

**ASSESSMENT OF *POLYRHACHIS* SMITH, 1857
(FORMICIDAE: FORMICINAE) IN
BORNEENSIS COLLECTION**

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**INSTITUTE FOR TROPICAL BIOLOGY
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**PENILAIAN *POLYRHACHIS* SMITH, 1857
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ABSTRAK

PENILAIAN *POLYRHACHIS* SMITH, 1857 (FORMICIDAE: FORMICINAE) DI KOLEKSI BORNEENSIS

Kajian ini dilaksanakan untuk menilai specimen genus *Polyrhachis* Smith, 1857 yang disimpan di BORNEENSIS, pusat koleksi rujukan Institut Biologi Tropika dan Pemuliharaan, UMS. Bilangan individu, subgenera dan spesies genus ini didokumentasikan dan diidentifikasi. Oleh yang demikian koleksi semut ini boleh dijadikan sebagai rujukan untuk semakan taksonomi. Semua specimen diidentifikasi hingga ke peringkat subgenus berdasarkan kepada kekunci Bolton (1994), kekunci Dorow (1995) dan Kohout (komunikasi peribadi). Untuk ke peringkat spesies, perbandingan adalah secara langsung dengan specimen yang telah diidentifikasi. Sebanyak 1205 individu semut genus *Polyrhachis* telah direkodkan. Mereka tergolong dalam 12 subgenus dan 110 species. Dua belas subgenus yang telah diidentifikasi dalam kajian ini adalah *Aulocomyrma*, *Campomyrma*, *Chariomyra*, *Cyrtomyrma*, *Hagiomyra*, *Hedomyrma*, *Hemioptica*, *Myrma*, *Myrmatopa*, *Myrmhopla*, *Myrmohtrina*, dan *Polyrhachis*. Subgenus yang paling melimpah dan kaya spesies adalah *Myrmhopla* dan *Myrma*. *Polyrhachis bicolor*, *P. longipes*, and *P. inermis* adalah tiga spesies yang paling melimpah. Kekunci kepada sembilan subgenus yang diketahui wujud di Borneo dibina berdasarkan kepada ciri-ciri morfologi. Semua specimen disimpan di dalam bilik serangga di BORNEENSIS dan diatur mengikut susunan huruf abjad di bawah setiap subgenus. Maklumat taksonomi dan ekologi di atas label specimen direkodkan dalam MUSEBASE, suatu pangkalan data koleksi.

Kata kunci:

Polyrhachis, menilai, subgenus, BORNEENSIS, MUSEBASE

ABSTRACT

ASSESSMENT OF *POLYRHACHIS* SMITH, 1857 (FORMICIDAE: FORMICINAE) IN BORNEENSIS COLLECTION

This research was conducted to assess the specimens of genus *Polyrhachis* Smith, 1857 deposited in BORNEENSIS, the reference collection centre of the Institute for Tropical Biology and Conservation, UMS. The number of individuals, subgenera and species of this genus were documented and identified so that the collection can be used as a reference for taxonomic revision. All specimens were identified to subgeneric level based on Bolton's key (1994), Dorow's key (1995) and Kohout (person. comm.) and to species level whenever possible by direct comparison to specimens that had been previously identified. In total, 1205 individuals of ant genus *Polyrhachis* have been recorded. They belonged to 12 subgenera and 110 species. The twelve subgenera identified in this study were *Aulocomyrma*, *Campomyrma*, *Chariomyra*, *Cyrtomyrma*, *Hagiomyra*, *Hedomyrma*, *Hemioptica*, *Myrma*, *Myrmatopa*, *Myrmhopla*, *Myrmohtrinox*, and *Polyrhachis*. The most abundant and speciose subgenera were *Myrmhopla* and *Myrma*. *Polyrhachis bicolor*, *P. longipes*, and *P. inermis* were the three most abundant species. A key to the nine subgenera known to occur in Borneo was constructed based on morphological features. All specimens were housed in BORNEENSIS and arranged in alphabetical order under each subgenera. Taxonomic and ecological information on specimens label were recorded into MUSEBASE, a collection database at BORNEENSIS.

Key words:

Polyrhachis, assess, subgenera, BORNEENSIS, MUSEBASE