UNIVERSITY OF FLORIDA
IFAS EXTENSION

EENY-292

Giant Bark Aphid, *Longistigma caryae* (Harris) (Insecta: Hemiptera: Aphididae)[1]

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Introduction

This bark-feeding aphid was first described by Harris (1841) as *Aphis caryae* from pignut hickory, *Carya glabra* (= *porcina*) (Mill.) Sweet, in Massachusetts. It is the largest aphid that occurs in the United States, and it was probably this species that was reported by Thomas (1879) from limbs of pignut hickory in Illinois. Weed (1891) described its various forms and gave a short note on its biology. Wilson (1909) described the genus *Longistigma* for this species because of the extremely long slender stigma which extends around the end of the wing.

Distribution

L. caryae has been reported from Alabama, Arkansas, Arizona, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, and Wisconsin.

Figure 1. Nearly mature nymph of the giant bark aphid, *Longistigma caryae* (Harris). Credits: Louis Tedders, USDA ARS, courtesy of ForestryImages.org

Description

Apterous (wingless) viviparous female: body 6 mm long, abdomen 3.5 mm in diameter, antennae 3 mm long, posterior legs 9 mm long. Light to dark brown except cornicles and a few small spots on the abdomen; tips of femora, tibia and tarsi black. Cornicles very short and truncate. Rostrum extending to posterior coxae. Body, legs and antennae with

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long, light brown hairs. Antennal segment III equal to IV plus V; VI short, with unguis thumb-shaped.

Figure 2. Colony of giant bark aphids, *Longistigma caryae* (Harris), with both winged and wingless females. Credits: University of Florida

Alate (winged) viviparous female: body 6 mm long, abdomen 3 to 5 mm in diameter, head to tip of folded wings 10 mm; wing expanse 18 mm, antennae 3 mm, posterior legs 11 mm. Head and thorax bluish black, antennae and cornicles black, dorsum of abdomen whitish with 2 rows of black spots on each side of the median line and a transverse series of small, black dots on each segment. Cornicles short and truncate. Tips of femora, tibia and tarsi black. Body, legs and antennae covered with long brown hairs. Wings dusky, especially toward base. Oviparous females do not differ in appearance from viviparous females.

Figure 3. Winged adult giant bark aphid, *Longistigma caryae* (Harris). Credits: Lyle J. Buss, University of Florida

Hosts

Basswood - *Tilia* spp., hickory - *Carya* spp., oak - *Quercus* spp., pecan - *Carya illinoensis* (Wangenheim) Koch, sycamore - *Platanus* spp.,

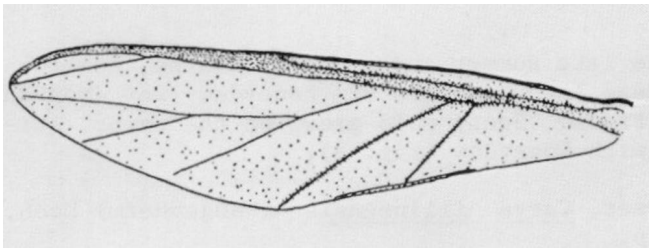

Figure 4. Forewing. Credits: Division of Plant Industry

walnut - *Juglans* spp. and wax myrtles (Barnard and Dixon, Mueller 2002).

Economic Importance

During the late summer and autumn months, numerous specimens feeding on branches excrete large amounts of a sticky, clear liquid known as honeydew that can form a sticky coating on automobiles, picnic tables, lawn furniture, and plants underneath trees where the aphids are feeding. Soon sooty mold, which is grey-black in color, begins to grow on the sugar-rich honeydew. While sooty mold does not directly damage plants, it blocks sunlight and disrupts photosynthesis, contributing to reduce plant vigor. Sooty mold can also damage the finish on cars, chairs, tables or other objects.

Survey and Detection

Look for sooty mold on any of the host plants. Check the bark of limbs and trunk for large dark aphids during the summer and early autumn.

Management

For management information please see Insect Management on Landscape Plants (http://edis.ifas.ufl.edu/IG013).

Selected References

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