

Treehopper Girdle Identification

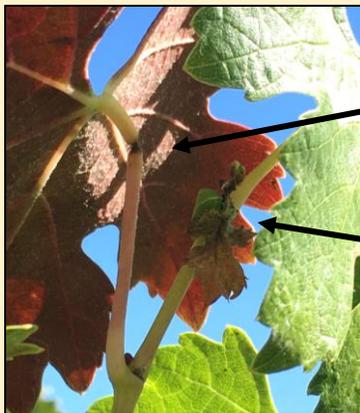
Spissistilus festinus and *Tortistilus wickhami* are two treehoppers found in California vineyards. They use their mouthparts to pierce phloem tissue, disrupting nutrient flow and creating a girdle. They feed on nutrients that accumulate above the girdle.

In red varieties, girdles result in the reddening of leaf tissue (typically 1-3 leaves), as the plant responds to the feeding damage.



A girdle may be visible on the petiole or lateral, proximal to the red leaves

Girdles are found primarily on laterals and petioles, occasionally on shoots



Girdle

Treehoppers may be seen near the girdle



Girdled petiole

Girdled lateral

S. festinus is a vector of grapevine red blotch virus.
T. wickhami is under investigation as a vector.

S. festinus



S. Vengco

T. wickhami



C. Kron

Visit the UCCE Napa Viticulture Team website to learn to identify *S. festinus* and *T. wickhami*.

