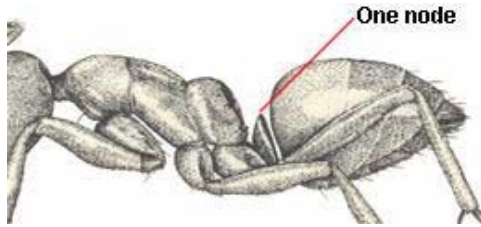
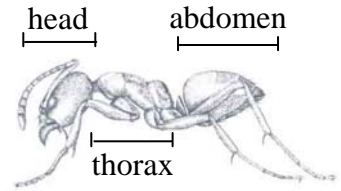




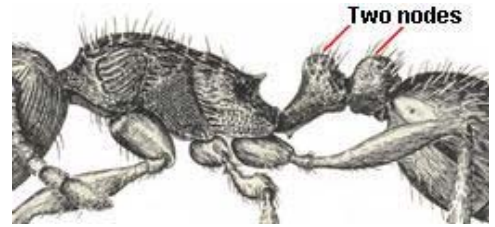
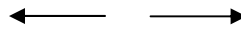
Guide to Vineyard Ant Identification

Monica L. Cooper, Viticulture Farm Advisor, Napa County

Lucia G. Varela, North Coast IPM Advisor

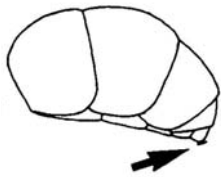


I. Petiole node

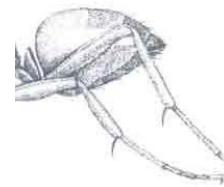
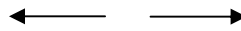


One Node
Go to II

Two nodes
Subfamily Myrmicinae
Go to V

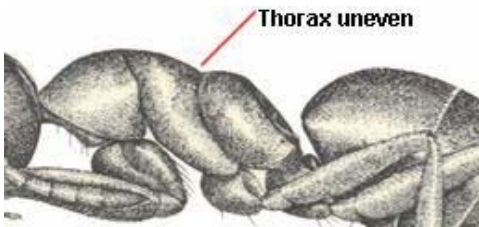


II. Tip of abdomen

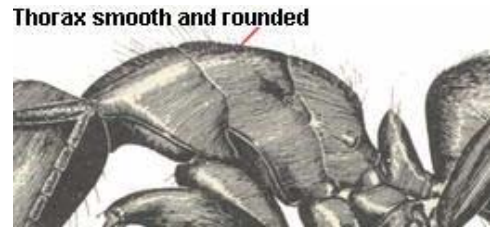


Circle of small hairs present
Subfamily Formicinae
Go to III

Circle of small hairs absent
Subfamily Dolichoderinae
Argentine Ant (*Linepithema humile*)

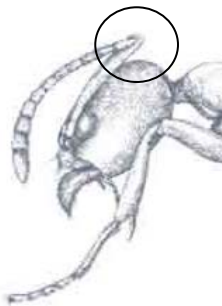


III. Shape of thorax

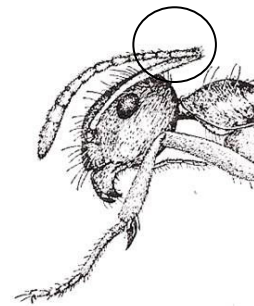
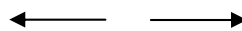


Thorax uneven
Go to IV

Thorax smooth and rounded
Subfamily Formicinae
Carpenter ant (*Camponotus* spp.)

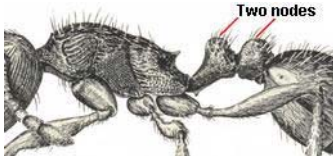


IV. Length of antennae

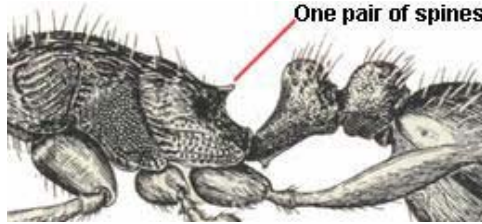
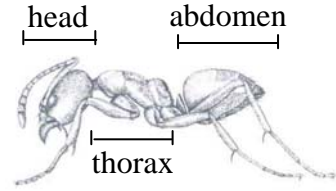


Antennae not much longer than length of head
Subfamily Formicinae
Field or Gray Ant (*Formica* spp.)

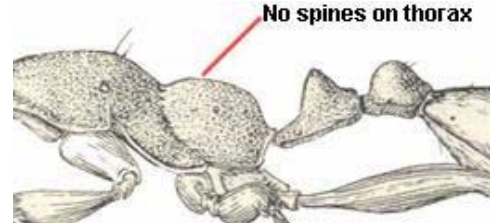
Antennae much longer than length of head
Subfamily Formicinae
False honey ant (*Prenolepis imparis*)



Petiole with two nodes
Subfamily Myrmicinae
(V-VIII)



V. Dorsal side
of Thorax
&
Antennae



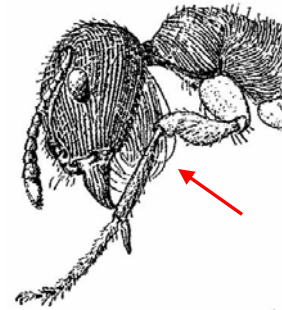
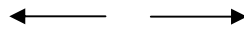
One pair of spines on thorax
12 segmented antennae
Go to VI

No spines on thorax
10 segmented antennae
Solenopsis molesta and *Solenopsis xyloni*



No brush of bristles
Go to VII

VI. Underside of head



Brush of long bristles
Harvester ants
(*Pogonomyrmex californicus* and *P. brevispinosis*)

VII. Head and Thorax

With hairs
Go to VIII

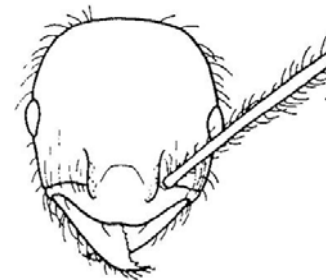


Without hairs
Cardiocondyla mauritanica



With many parallel furrows
Profile of thorax rounded
Pavement ant (*Tetramorium* "species E")

VIII. Head and Thorax



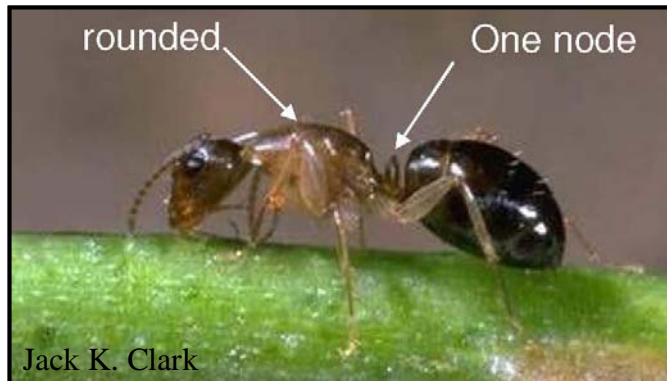
Without parallel furrows
Profile of thorax not evenly rounded
Pheidole californica

Argentine Ant (*Linepithema humile*), subfamily Dolichoderinae



- Exotic species
- 3-4 mm in length
- Deep brown to light black
- Move rapidly in distinct trails
- Feed on honeydew
- Shallow nests (2 inches from soil surface)
- Does not bite or sting

Carpenter Ant (*Camponotus* spp.), subfamily Formicinae



- Large ant: >6 mm in length
- Dark color with smooth, rounded thorax
- Workers most active at dusk and night
- One of most abundant and widespread genera worldwide
- Generalist scavengers and predators: feed on dead and living insects, nectar, fruit juices and honeydew
- Typically nest in live or dead wood, or landscaping material
- Can't sting, but inflict painful bite and spray formic acid, causing a burning sensation

Field or Gray Ant (*Formica aerata*), subfamily Formicinae



- Large ant: 4.0-7.5 mm in length
- Shiny abdomen
- Move in jerky motion; do not trail
- Generalist foraging habits: feed on honeydew and insects
- Nests difficult to locate; often seen only as holes ringed with scattered soil

False honey ant (*Prenolepis imparis*), subfamily Formicinae



4.0 mm in length

Long first antennal segment

Hourglass-shaped thorax

Nests located deep in soil

Forage in cool weather (below 68°F), and estivate during hottest months

Common in mesic habitats (those with a well-balanced supply of water) at low and medium elevations throughout California

Thief Ant (*Solenopsis molesta*), subfamily Myrmicinae



Very small: 1.0-1.5 mm in length

Golden color

Commonly found nesting in or near other ant species' nests

Feed on honeydew, and larvae of other ant species

Ten-segmented antennae of which tip forms a two-segmented club

Southern Fire Ant (*Solenopsis xyloni*), subfamily Myrmicinae



Polymorphic (many-sized) workers: 2.5-4.5 mm in length

Shiny red head and thorax; black abdomen

Does not trail; may swarm when disturbed

Aggressive workers with painful sting

Generalized foraging habits: feed on seeds, insects and honeydew

Native to southern and western North America

California Harvester Ant (*Pogonomyrmex californicus*), subfamily Myrmicinae



5.5-6.0 mm in length; Red color

Workers are diurnal, and have potent sting

Does not trail

Feed mainly on seeds, also dead insects

Seed casing, detritus, and loose soil found around nest hole

Psammophore (basket of long hairs on underside of head) for carrying sand grains

Cardiocondyla mauritanica, subfamily Myrmicinae



Exotic species

Very small: 2 mm in length

Spine on thorax; No hairs on head or thorax

Occur mainly in disturbed (and most often urban) habitats in California

Able to survive in sites invaded by the Argentine ant

Pavement Ant (*Tetramorium* “species E”—formerly known as *Tetramorium caespitum*),
subfamily *Myrmicinae*



Exotic species

Small: 2-3 mm in length

Dull, blackish brown

Native to Europe

Generalist foraging habits: feed on insects, honeydew, nuts and fruit

Build mounds near water

Found in urban and agricultural areas of central and northern California

Able to survive in sites occupied by the Argentine ant

Pheidole californica, subfamily *Myrmicinae*



Polymorphic (many-sized) workers: 2-4 mm in length

Major workers with disproportionately large heads

Large, diverse genus (more than 600 recognized species)

P. californica belongs to the *P. pilifera* group (seed-harvesting specialists)

Commonly found in open, dry habitats