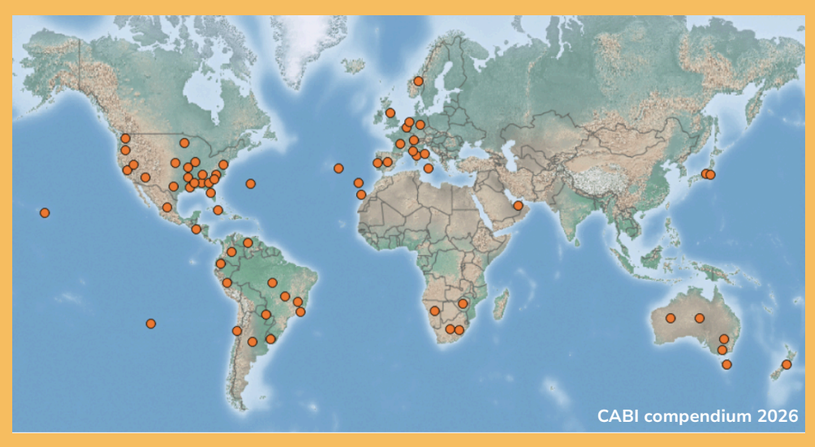
BE AWARE!

Argentine ant - *Linepithema humile*

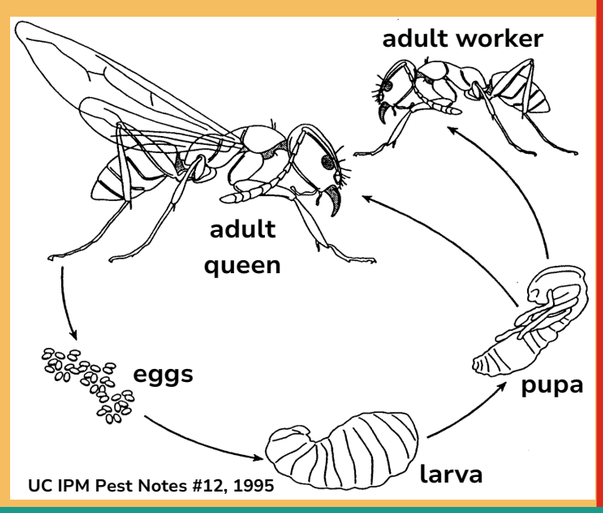
THE ORGANISM

The Argentine ant is a major pest in agricultural and urban environments. Native to South America, it is now established on all continents, except Antarctica.



Argentine ant colonies have two main castes that develop from fertilised eggs: reproductive females (queens) and sterile females (workers). Reproductive males (drones) stem from unfertilised eggs.

They undergo complete metamorphosis; larvae emerge after ~28 days and adults after ~74 days. Nests contain eggs, larvae, pupae, workers, and queens year-round, with males present only in May–June.



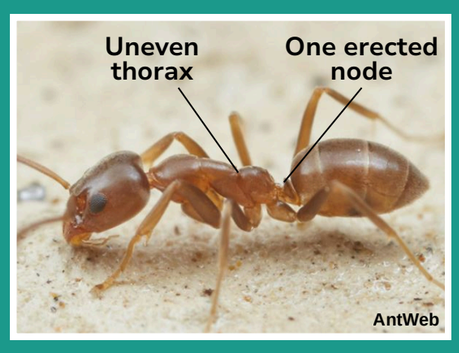
HOW TO RECOGNISE IT ?

1. APPEARANCE

- Workers are hairless, uniformly small (~2.2–2.6mm), light-to-dark brown, with an uneven thorax, and a single node at the waist.
- Males are winged and larger (~3mm).
- Queens are even larger (~5mm).
- When crushed, these ants release a musty odour.

2. BEHAVIOUR

Nests are in moist areas under wood, stones, leaves, and potted plants.



3. SYMPTOMS ON PLANTS

Plants are rarely directly damaged, but their mutualistic relationships with honeydew-producing insects lead to:

- unchecked growth of populations of sap-sucking insects (aphids, mealybugs, scale insects) on plants
- increased honeydew deposits on leaves, promoting the growth of sooty mould on their surface

Like other ants, they form continuous wide trails along stems, trunks, and the ground.

THE PROBLEM

Argentine ants do not bite or sting humans.

Invasive impact: Listed among the 100 of the World's Worst Invasive Alien Species by the Invasive Species Specialist Group (ISSG), they thrive in urban, agricultural, and natural areas. These ants can form "supercolonies" linking hundreds of nests and millions of workers, enabling them to outcompete and displace native ant species and disrupting ecological processes such as seed dispersal and pollination. These effects can significantly damage the ecology and economy of natural and agricultural ecosystems.

Threat to plant health: They indirectly harm plants by protecting honeydew-producing insects from predators and parasitoids in exchange for honeydew secreted by these insects. This allows the populations of these insects to grow, placing greater stress on plants. Honeydew deposits on leaves can promote black sooty mould colonisation that reduces photosynthesis by blocking access to sunlight.

WHAT TO DO?

PREVENTION

1. **Quarantine:** Thoroughly check plants, soil, and plant products before introduction into collections.
2. **Awareness:** Inform visitors about the pest and management efforts to maintain support for control measures.

DETECTION & MANAGEMENT

1. **Control:** Limit ant populations by removing access to food, water, and nesting sites. Adjust irrigation to reduce standing water. Control honeydew-producing insect populations. Use sticky traps or physical barriers around plant bases to restrict ant movement.
2. **Disposal:** Where infested plant material is removed, it should be disposed of appropriately to prevent spread.
3. **Training:** Staff should be able to identify Argentine ants and their associated honeydew-producing pests.
4. **Reporting:** Any confirmed or suspected ant activity, or associated pest infestations, should be recorded and reported to the relevant supervisor or biosecurity officer.

For more information:

- Angulo et al. (2024). The Argentine ant, Linepithema humile: natural history, ecology and impact of a successful invader. Entomologia Generalis. 44. 10.1127/entomologia/2023/2187.
- https://ask.ifas.ufl.edu/publication/IN1336
- https://apps.lucidcentral.org/pppw_v10/text/web_full/entities/argentine_ant_365.htm

IPSN
International Plant Sentinel Network