Pest Profile



Photo Credit: Jerry A Payne, USDA Agricultural Research Service, Bugwood.org

Licensed under a Creative Commons Attribution 3.0 License

Common Name: Pecan phylloxera

Scientific Name: *Phylloxera devastatrix*

Order and Family: Hemiptera, Phylloxeridae

Size and Appearance:

	Length (mm)	Appearance
Egg	2.5mm	Small
		Light yellow in color
Larva/Nymph		Resemble adults in
	2.5mm	appearance
		 Slightly smaller than adult
Adult		 Resemble aphids without
	~3mm	cornicles (tubes on
		abdomen).
		Soft-bodied
		Cream-colored
Pupa (if applicable)		

Type of feeder (Chewing, sucking, etc.): Both larvae and adults have sucking mouthparts.

Host plant/s: Pecan trees

Description of Damage (larvae and adults):

Feeding done by the overwintered adult female pecan phylloxera results in galls forming on leaf veins, leaf rachises, catkins, and current season shoot and nut growth. Inside the gall, the female will lay her eggs and upon their hatching the nymphs will continue to feed on plant tissue.

During periods of high infestations, twigs and branches will become deformed as well as the tree having a knotty appearance. Occasionally, infestations will become severe enough to cause dieback. Galls may also form on pecans, causing them to become deformed, have stunted growth, or drop prematurely.

References:

- Cranshaw, W., (2004). Chapter Seven: Phylloxeran Galls: Pecan phylloxera. In *Garden insects of North America: The ultimate guide to backyard bugs*. (p. 412). Princeton, NJ: Princeton University Press.
- Hall, M.J., (2009, September). Bug Biz: Pecan Phylloxera. Louisiana State University Ag Center and Extension Station, 2009. Retrieved March 10, 2016 from http://franklin.agrilife.org/files/2011/09/PeacnPhylloxera.pdf
- Payne, J. A. (2011, May 09). Pecan phylloxera (Phylloxera devastatrix). Retrieved March 29, 2017, from https://www.insectimages.org/browse/detail.cfm?imgnum=1224076
- Ree, B., (2003). A Partial List of Damaging Insects Attacking Pecan in the United States. Texas A&M University, 2003. Retrieved March 10, 2016 from http://pecankernel.tamu.edu/insect_list/
- Smith, G.S., O'Day, M. H., and Reid, W., (1995, June). Pecan Pest Management: Insects and Diseases. University of Missouri Extension, 2015. Retrieved March 10, 2016 from http://extension.missouri.edu/p/MP711