The species commonly referred to the Old World genus *Haroldius* Boucomont, 1914 and their direct relatives are miniature, generally smooth, globular or oval scarabs, varying in length between about 1.5 and 4.5 mm. Earlier authors positioned *Haroldius* in the tribe Alloscelini (first proposed as Alloscelides by Janssens 1946, suffix changed in 1949b; Balthasar 1963), but since the transfer of the type-genus *Alloscelus* Boucomont, an African associate of driver ants, to the Onthophagini, and the consequent complete dissolution of the tribe, a position in the Canthonini seems more appropriate (Paulian 1985, Branco 1997). This tribal position may be correct, but no explicit justification has been given so far, and the Canthonini as currently conceived may not be monophyletic; it seems that *Haroldius* remained absent from recent Scarabaeinae phylogeny discussions (for instance, Philips et al. 2004).

Although over 30 species have now been placed in *Haroldius*, little of substance is known about their biology and ecology; larvae are unknown. In Asia, adult *Haroldius* appear to be soil-surface, litter-inhabiting beetles, flying in forest environments. They may be saprophagous or mycophagous (Scheuern 1995), and some have long been found in association with ants, possibly also with termites (see remarks in Paulian 1985, and notice that termite mounds usually also harbour ant nests); some individuals we saw appear to be nibbled at (by ants?). Whatever their precise ecological relationship, the smooth, loricate structure of *Haroldius*, including the characteristically broadened and flattened tibiae, suggests that the association of these beetles with social insects is not accidental. Specimens of *Haroldius* remain rare – or poorly sampled: the total number in collections may still not exceed one hundred. From around 1980 most individuals seem to have been collected by litter sifting, or in flight interception traps (so are, by the way, the analogous, also non-coprophilous ‘smoothies’ usually placed in the Onthophagini, such as the Southeast Asian *Cyobius* Sharp and *Anoctus* Sharp; cf. Krikken 1971, Krikken & Huijbregts unpublished, and below, in the list of taxa, under *Larhodius* Balthasar, 1963).

Most of the *Haroldius* used in this study come from the Southeast Asian islands of Borneo and Sulawesi, the latter island being a significant range extension, particularly as five species can be distinguished, all new to science. The majority of the *Haroldius* species inhabit the Oriental Region; already more than 50 years ago three species were described from Central Africa, in *Afroharoldius* Janssens (1949a, 1953) – nothing has been reported since.
We provisionally accept the inclusion of *Afroharoldius* and *Ponerotrogus* Silvestri 1924 in *Haroldius*, as well as the upgrading of *Larhodius* Balthasar (1963, then a subgenus in *Haroldius*) to full genus in the Onthophagini, actions which were all proposed by Paulian (1985). This acceptance is conditional on a further revision of all these non-coprophilous scarab ‘smoothies’. *Larhodius* now includes three species (Masumoto & Utsunomiya 2003), which are, as indicated in the title of the publication cited, placed in the ‘Dichotomini’ [recte Dichotomiini]. A third Asian genus to be considered in a revision is the monospecific *Phaedotrogus* Paulian (1985) of Sri Lanka. A distinct myrmecophile and equally monospecific genus of South Africa also to be taken into account is *Formicdubius* Philips & Scholtz (2000), which we – looking only at the habitus picture – would immediately have placed in or near *Haroldius*. As befits a true myrmecophile, *Formicdubius* has what appear to be trichomes, on the back side of its prothorax.

The current classification of *Haroldius* and its (quasi-)relatives (see list of taxa below) is compounded by the fact that some authors have not picked up Paulian’s (1985) revisionary comments on the application of the available genus-group names and seem to be otherwise incorrectly or insufficiently informed. For instance, Masumoto & Utsunomiya (2003) state that they are the first to upgrade *Larhodius* to genus rank. This is not so: Paulian (1985) already did this, with a simultaneous transfer to the Onthophagini (notice also that the two Southeast Asian *Larhodius*, as pictured by the Japanese authors, strongly look like small *Cyobius*, an unquestionably onthophagine genus). Our acceptance of Paulian’s views also implies that *Ponerotrogus krali* Utsunomiya & Masumoto (2000) should be recombined with *Haroldius*. *Formicdubius* is certainly not distinct from all Scarabaeinae genera because of its convex and oval body shape, as claimed by its authors (Philips & Scholtz 2000): all *Haroldius*, including the ‘Afroharoldius’ and the apparently onthophagine *Larhodius* species mentioned, are more or less shaped in this way. A detailed comparison of *Formicdubius* with actual material of other ‘smoothies’ is definitely in order.

As for the approximate evolutionary position of *Haroldius* and its (genuine) relatives in the overall scarabaeoid system, three circumstances seem to imply an ancient, but post-Gondwanan, possibly Tertiary lineage: (a) *Haroldius* has an essentially austral distribution, but there appear to be no direct relatives in the faunas of ex-Gondwana components like Madagascar, South America or Australia (Paulian and certain other workers would certainly have recognized them); (b) ants and termites, with which at least some of our ‘smoothies’ seem to have an intimate relationship, have evolved in, and greatly radiated since, the Cretaceous (Grimaldi & Engel 2005); and (c), if *Haroldius* indeed have to be regarded as modified Canthonini (as maintained by Paulian 1985, 1993), this entails (in accordance with the long-standing consensus view among scarabaeologists) austral, or, for that matter, Gondwanan roots (cf. also discussion of Scarabaeinae relationships in Philips et al. 2004, Scholtz & Grebennikov 2005, and included references). In conclusion, the *Haroldius* group constitutes an interesting challenge for future, more detailed phylogenetic and biogeographic research; their inclusion in critical scarabaeine phylogeny studies might clarify more than only their own direct relationships.

In this paper the genus *Haroldius* Boucomont (1914) is re-diagnosed, and the five new species from Sulawesi are described, pictured, and keyed (the late Paulian already alluded to the existence of this Sulawesi material in some of his papers, see References). The novelties were collected while participating in Project Wallace in North Sulawesi during 1985 and during follow-up activities elsewhere in Sulawesi during 1989. The characters of all Sundaland-Sulawesi species are analyzed and tabulated, taking material and published information of the entire genus (including some potential novelties from Borneo) into account. It is very likely that the Sulawesi *Haroldius* described here are all endemic to the island (our current estimates of species-level endemicism for Sulawesi laparostict Scarabaeinae are over 80%), and we expect that the forests on the island’s different peninsulas and nearby islands harbour more *Haroldius* (sub)species – in accordance with the distribution patterns known for other groups of organisms. *Haroldius* is reputed to occur in the Moluccas (Hanski & Krikken 1991), but actual specimens are not available. A list of all *Haroldius*-like taxa described up till now is given below, and the world distribution of the genera discussed in this paper is mapped (fig. 1).

This paper is part of an ongoing programme focussing on the classification of scarab genera, with particular reference to the fauna of the Southeast Asian islands, taking into account the results of field surveys in the area, both by ourselves and by our ecological colleagues.

**Material, methods, conventions**

The substance of this paper concerns straightforward morphological taxonomy, i.e. the diagnosis and description of the Sulawesi novelties and their comparison with Sundaland relatives. In view of the paucity of both actual material and context data, we make no phylogenetic claims; further