticeably convex or hemispherical in side view. Ridges on the dorsum of the shell often form the letter 'H'. The soft brown scale is flatter and leathery. It is yellowish-green to yellowish-brown and often mottled with brown spots. Species identification of scales requires preparation of specimens on microscope slides so they can be viewed under a microscope.

Feeding Damage and Symptoms

The primary damage from scale is a general weakening of the plants, soft scale produces honeydew making the leaf surface sticky and serves as a medium for fungal growth called sooty mold. Armored scale feeding often results in chlorotic spots where feeding occurs. The presence of scale is a distraction, reducing the esthetic quality of the plant. Heavy infestations can distort and kill small plants. New growth is often distorted from scale feeding. Heavy feeding will result in dead stems and leaf drop.

Detection and Sampling

Scales do not fly so most infestations originated from infested plant materials that are brought into the greenhouse. Plants must be

Detection and Sampling

Scales do not fly so most infestations originated from infested plant materials that are brought into the greenhouse. Plants must be inspected to find an infestation. You must inspect plants for live scale infestations. Look for suspicious looking

bumps that might be on the plant stems or leaves. Armored scale are usually first detected by the white pupal cases of the adult scale that are very noticeable on the leaves. Soft scales are often first noticed by the shinny sticky honeydew found on leaves produced by the scale feeding above. Ants feed on the honeydew so the presence of ants on a plant may indicate that a sucking insect is present and close inspection is needed. If you smash a soft scale with your fingernail a drop of liquid will come from the bump. Scale may feed on stems or the underside of leaves so detection requires looking under leaves and into the canopy of plants.

Management

Chemical Control. The crawler stage is the most susceptible to pesticides and repeat applications are needed for control. Several insecticides are registered for scale control and it will probably take different compounds for soft and armored scale. Sevin has been the most common compound used against soft scale. Oils have been used for all scale species.

Cultural Control. Scales cause more damage on stressed plants, so keep plants healthy. Inspect plants that come into the greenhouses for scale insects. They can not fly and must come into the greenhouse on plants.

Biological Control. Scale insects live a sessile life so they are vulnerable to natural enemies. However, the wax cover helps protect them. Natural enemies include lady beetles, microscopic wasps, predatory mites, and lacewing larvae. The crawlers are also the easiest prey for predators and can fall prey to numerous species. Natural enemies, specific to scale insects, are available from biological control supply companies.

. ***To be continued….***

Topics to come in future newsletters are:
Lepidopterous Larvae, Caterpillars or Worms, Slugs and Snails, Pest Management Strategies for Insects and Mites in Common Greenhouse Production.