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PRESIDIO--A beetle used as a biological control of saltcedar is jumping to another tree, according to a Texas AgriLife Extension Service entomologist.

Though one tree is hated and the other loved, the one thing they have in common is a small imported beetle that feeds on both, said Dr. Mark Muegge, AgriLife Extension entomologist at Fort Stockton.

Saltcedar is a shrub or small tree introduced into the U.S. more than a century ago for erosion control. Athel is a popular non-native shade tree in southwestern Texas that's kin to saltcedar. According to Muegge, the beetles feed only on saltcedar and athel. If either of these plants are not present, the beetles die.

Saltcedar has become a major pest along waterways throughout the West, so to control it, scientists introduced saltcedar leaf beetles, its natural enemy from its native land, said Muegge.

"The beetles are very effective in controlling saltcedar," Muegge said. "Unfortunately they can also feed on athel. Athel is not well known outside southwestern Texas, because the tree is not cold tolerant."

Muegge said research has shown that the beetles do not prefer athel over saltcedar, but will feed on athel when beetle numbers are high.

He said the beetles chew away the leaf's surface, causing them to turn brown and fall off. But even though the tree is bare of leaves, it's not dead.

"Trees defoliated by leaf beetles will grow new leaves once beetle numbers decline," he said. "It takes several complete defoliations to actually kill the tree."

Both adult beetles and larvae feed on the trees, Muegge said. Adult beetles are about one-quarter inch long and can be yellow, brownish green or even almost black. Small larvae are black. Larger larvae have a light yellow stripe along each side of the body.

"The beetles do best on saltcedar, not athel," Muegge said. "As the beetles continue to feed on saltcedar, the shrub infestations will dwindle and so will the beetles."

Muegge said there are two control strategies; rescue treatments for athel trees already hit by the beetles and preventive measures for those not yet affected.

If larvae and adults are found on the athel trees, he recommends spraying the foliage now. Products such as carbaryl (Sevin), gamma-cyhalothrin (Spectricide Triazicide Insect Killer Concentrate), imidacloprid (Bayer Advanced Tree and Shrub Insect Control, Ferti-lome Tree and Shrub Systemic Insect Granules or Drench, Ortho Max Tree and Shrub Insect Control), permethrin (Green Light Conquest Insecticide Concentrate), and Green Light Tree and Shrub Insect Control with Safari.

For homeowners who want to use organic control products like EcoExempt IC2, spinosad (Ferti-lome Borer, Bagworm, Tent Caterpillar and Leafminer Spray, Green Light Lawn and Garden Spray with Spinosad, and azadirachtin (Azatin, Azatrol) are viable options.

Since the beetles will persist until late October or November, repeated treatments may be necessary. Special high pressure sprayers may be needed to reach the top branches of large athel trees.

"Preventive control next spring is probably the best way for homeowners to protect their trees, because no special equipment is needed and a single application will last all season," he said. "Preventive control insecticides include products with imidacloprid or Safari. They are applied to the soil near the tree trunk and watered in so the tree's roots can absorb and circulate the insecticide throughout the entire tree.

"Saltcedar has become a huge problem, so we sure don't want to lose the beetle, but homeowners don't want to lose their athel trees either. By controlling the beetles on athel trees we should be able to have the best of both worlds."

For more information call Muegge at 432-336-8585 or Dr. Allen Knutson, AgriLife Extension entomologist at Dallas, 972-952-9222.

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