



ANTS

The ants go marching one by one, hurrah, hurrah . . . so goes the old song. Anyone whose kitchen has been invaded by persistent columns of ants knows how difficult it is to get rid of them once they've found their way in. Some ant species are problems in homes and gardens; others can be agricultural pests. There are also non-native, highly invasive ant species. It must be noted, however, that ants are a part of the natural landscape and perform many useful functions like cleanup of dead and decaying things, and feeding on other pest insects. (Ants can feed on the eggs and larvae of insects like fleas and termites.)

But when ants are a pest and control is needed, the first step is, as always, to identify the pest. First we will look at some of the species commonly found in Tehama County. After the species descriptions, particular ant problems and control measures are discussed.

Argentine Ants



Argentine ants are small (1/8 inch), uniform in size and dull brown in color. They don't sting and seldom bite. They give off a musty odor when crushed.

The Argentine ant, *Linepithema humile*, is a

non-native, invasive species that came from South America and arrived in the U.S. sometime in the 1800s. It hitch-hiked on ships and trains, and then trucks until it became established from southern California all the way up the I-5 corridor to Vancouver.

The Argentine ant is the single biggest pest ant of homes and gardens because they occur in large numbers and are hard to control. This is because they don't have one single nest with one queen, like most ants, but bud off new nests with several queens. The nests are inter-related, with workers moving freely between them. They forage over large areas. When Argentine ants invade an area, they drive away all native ant species.

Carpenter Ants



Carpenter ants are our biggest species (up to 1/2 inch). Some are all black, and some are brown and black. They don't have a sting but can bite and inject formic acid causing a burn. Workers range in size.

In our area carpenter ants (*Camponotus* sp.) are found in wooded areas from the foothills to the mountains. Carpenter ants are named for the habit of excavating nests in wood. They don't eat wood like termites, but can chew their way through it with their powerful jaws, producing sawdust-like



waste called frass. Carpenter ants are attracted to dead stumps and knot holes in dying trees where they make their nests in easily excavated rotten wood. Many species of carpenter ants don't go beyond exploiting rotten wood, but several of our western species, including *Camponotus modoc* and *Camponotus vicinus*, can tunnel into living trees and intact structures. In nature carpenter ants are valuable for beginning the process of breaking down and recycling wood, but in homes and landscapes these two species can be major, destructive pests.



Carpenter ant damage on a structure



Carpenter ant damage to tree

Velvety Tree Ants



Named for velvety abdomen and living in trees, workers range from 1/8 to 1/4 in. Head is brown, mid-section red, abdomen black. Gives off strong ant smell when crushed, giving rise to the nickname "piss ant". An aggressive biter.

We have two species of velvety tree ant; *Liometopum occidentale* (pictured above), which nests in oaks and other hardwoods, and *L. luctuosum*, which nests in conifers. Like carpenter ants, velvety tree ants can damage wood and insulation in homes. They produce a finer-grained frass than carpenter ants, and it can be associated with a smell. They sometimes cross the landscape in broad files.

Fire Ants



Southern fire ant (*Solenopsis xyloni*). Amber-colored head and mid-section, black abdomen. Vary in size from 1/8 to 1/4 in. Can swarm out of nest and sting.



The first thing to say about fire ants is that we do not currently have the Red Imported Fire Ant in northern California. It is found across the southern states and occurs in southern California and the San Joaquin Valley. Their nests can be large mounds, they have very large colonies, and they are extremely aggressive, swarming out of their nests when disturbed and attacking in large numbers.



Southern fire ant nest



Red imported fire ant mound



Welts from fire ant stings

Their sting is very painful, and can be dangerous to some people.



Fire ant sting

If anyone observes possible Red Imported Fire Ant colonies, please report it to the Agriculture Department.

Our native species, the southern fire ant, can also swarm and sting, but is not as severe.

The southern fire ant can do damage in almond orchards, generally to nuts on the ground. They can hollow out the nutmeat, leaving only the skin.

Other Ants in Our Area

Odorous house ant, Pavement ant, Thief ant



Odorous house ant (*Tapinoma sessile*) is small, uniformly 1/8 inch, dark brown to black, and gives off a very strong ant smell when crushed.



Pavement ant (*Tetramorium caespitum*) small, 3/16 inch, dark brown to black. Named for nesting along sidewalks. Colonies fight creating ant wars on sidewalk. Can be a pest in almond orchards.



Thief ant on left, pavement ant on right. The thief ant is our smallest ant, 1/32 inch, light brown. Named for stealing food and larvae from other ants' nests.

These are just some of the many ants found in California. If you want an ant identified bring a sample in to our office, or you can attempt the "Key to Identifying Common Household Ants" found at www.ipm.ucdavis.edu/TOOLS/Antkey/

Problems and Solutions

Ants in the House

Home invasions by ants are the #1 complaint to pest control companies. Correct identification of your ants will aid in decisions like whether to call a pest control company (recommended for Argentine and fire ants), and what kind of bait to use.

The two main components of ant control are prevention and baits. Prevention can be achieved by caulking cracks and gaps on the outside of the house that allow ants to get in. Pet dishes can be placed in a larger bowl of water to form a barrier to ants. Inside the house, keep food and spills cleaned up and food stored in containers. Petroleum jelly can be used to seal cracks inside and to seal garbage can lids.

Ant baits work by being taken back to the nest where they kill the colony including the queen. Spraying a file of ants in your house will not solve the problem as long as the queen goes on reproducing. Terro™ ant bait is commonly used by home owners. It is a sweet, clear syrup that is placed in a drop on a piece of cardboard near the ant trail. Allow the workers to find and feed on it for a day or two. It can take several days to kill the colony. Combat ant gel™ is useful for treating velvety tree ants. It comes in a tube with a tip, and can be squeezed into grooves in the bark of affected trees.

(Note: The products named in this article are among many available in stores, and do not represent an endorsement on the part of the Tehama County Dept. of Agriculture. Also, professional pest control businesses have access to more products than are available over the counter.)

Ants and Aphids

Some ants, most notably, Argentine ants, are often found in association with aphids. They farm the aphids, protecting them and moving them around. They do this because they feed on the honeydew that aphids produce. When dealing with aphids in fruit trees or landscaping, check for ants as well.



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A band of Tanglefoot™ around the trunk of the tree or shrub will deny the ants access to the aphids and the tree.

Ants in Almond Orchards

Pavement ants and Southern fire ants are sometimes pests of almond orchards. They do the most damage to nuts on the ground, and the longer the nuts remain on the ground, the greater the damage. Ant baits with insect growth regulators are effective control options for commercial orchards. Insect growth regulators are substances that disrupt the life cycle of insects. They are specific to insects and have very low toxicity to birds, fish, mammals or humans. Examples of products with insect growth regulators are Esteem™ and Clinch™.

For more information on ants see:

www.ipm.ucdavis.edu and search ants.

A thorough reference on ants in urban settings is “Urban Pest Management of Ants in California” available from the University of California at;

<http://anrcatalog.ucdavis.edu>.

It can also be purchased at the Agricultural Extension office at 1754 Walnut Street, Red Bluff, CA.