

Evolution of Ghost Ants and Mud Daubers

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Goal

Aim: Comparing evolutionary facts and making historic connections between Ghost Ants and Mud Daubers.

Abstract

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This group is comparing ghost ants and mud daubers. Ants, bees, and wasps all are all connected by being in the same Order, Hymenoptera. Hymenoptera deriving from the Greek word “Hymen” meaning membrane, and the Greek word “ptera” meaning wings. Hymenoptera also deriving from the Greek word “Hymeno”, meaning the Greek god of marriage. This speaking about the way the wings are joined together as one. These two insects, bees and waps, are closely related, this project will show how closely they are related. Bees will also be mentioned.

Mud Daubers

- Solitary wasps
- One inch in length
- Makes nest out of mud/ or from the sides of buildings.
- Non-aggressive wasp, stings repeatedly when necessary
- Eats other insects, mainly spiders



Mud Dauber Fact:

Mud Dauber's build their nests in sheltered areas, or anywhere their desired prey lives, that being spiders. As a result, one can find Mud Dauber's living almost anywhere, but do to their non-aggressive nature, (they don't contain venom) they are nothing to fear by humans or mammals.



Ghost Ants

- Dark head/thorax; pale abdomen/legs
- Less than 1/16 inch long
- Known as ghost ants because when they are over light, their abdomen and legs disappear
- Also known as “sugar ants” due to their cravings for sweet foods
- Reside mainly in Central and Southern South Florida



Ghost Ants Fact:

Due to their craving for sweet foods, and their clear abdomens, one can see the color of the food they eat

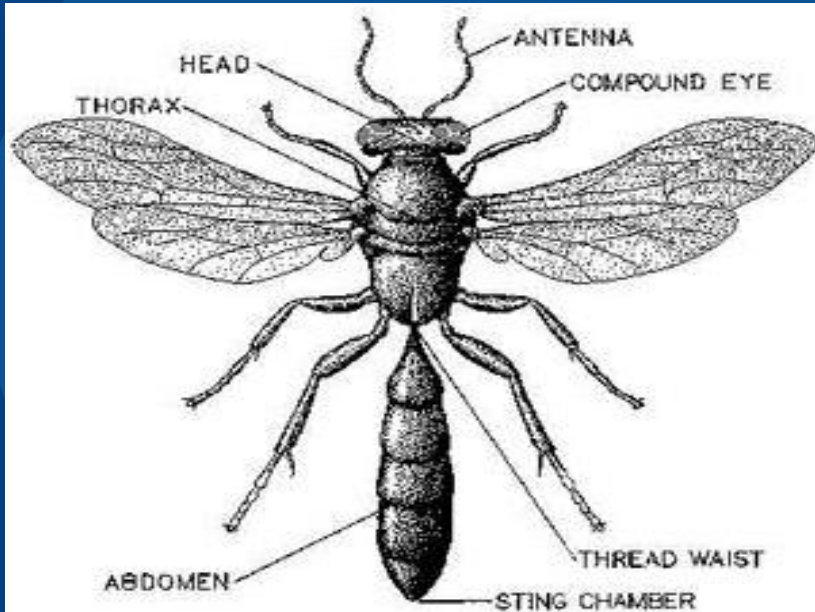


Taxonomies

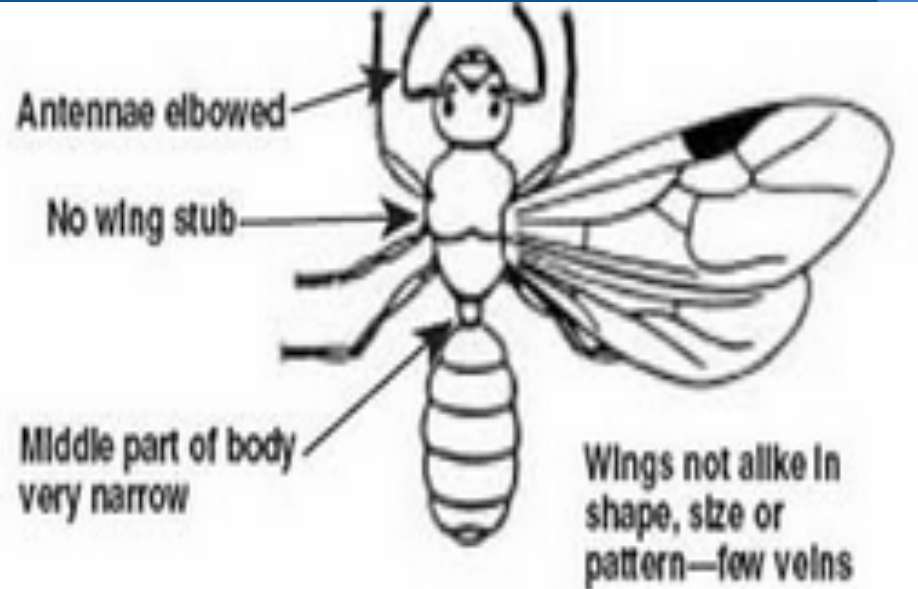
	Mud Dauber	Ghost Ant
Kingdom	Animalia	Animalia
Phylum	Arthropoda	Arthropoda
Class	Insecta	Insecta
Family	Sphecidae or Crabronidae	Formicidae
Order	Hymenoptera	Hymenoptera
Genus	Sceliphron Caementarium	Tapinoma
Species	Caementarium	Melanocephalum

Fossil evidence

Bees are related to Ants, although Ghost ants and Wasps have more similar features .

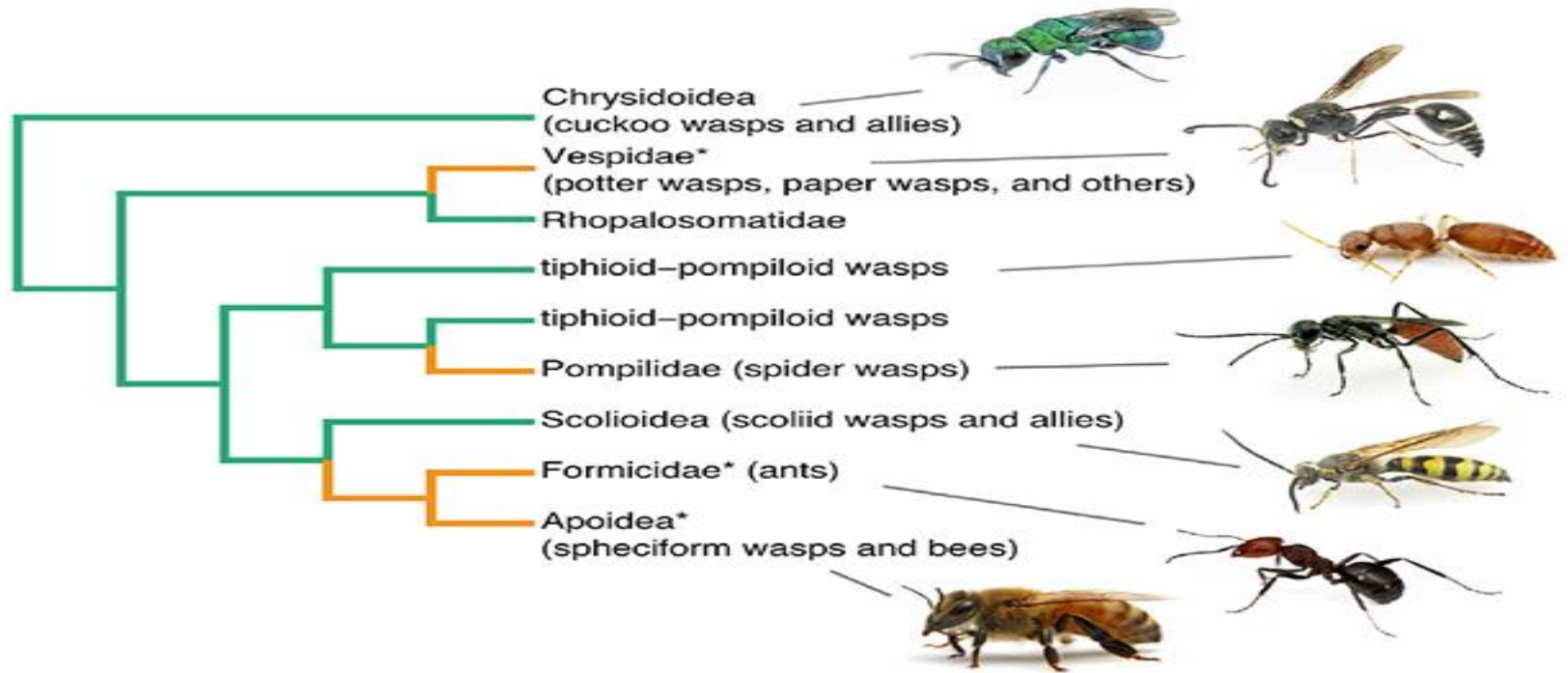


*The organ pip mud dauber, *Tyragilum politum*.*
Illustration by Bernice B. DeMarco.

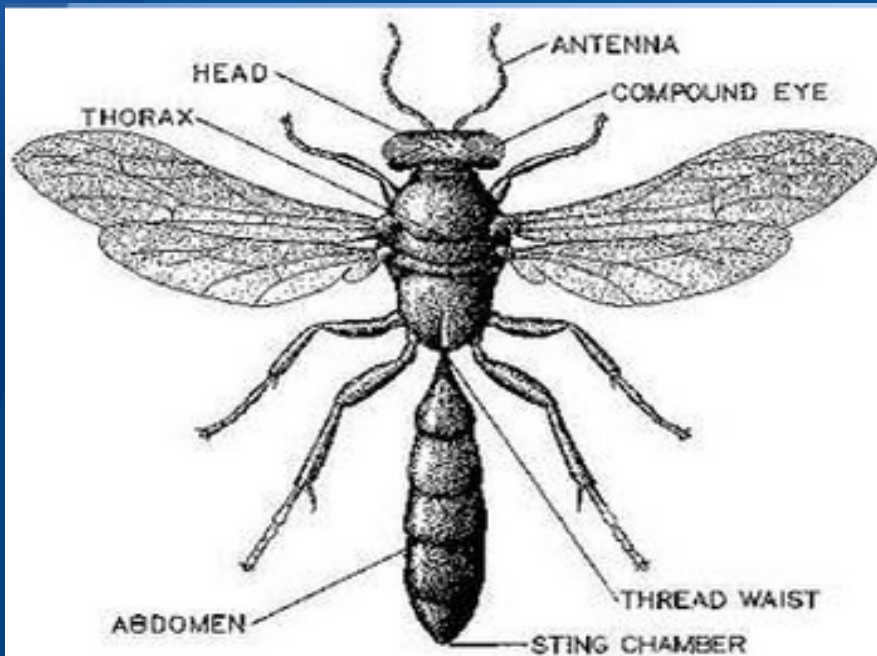


Ant

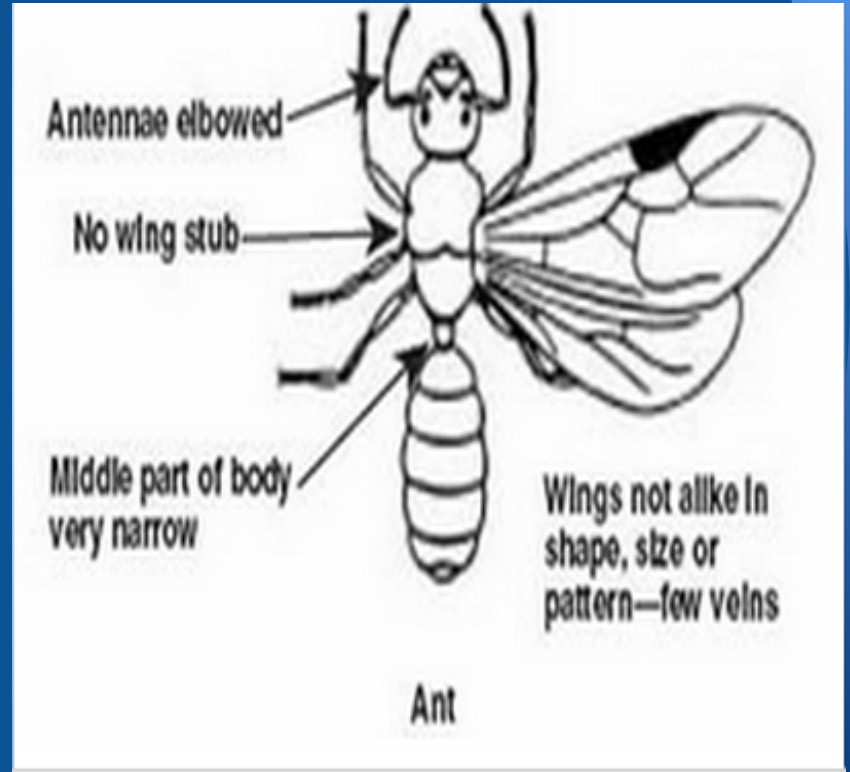
Phylogeny: Cladogram



Homologies



*The organ pip mud dauber, Typragilum politum.
Illustration by Bernice B. DeMarco.*



Biogeography

Mud Daubers:

Can be found throughout the United States in various areas due to their range of homes they can make varying to their choice of prey

Ghost Ants:

Can be found in the Central and Southern areas of South Florida, making their homes in people's homes, in cabinets, holes in the walls, and gardens

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Key terms

1. Exploit - To make full use of something and derive benefit from a source
2. Polydnviruses - Virus that Mud Daubers or wasps give to their prey
3. Halt - Suspension of movement or progress
4. Oddity - A strange or peculiar person, place, or thing
5. Innards - Entrails of living beings
6. Nudivirus - A virus used
7. diverged - Separate from one direction and go another direction
8. indicating - To point out or show
9. hymenoptera - One of the largest orders of insects including ants, bees, wasps, and sawflies.
10. encapsidated - Enclose a virus or gene particle in a gene shell

Conclusion:

Through this presentation we have learned and focused more on the relation of the Mud Daubers and The Ghost Ant. For we have concluded that bees are a closer relative to ants. Ants are the most social insect, as bees are too. Yet many wasps, specifically Mud Daubers, are almost, if not 100% solitary and survive completely on their own. Ants and Mud Daubers would seem to very linked, but they are in fact not.

Could ants and wasps possibly be predator and prey, or become so as the earth continues to age and evolution progresses?