



# Pest e-alerts



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## Flatid Planthoppers

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An old and somewhat common pest has been spotted in Oklahoma and other southern states this summer. I have received images of white, cottony masses covering stems of ornamental and vegetable plants. These white masses are waxy secretions of flatid planthoppers (Hemiptera: Flatidae). In general, these insects are not abundant enough to cause direct damage to plants, although oviposition (egg laying) punctures may kill small stems and branches. The most common and widespread flatid species in the southern U.S. is *Metcalfa pruinosa*. It occurs throughout the U.S. and Canada but is probably most abundant in the southern U.S. This species feeds on a wide variety of trees, shrubs, vines, and occasionally on vegetables and weeds. Another flatid species, *Flatormenis proxima* (formerly *Anormenis septentrionalis*), the northern flatid planthopper, is more common in northern states and Canada. Additionally, several undescribed species are reported to occur in the southern U.S.



Figure 1. Adult flatid planthopper, *Metcalfa pruinosa*.  
Photo: David Cappaert, Bugwood.org.

## Identification

Adults of *M. pruinosa* are whitish gray and measure about 1/4 inch long (Fig. 1). They are somewhat wedge-shaped, becoming narrower toward the rear end, and are covered with a white, powdery substance. A characteristic pair of dark spots is located in the basal half of each forewing. These insects may be mistaken for moths at first glance. Adults of *F. proxima* are similar in shape to *M. pruinosa* but are pale green. Nymphs of both species are white, laterally flattened, and covered with long filaments of the flocculent, waxy substance they secrete on host plants (Figs. 2 and 3).



Figure 2. Flatid planthopper nymph and cottony, waxy secretions on stem of host plant. Photo: David Cappaert, Bugwood.org.



Figure 3. Cottony, waxy secretions on stem of host plant. Note sticky honeydew present on leaves below affected stems. Photo: Becky Peterson, Bryan County, OK.

### Life Cycle and Biology

*Metcalfa pruinosa* overwinters as an egg inside twigs of its host plant. Eggs are scattered singly, each inserted through a slit in the bark cut by the ovipositor. Small nymphs hatch and suck sap from the stems using their piercing-sucking mouthparts. As mentioned above, nymphs produce the white, cottony material on the stems, which obscures the developing insects. Nymphs are most common in June and July in southern states. Most are mature by mid-July and adults are present into early October. There is one generation per year in Oklahoma.

### Detection, Damage, and Management

Look for masses of white material on the stems of plants and check for nymphs. Like other planthoppers, nymphs jump readily when disturbed. This behavior helps distinguish planthopper nymphs from woolly aphids, mealybugs, and bark scales. Damage from flatid planthoppers is rare, but heavily infested plants may become wilted and leaves and stems may be covered with honeydew (liquid excrement) produced by these insects. Honeydew serves as a growing medium for black sooty mold. Control is not usually warranted unless damage and/or black sooty mold is observed and nymphs are still present. If control is necessary, use products containing horticultural oil, sometimes referred to as stylet oil, or insecticidal soap. These products are available at most garden centers and do not cause harm to beneficial insects if applied according to label directions.

## References

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