

## Beech Blight Aphid

Jeremy Slone, PhD, Entomologist

Beech blight aphid (*Grylloprociphilus imbricator*) is a species of woolly aphid that forms dense colonies on the twigs and foliage of American beech (*Fagus grandifolia*) trees from late spring to fall. This pest is present from Texas to Florida, and north to Canada along the East Coast. Beech blight aphid is similar in appearance to another beech-inhabiting aphid species, the woolly beech aphid (*Phyllaphis fagi*), which is commonly found only on European beech (*Fagus sylvatica*).

### Description

Beech blight aphids secrete tufts of white, waxy strands from their abdomen, which form a thick covering over their body (Figure 1). Populations have been observed covering several feet of branch tissue which can give the appearance of snow accumulation. When disturbed, the colony will defensively raise and wave their woolly abdomens in an elaborate display as a warning to attackers. This has given rise to another common name, the boogie-woogie aphid. Aphids feed on plant phloem using long, slender mouthparts but will also stab predators that are not deterred by the swaying behavior.

Winged individuals are reported to disperse to the secondary host, bald cypress (*Taxodium distichum*), where they feed on the roots; however, this alternation of hosts is not necessary for populations to persist.

### Damage

Aphid feeding can reduce plant vigor but rarely causes significant damage to overall tree health. Large populations may contribute to branch dieback.

This pest is a significant nuisance as each individual exudes copious amounts of sugary waste, called honeydew, which can drip onto branches and underlying surfaces (Figure 3). Honeydew from this

**Figure 1: Beech blight aphid infestation**

Photo credit: Joe Boggs (<https://bygl.osu.edu/node/1871>)



species has an obligate association with the sooty mold fungus *Scorias spongiosa*. This means that this particular sooty mold only occurs in response to this host and pest interaction. *S. spongiosa* forms dense, fuzzy masses (Figure 4) rather than the superficial coatings commonly seen with other sooty mold fungi. This dense growth can contribute to reduced photosynthesis if formed over foliage and can be especially problematic on understory growth.

Figure 3: Honeydew on tree trunk and flare root exuded by woolly beech aphids feeding on a branch above



## Management

Regular monitoring is important to identify aphid infestations before they become excessive. Proper soil management and fertilization can also aid in preventing aphid problems as excessive nitrogen fertilization can promote aphid outbreaks. Few cultural practices are available to help with aphid infestations. Therapeutic products are also available for aphid management and are typically very effective. Please contact your Bartlett Arborist Representative to learn about monitoring programs and management strategies.

Figure 4: Dense sooty mold (*Scorias spongiosa*) growth on twigs



Founded in 1926, The Bartlett Tree Research Laboratories is the research wing of Bartlett Tree Experts. Scientists here develop guidelines for all of the Company's services. The Lab also houses a state-of-the-art plant diagnostic clinic and provides vital technical support to Bartlett arborists and field staff for the benefit of our clients.