

Big-headed ant (361)

Summary

- Worldwide distribution. Common in Pacific island countries. Among world's 100 worst invasive species.
- Nests under logs, stones, tree bark, leaf litter, and occasionally in houses. Prefers disturbed areas. Eat seeds, other insects, small lizards and birds, and honeydew. A scavenger. Once colonises established, biodiversity declines.
- Direct damage to agriculture seeds and plant parts; indirectly by defending aphids, mealybugs, scales and whiteflies from natural enemies.
- Queens mate inside colony. Workers are 'major' (big-headed soldiers) or 'minor' (much smaller workers) that rear the brood.
- Tramp ant; spread by 'budding' - queens, workers and brood move to new sites. Spread with international trade.
- Biosecurity: requires risk assessments, regulations preventing introduction, protocols in case of breaches, and ability to make rapid response. Pacific Ant Prevention Plan available (IUCN/SSC Invasive Specialist Group).
- Cultural control: hot water at 47°C kills ants; over 49°C kills plants.
- Chemical control: use (i) stomach poisons (fipronil, Amdro[®], borax), (ii) growth regulators (methoprene, pyriproxyfen), (iii) nerve poisons (bifenthrin, fipronil, imidacloprid). See (<http://piat.org.nz/getting-rid-of-ants>).

Common Name

Big-headed ant, African big-headed ant, coastal brown ant.

Scientific Name

Pheidole megacephala

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Information from CAB International (2018) *Pheidole megacephala* (big-headed ant). Crop Protection Compendium. (<https://www.cabi.org/cpc/datasheet/40133>); and Pacific Invasive Ant Toolkit. (<http://piat.org.nz/ant/>); and *Pheidole megacephala*. AntWiki. (http://www.antwiki.org/wiki/Pheidole_megacephala); and AntWeb. (<https://www.antweb.org/description.do?rank=species&genus=phaidole&name=megacephala>); and from *Pheidole megacephala* (2018) Global Invasive Species Database. (http://www.iucn-gis.org/gisid/speciesname/Pheidole_megacephala). Photos 1-3 Simon Hinkley & Ken Walker (2006) Coastal brown-ant (*Pheidole megacephala*). Museum of Victoria. PaDIL - (<http://www.padil.gov.au>).

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Photo 1. Side view of 'major' worker, big-headed ant, *Pheidole megacephala*.



Photo 2. Front view, head of 'major' worker, big-headed ant, *Pheidole megacephala*.



Photo 3. Front view, head of 'minor' worker, big-headed ant, *Pheidole megacephala*.

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