

# TWO-MARKED TREEHOPPER

**Hemiptera: Membraciade**  
*Enchenopa binotata* - complex

Bug  
of the  
Month



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The two-marked treehopper is actually a complex of multiple species found mainly in Eastern North America. They feed on diverse host plants, including nut trees, black locust, black walnut, nannyberry, and grapevines. Although they don't cause direct damage to grapes when feeding, these insects can transmit the Grapevine red blotch associated virus (GRBaV), which alters berry chemistry, delays ripening, and reduces the quality and market value

of resulting wine. The two-marked treehopper's life cycle is about four weeks long. Eggs are laid inside the twigs of the host plant and covered with a secretion called 'egg froth' for protection during the winter months. Nymphs hatch in the spring and have a pale white-gray color over brown coloring. The adult is about 8 mm in length, brown-black in color, with two yellowish-colored dorsal spots. The hind legs are narrow with spines,

while the front two pairs are wide and flattened. Adults use vibrational communication to convey messages to each other for mating and to signal alarm. Male treehoppers make substrate-borne vibrations on certain structures of the host plant that travel throughout the plant. Females detect these vibrational signals with specialized structures on their legs, and they respond using their own vibrations to indicate that they are receptive to mating.

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