Guide to Vineyard Ant Identification
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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)

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

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

V. Dorsal side of Thorax & Antennae

VI. Underside of head

No brush of bristles
Go to VII

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

VII. Head and Thorax

With hairs
Go to VIII

Without hairs
Cardiocondyla mauritania

VIII. Head and Thorax

With many parallel furrows
Profile of thorax rounded
Pavement ant (Tetramorium “species E”)

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