## Regional Eruption of Crape Myrtle Bark Scale (CMBS) Affecting Rehoboth Beach

Pai Jih Hung – meaning "100 days of red" – is the Chinese name for the Crape Myrtle, a common ornamental tree in our landscapes. But some Rehoboth Beach residents may think "365 days of black" when they see their Crape Myrtles charred as if they caught fire. This article aims to bring awareness to Rehoboth Beach property owners of a national ecological disturbance causing such symptoms.

Don't let your Crape Myrtles go from this...



## What is CMBS

CMBS is a small sap-sucking insect with several life stages (egg, nymph, pupa, and adult) (*LSU AgCenter*). Most stages are small enough to go unnoticed with the naked eye. Adult females develop a white-grayish protective coating. This will be one of your first indicators of CMBS. It is important that this stage is not confused with its natural predator – the **Ladybird Beetle** (see full article).



During the early Fall (September) "Crawler Season" I was able to capture decent photos through a hand lens. Red indicates CMBS (eggs and crawlers) and Green appears to be ladybug larvae feeding on the scale.

#### What's the Damage?

The insects have piercing mouthparts with which they penetrate the tree's bark and feed on the sap. Scale insects digest the sap and then excrete a sticky, sugary solution: <u>honeydew</u>. The presence of honeydew is another good indicator of a scale infestation. It can attract wasps, yellow jackets, and other flying insects. The effects we see are primarily crown dieback, little or no growth, and loss of blooms. <u>Sooty Mold</u> accumulates on untreated trees with CMBS.

#### Sooty Mold

Sooty Mold is the black fungus that covers bark and leaves thereby giving the tree a charred look. It is a fungus group consisting of many species that can only survive on the sugary composition of **honeydew**. It is consuming the excrement of the scale – wherever that may be. Brian Kunkle of UD Cooperative Extension in Sussex County points out that Sooty Mold "is not a disease. It does not harm the health of trees or shrubs." While it may be an unsightly symptom for many, it is just that – a symptom (and indicator) of a much larger problem. If Sooty Mold is seen on a car, fence, or patio – which we see often - it is surviving on the excretions of the scale insects feeding on your trees above.

Mr. Kunkle agrees that the best option for Sooty Mold removal is to allow it to "weather off" after gaining control of the insect population. Sooty



Photo: REHOBOTH BEACH – After treatment, dead CMBS and Sooty Mold begin to fall off as the tree sheds its bark.

Mold is not capable of growing without the excrements of the insects. It may take time for the tree to grow, shed its bark and its leaves. Some local residents have opted to use a diluted Dawn dish detergent solution with a scrub brush and plenty of rinsing. Others have powerwashed the trunks. These aren't uncommon methods across the U.S., and many have found some success in the laborious tasks. One thing remains certain – if the scale is not controlled, the Sooty Mold will return and persist.

#### **Moving Forward: Management**

CMBS is certainly going to be a member of our local ecology for years to come. The universities of Maryland and Delaware are involved in extensive research on the matter, and experimenting with management options that are ecologically sound. A local arborist who works closely with the extension agents is best equipped to provide the necessary guidance, prevention, and treatment.

We have found that even with soaring populations of CMBS in the community, the pest can be controlled on individual properties with ongoing management practices. Preventative <u>plant</u> <u>healthcare (PHC)</u> is highly recommended over reactive treatments. The progressiveness of the infestation is often proportional to the recovery time. Meaning if your tree turns completely black before you have sought professional assistance, it will require more time (seasons or years) to fully gain control of the population. **Each property, each tree has its own characteristics and conditions that determine the best possible management strategy. It is** 

best to have a <u>certified arborist</u> inspect your property for CMBS and other plant healthcare issues to prescribe a treatment plan.

# Ladybird Beetle

**Biological Control of CMBS** 

Adult Female CMBS develop a white-grayish coating, but don't confuse CMBS with this furry crawler – the *Hyperaspis* Ladybird Beetle. They are predatory insects which feed on CMBS eggs while doing no harm to the tree.



Left: Close-up image of Hyperaspis Ladybird larvae – a beneficial which could easily be mistaken for CMBS | Right: Hyperaspis Ladybird beetle adult Photo Credit: Texas A&M AgriLife Extension

In other words – If your crapes are struggling with CMBS, the ladybirds are your best friends.

#### How to tell them apart:

You can differentiate Ladybird larvae from CMBS adults without a magnifying glass. While scale insects fix themselves to the tree with piercing mouthparts, Ladybirds can move about. If you lightly touch one, it may start to move. If you can see it moving, it is likely a beneficial ladybeetle. We are seeing increasingly more of the beneficial ladybug species since the arrival of CMBS, and we should hope to see that trend continue.

*"I always find ladybeetle larvae, especially those of Hyperaspis species, with CMBS populations in South Carolina. Therefore, I always stress the importance of giving the ladybeetles a chance in suppressing the CMBS population."* Mike Merchant of Texas A&M University suggested that ladybeetles can provide about 75% suppression of CMBS population.

(GrowerTalks © 2023 Ball Horticultural Company)



Photo Credit: Patrick Porter – Texas A&M Extension Entomology. Left: Assorted Ladybeetle species. Right: Adult ladybeetle eating aphids.

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Credentials & Certifications:





Certified Construction Reviewer (CCR) & Responsible Person



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