

# INVASIVE SHOT HOLE BORER TRIALS



RESEARCH

## OBSERVATIONS

The Invasive Shot Hole Borer is known to attack more than 300 species of plants and are capable of causing death to several species of sycamore, maple, willow, box elder, cottonwood, and oak. Pioneer beetles attack and colonize individual trees. Over time, the attack density builds on the host and gallery construction and fungal infection can girdle the tree resulting in death. With treatment, initial attacks are unsuccessful and the host is saved from further attack and death.



UNTREATED



SAP STAINS FROM ATTACKS



TREATED

## BEST TIME TO TREAT

Systemic treatments are best made preventatively, when attacked hosts are first noticed in the area, but prior to heavy attack and colonization of valued trees. Trees can be treated any time of year when there is good soil moisture and trees are actively transpiring.

## SUMMARY OF TRIAL RESULTS

California sycamores selected in three locations in southern California were treated with TREE-äge® (TA) alone, Propizol® (P) alone, a combination of the two (TA + P), or left untreated in early 2014. The trees were monitored for ISHB attack levels for 4 years. All treatments significantly reduced ISHB attack levels and successful attacks. We concluded that TREE-äge (TA) alone or combined with Propizol (P) are acceptable preventative treatments for management of ISHB attacking ornamental trees in southern California.

