

in the more eastern Pacific islands. That single exception, *Polyrhachis rotumana* Wilson & Taylor, is known from the island of Rotuma which belongs politically to Fiji but is quite isolated from the Fijian archipelago and shares more geological and biological affinity with the islands of Polynesia.

*Pachycondyla* (9 native spp.), *Crematogaster* (7 native spp.) and *Gnamptogenys* (6 native spp.) are also among the most diverse ant genera in the Solomon Islands, but are either absent from or poorly represented in more easterly archipelagos. Fiji, for example, supports a single native *Gnamptogenys* species (*Gnamptogenys aterrima* Mann), and does not support any native *Pachycondyla* or *Crematogaster* species (Sarnat and Economo 2012). The Solomons are the known eastern limit for many ant genera. Out of the 51 genera native to the Solomons, the following 19 are not known to occur in the Pacific in or east of the Fijian archipelago: *Anonychomyrma*, *Arnoldius*, *Cardiocondyla*, *Colobostruma*, *Crematogaster*, *Cryptopone*, *Myopias*, *Myopopone*, *Myrmecina*, *Oecophylla*, *Opisthopsis*, *Pachycondyla*, *Podomyrma*, *Polyrhachis*, *Probolomyrmex*, *Rhytidoponera*, *Stereomyrmex*, *Tetraponera*, *Turneria*.

While additional sampling may prove otherwise, the current analysis of the Solomons ant fauna does not appear to support the type of *in situ* single-lineage radiations that characterize much of the Fijian ant fauna to the east. Parallels to the dramatic radiations of the *Pheidole roosevelti* group (Economo and Sarnat 2012; Sarnat 2008), *Lordomyrma* (Lucky and Sarnat 2008; Sarnat 2006), and the *Camponotus dentatus* group (Sarnat and Economo 2012) are largely unknown from the Solomons. It is likely that the Solomons ant fauna is derived more from relatively frequent colonization events from nearby New Guinea than from sweepstakes colonists that diversified into largely unoccupied ecological niches as occurred in the more isolated Fijian archipelago. Unlike New Guinea and Fiji, the Solomons do not support any endemic ant genera.

The importance of establishing baseline faunal inventories for the entire Solomon Island archipelago and its constituent islands is especially important when considering the growing environmental impacts resource extraction, plantation agriculture and invasive species are having on native biodiversity. Perhaps the greatest threat to native ant species in the Solomons is the spread of the Little Fire Ant (Fasi 2009). The introduction of *W. auropunctata* into the Solomon Islands is believed to have occurred around 1974, possibly with the arrival of coconut nurseries (Fabres and Brown 1978; Ikin 1984; Wetterer 1997). Foucaud et al. (2010) determined that a single clonal queen genotype is shared between the Melanesian populations of *W. auropunctata* from the Solomons, Vanuatu, Papua New Guinea and Australia, and suggested that the population spread by means of traditional exchange of plants and goods among Melanesian people. Although there have been reports of the ant's effect on vertebrates in the Solomons, such as blinding dogs and attacking hatchlings of the ground-nesting Melanesian Scrubfowl (*Megapodius eremita* Hartlaub) (Wetterer 1997), and also its effect on food crops and subsistence agriculture (Fasi 2009), there have yet to be any studies examining the effect of *W. auropunctata* on native ant diversity in the Solomons. The potential for spread of *W. auropunctata* across the entire archipelago is high (Fasi 2009), and it is likely a matter of years before all the major islands are infested.