frontal view, broad with short petiolar spine, posteriorly flat with transverse striation. Gaster rounded to oval; anterior part of first tergite evenly convex in lateral aspect, without impression; first tergite smooth, second with some reticulation, at least anteriorly.

Pilosity: Fine white semi-appressed pubescence on entire body, very dense on appendages including petiole, on mesosoma, head and gaster distance between hairs approximately their length. Few standing setae on pronotum, several standing hairs on gaster increasing in length towards apex of abdomen. Some isolated hairs on head venter and one pair of standing setae on head dorsum.

Colour: Body, including all appendages, dark brown (almost black in some specimens).

Description of gyne: Measurements: gyne with smallest HW: CI 87, HL 2.27, HW 1.97, MdI 57, MdL 1.30, MsL 2.93, PnW 1.60, PtH 1.00, PtL 0.78, PtW 0.49, SI 107, SL 2.10, TL 9.88; gyne with largest HW: CI 85, HL 2.47, HW 2.10, MdI 54, MdL 1.33, MsL 3.13, PnW 1.65, PtH 1.02, PtL 0.88, PtW 0.61, SI 104, SL 2.18, TL 10.31.

Structures: Differs only in the following characters: pronotum with transverse striation, mesonotum with longitudinal striation, scutellum shiny, sexual female morph-specific characters (wing insertions, mesosoma and gaster bigger).

Notes: *Odontomachus simillimus* can be easily recognised even in the field by small size, dark colour, proportionally large head and short scape. In the Philippines, there is no other species with a short, truncate subapical tooth of the mandible (Fig. 43), and none with fine reticulation on visible part of gaster tergite 2 (but note that the anterior part of tergite 2 which is usually covered by tergite 1 is also reticulate in other species).

Odontomachus simillimus is surprisingly uniform over its large distribution area. It is distinguished from the second Old World species, *O. troglodytes* from Africa, Madagascar, and the Seychelles, by its smooth gaster tergite 1.

Distribution (Philippines: Fig. 47): Widely distributed from India to Polynesia (WILSON 1959, BROWN 1976), "undoubtedly many of the island records represent accidental introductions by man" (BROWN 1976: 87). No distribution limit in the Philippines; records from 21 islands (19 in this study).

Habitats: *Odontomachus simillimus* is a common species which also can be found in open or moderately to strongly disturbed habitats, like coastal areas, coconut groves, villages, and even lawns on university campuses. It usually does not enter dense forests, but can be occasionally found on banks of stream running through forests. According to collections by Chapman in eastern Negros, the species can be found from sea level up to an elevation of 900 m (WHEELER & CHAPMAN 1925).

Discussion

Although *Odontomachus* are very conspicuous ants, little attention has been paid to their taxonomy since BROWN's (1976) revision. As we have mentioned previously, the Philippines harbour two sets of *Odontomachus* species, one of which is generally widespread in distribution and the other of which, the one we discuss here in more detail, includes more range-restricted species. Regarding the latter set, what might be called the Philippine *O. infandus* group species, BROWN's (1976) concept of a widely distributed, highly variable species, *O. infandus*, turned out to be wrong; perhaps simply because it was blurred by incorrect label data. New and correctly labelled samples show a pattern of distinct, sympatric and allopatric species, each with a comparatively stable character set and endemic on one or a few islands. Sympatry is observed only on the island of Luzon (four species), allopatry on several other islands. In other words, there appears to be a radiation of native *Odontomachus* species both among and within islands. Ranges of the more widely distributed species agree relatively well with patterns found in other terrestrial or limnic organisms and are largely effected by the areas covered by the large Pleistocene islands (e.g., ONG & al. 2002 and references cited therein).

The present study includes two unnamed species. Species 1 from southern Luzon is somewhat problematic as it shows affinities to the sympatric species, *O. infandus* and *O. banksi* (in one instance even sharing the same habitat with the latter), and similarities with the allopatric *O. alius*. Species 2, although only based on one individual, must be regarded as an undescribed species, but it seems advisable to see more specimens before naming it.

A key next step is to study the molecular phylogenetic relationships of species and isolated populations of the Philippine *O. infandus*-group species. The archipelago is among the earth's most important biodiversity hot-spots (MITTERMEIER & al. 2005, CATIBOG-SINHA & HEANEY 2006) and a "laboratory of evolution", many thousand times more diverse than the famous Galapagos Islands. *Odontomachus* species, with their conspicuous and consequential feeding morphology have the potential to serve as living laboratory for understanding evolution of this diverse region, not quite Darwin's finches, but perhaps Brown's trap-jaws.

There is a lack of taxonomic knowledge of the sexuals of most *Odontomachus* species. Males are presently not identifiable at all. Excavations of complete nests (e.g., see TSCHINKEL 2011) would help, also for learning about size and development of *Odontomachus* colonies. Focused studies of these species in general would be rewarding. It is perhaps worth noting in this regard that the collections by the second author and co-fellows are by-products of his project on aquatic Hemiptera (GAPUD & ZETTEL 1999) rather than focussed ant research.

Another area for promising research might be to consider the biology of the enigmatic species, *O. malignus*. There are only a few anecdotal notes on its life (WILSON 1959, BROWN 1976, OLSEN 2009), but it is well known that ants in intertidal zones can display fascinating adaptations to their unfavourable habitats (NIELSEN 2011).

Finally, we would be remiss if we did not mention the conservation implications of our findings. Ants do have a potential importance for conservation biology (e.g., KAUTZ & MOREAU 2011 and references therein), particularly in tropical countries. Sadly, destruction of forests in the Philippines is still ongoing, despite the present low level of natural forest cover (ONG & al. 2002, CATIBOG-SINHA & HEANEY 2006). Our results suggest that based on morphology, ants of the Philippines may include more endemic species than currently recognized. The number seems likely to increase further with molecular work. Forest-inhabiting, endemic ants are strongly affected and threatened by extinction and range-restricted taxa are more threatened than those that are widespread. This danger is perhaps most