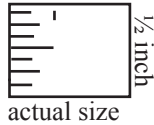


Thrips



Western Flower Thrips,
Frankliniella occidentalis

- Approximately $\frac{1}{25}$ inch long
- Tubular shaped
- Adults with feathery wings
- Front end of the head is square with a pair of red eyes at the corners, and a pair of antennae in the middle



Grape Thrips, *Drepanothrips reuteri*

- Appearance similar to western flower thrips



Early Season Shoot Damage

- Early spring damage when shoots are less than 12 inches long
- Shorter internodes
- Stunted growth



Damage: observed in Mid-Season

- Misshapen basal leaves due to feeding on expanding leaves early in spring



Left: Normal shoot

Right: Early spring thrip feeding damage observed later in the season

- Scarred canes with shorter internodes



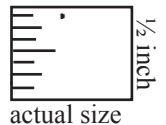
Predators: Minute pirate bug nymph

- Nymphs are cream-colored and oval shaped with an orange spot in the abdomen
- Long piercing mouth parts
- As the name implies, they are very small but larger than thrips



Predators: Minute pirate bug adult
Orius tristicolor

- Adults have black and white pattern on wings



Thrips

Date	Insect Stage	What to look for
Budbreak through April	Adults and immatures	<ul style="list-style-type: none">• Stunted shoot growth immediately after bud break• At bud break watch for scarring or bronzing at the edge of the tiny, immature leaves. Peel back these leaves and with a hand lens look for thrips.• If shoot growth is delayed due to cold weather, thrips damage may be more apparent.• When shoots are short, inspect for thrips on the developing leaves at the tip of the shoot.• When shoots can be bent without damage, sharply tap the tip of the shoot onto a hard white surface. Look for fast moving elongated insects.