

Pest Profile



Photo credit: April Nobile, California Academy of Sciences (Specimen CASENT0006306; from <https://www.antweb.org>)

Common Name: Red harvester ant (big red ants; harvester ants, red ants; Barbatus harvester ant)

Scientific Name: *Pogonomyrmex barbatus*

Order and Family: Order Hymenoptera; Family Formicidae

Size and Appearance:

	Length (mm)	Appearance
Egg		
Larva/Nymph		
Adult	Workers range from 5 mm – 8 mm	<p><i>Pogonomyrmex</i> harvester ants are characterized by broad, boxy heads, 12-segmented antennae, a two-part waist, a pair of dorsal spines and a stinger. Many species have a set of long hairs (called a psammophore) on the posterior lower portion of the head, behind the mouthparts.</p> <p>Workers of the red harvester ant are polymorphic without distinct majors and minors. They vary in color from a light to very deep red and they have texture in the form of lines on the head (rugae).</p> <p>Colonies have one queen (monogynous).</p>

		Queens are similar to workers but larger with a larger thorax. Female and male reproductive ants have wings.
Pupa (if applicable)		

Type of feeder (Chewing, sucking, etc.): Chewing

Host(s): Harvester ants in the genus *Pogonomyrmex* specialize in seeds but may forage on other foods (generalist and opportunistic).

Description of Damage (larvae and adults):

Because these ants primarily eat seeds (up to 90% of the diet), they are pests of agricultural systems, damaging crops but especially grasslands (pasture). They harvest seeds, defoliate plants, and remove young and old plants. Agricultural important plants they affect include corn, oats, alfalfa, cotton, guayule, grapes, date, citrus trees, apple, and pear, as well as more generally pasture (grasses) and shrubs.

They also have a potent sting with the most toxic of insect venoms that produces a persistent pain, the effects of which may spread through the lymphatic system. The venom may cause severe allergic reactions, other serious problems, and death of livestock, pets, and people. These ants sting in defense of the nest, so avoiding the nest area is a good idea.

They nest in open areas and also like some disturbance, like mowed lawns, and so are commonly found in lawns, playgrounds, managed fields, and along roads and sidewalks. The external nest area can be quite large, up to 2 m in diameter (large enough to be seen from the air), and are easy to locate because the ants denude the area of vegetation. Their nests may cause problems for livestock, harvesting equipment, airplane runways, highways, and other such surfaces. The nest also contributes to soil erosion and other problems.

The red harvester ant is found in Mexico and USA, including Arizona, California, Colorado, New Mexico, Nevada, Oklahoma, and Texas.

References:

Cole, A.C. (1968). *Pogonomyrmex harvester ants: a study guide of the genus in North America*.

Klotz, J., Hansen, L., Pospichil, R. & Rust, M. (2008). *Urban ants of North America and Europe: identification, biology, and management*. Ithaca, NY: Cornell University Press.

Schmidt, J.O. (2003). Venoms. In R.H. Resh & R. T. Carde. (Eds.) *Encyclopedia of insects* (1160 – 1163). Amsterdam: Academic Press.

Taber, S.W. (1998). *The world of the harvester ant*. College Station, Texas: Texas A&M University Press.