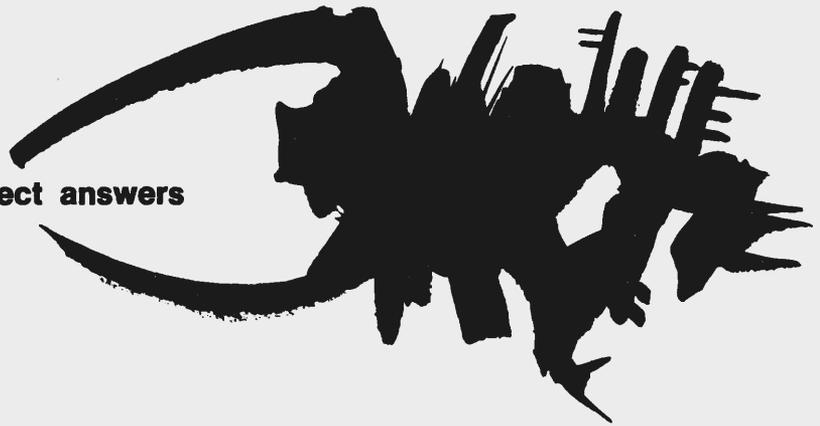


insect answers



MOISTURE ANTS

Ants (Hymenoptera: Formicidae) are an easily recognized group of social insects. The workers are wingless, all possess elbowed antennae, and all have a pedicel (narrow constriction) of one or two segments between the thorax and the abdomen.

Most ant colonies are started by a single, fertilized female or queen. From this single individual, ant colonies can grow to contain anywhere from several hundred to several thousand individuals.

Ants normally have three distinct castes: workers, queens, and males. Males are intermediate in size between queens and workers and can be recognized by ocelli (simple "eyes") on top of the head, wings, protruding genitalia, and large eyes. The sole function of the male is to mate with the queen.

The queen is the largest member of the colony. She has wings but loses them soon after mating. However, scars where the wings were attached still remain. Queens usually also have ocelli, in addition to large eyes, and a large abdomen for egg production.

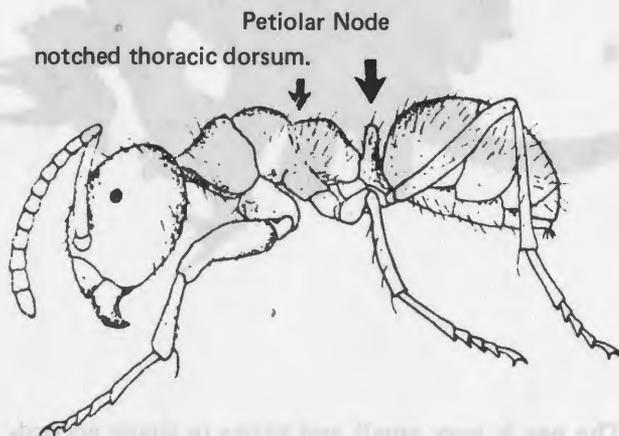
The worker, the smallest member of the colony, lacks ocelli (usually) and is never winged. Workers may be of one size (monomorphic) or may vary considerably in size (polymorphic). Large workers are usually called soldiers or majors, very small workers are minors.

Ants pass through several distinct developmental stages in the colony: egg, larva, pupa, and adult.

The egg is very small and varies in shape according to the species. The larva also varies in size and shape, but is usually white and is always legless. The pupal stage looks like the adult, but is soft, white, and motionless. Many are enclosed in a cocoon of a brownish or whitish, papery material.

Ants produce reproductive forms usually at one time of the year (spring or fall, depending on species and colony disposition). Colony activity at the time of reproductive swarming is high, with winged males and queens and workers in a very active state. The queen and males fly from the colony, mate, and shortly after, the male dies. The fertilized queen then builds a small nest, lays a few eggs, and nurtures the developing larvae that soon hatch. When adult workers appear, they take over the function of caring for the queen, the larvae, building the nest, and bringing in food for the colony. Colonies may persist for 20 years or more.

"Moisture ant" is a collective name that includes a number of ant species in two major genera which are superficially similar in appearance. Both are wood invaders. These are the yellow ants (*Acanthomyops* spp.) and the cornfield ants (*Lasius* spp.). In addition to the brief descriptions below, they can be further distinguished by the appearance of the constricted segment (petiolar node) which joins the thorax and abdomen. The cornfield ants possess a petiolar node which when viewed in profile is narrow and sharp at the top; while the node of the yellow ants is thicker and blunt at the top (see illustrations).

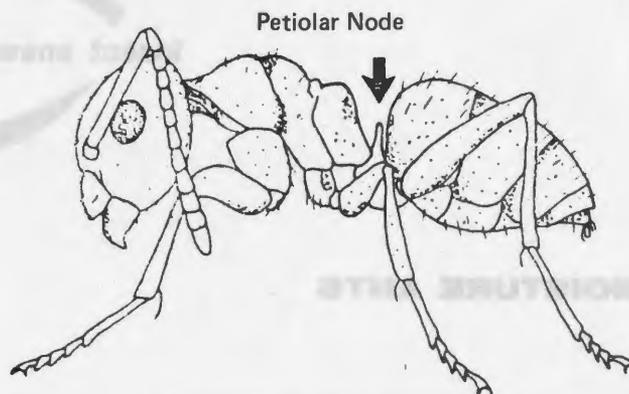


Acanthomyops spp. (Yellow ants)

Yellow Ants (*Acanthomyops* spp.). Most pest species yellow and 3-5 mm long. Monomorphic species with all workers of same size. Maxillary palpi short, three-segmented. Usually found in soil near house or in rotting wood. Will feed on sweet materials and may be an annoyance in the house at times. Will also attend aphids (plant lice) for their sweet excretion (honeydew). Colonies will produce reproductives and swarm in spring or fall. Distributed throughout state of Washington.

Major concern. These ants have been found in wood in houses and sheds, causing concern on the part of the householder. However, their presence in wood (these ants ordinarily nest only in wood in the last stages of decay) can be taken as an indication of a prior problem (the wood was obviously decayed before the ants moved in). Remedial actions should include removing all rotten wood and replacing it with sound material.

Cornfield and Other Ants (*Lasius* spp.) Most pest species yellow; can vary to a rather dark brown. Monomorphic species with workers all of same size. Maxillary palpi long, five-segmented. Colonies usually found in decayed logs and stumps, but some may be found in soil. Also feed on sweet materials, attend aphids for honeydew, and become a general annoyance factor around homes. Reproductive swarming usually late summer to early autumn. Widely distributed

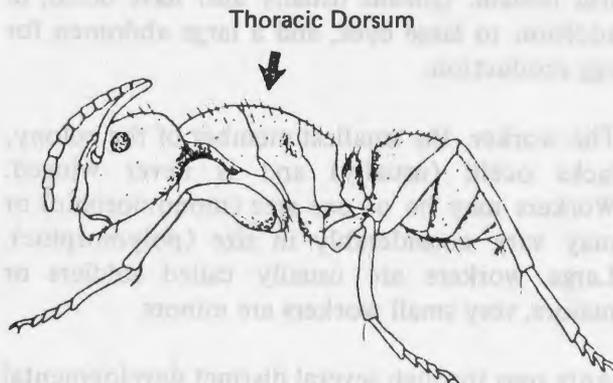


Lasius spp. (Cornfield and other ants)

genus, containing several species of pest status. Occur throughout state of Washington.

Major concern. These ants have frequently been found associated with rotting wood in houses. While several species may bring moisture into the wood structure to increase damage, the colony was initially started in wood in an advanced stage of decay. They should not be considered a structural pest, as the problem invariably existed before the colony was established. The obvious remedy is to remove the decayed wood and to replace it with sound material.

These ants are continually confused with carpenter ants. A sure way to distinguish them from carpenter ants is to view them from the side and determine if the thoracic dorsum is evenly convex (smoothly rounded). All carpenter ants have this rounded thoracic dorsum. Moisture ants have a notch or dip on the thoracic dorsum (see illustrations).



Camponotus spp. (Carpenter ants)

Control

These ants are not a primary structural pest, but they can speed the deterioration of wood. They also become a nuisance as they enter homes in search of food. Determine where the ants are coming from if possible. These ants require moisture to survive. They may be nesting in damp soil outside or under the house, beneath sidewalks, along foundations or under debris and rocks in the yard. Or the ants may be living in damp, decaying wood. If the ants are nesting in wood, they may throw out sawdust as they enlarge their nests. It is not known if these ants nest between insulation and wood or between walls.

Cultural Control

Make periodic checks for wet, decaying wood, or wet soil under the house. Correct problems which are creating a damp place for the ants to live (leaking gutters, plumbing, improperly caulked windows, etc.). Replace any badly damaged wood.

Chemical Control

When ants are nesting in decaying wood, chemical control measures act as a temporary solution

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Assistance from Washington State University is available to all persons, without regard to race, color, or national origin. Trade names have been used to simplify the presentation of information. No endorsement of products is intended.

by killing the ants. This will slow down the deterioration of wood, but does not correct the primary problem.

Ants nesting in the soil under or around the house and in the yard can also be controlled with insecticides if they have become a serious annoyance.

Chlordane,* diazinon, malathion or Baygon may be used for control. (Chlordane is the most effective of these materials). See label for instructions for use of these materials.

If the nest cannot be found or if it is located in an inaccessible place (such as between walls, or narrow crawl space), you may wish to consult a professional structural pest control operator.

*EPA has announced suspension of products containing chlordane for most agricultural and home uses. However, stocks produced prior to July 29, 1975, can be sold and used in accordance with label directions. It is EPA's opinion that this is the safest and most environmentally acceptable means of disposing of this chemical.



Use pesticides with care. Read the label and follow its directions. Never smoke while using pesticides and avoid breathing the spray or dust. Wear natural rubber gloves when handling pesticides. Wash hands and face carefully with soap and water after applying. If insecticides are spilled on skin or clothing, remove contaminated clothing and wash skin thoroughly. Store pesticides in their original containers and be sure labels remain on the containers. Keep containers away from food or feed and out of reach of children or irresponsible persons.

