

A New Species of *Graphium* Scopoli (Lepidoptera: Papilionidae) from the Bismarck Archipelago, Papua New Guinea

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ABSTRACT. *Graphium kosii* n.sp., a butterfly from high elevations in southern New Ireland, is described and figured. A key is presented for this and five closely related species: *Graphium weiskei* (Ribbe), *G. stresemanni* (Rothschild), *G. batjanensis* Okano, *G. macleayanum* (Leach) and *G. gelon* (Boisduval), all of which are confined to the Australasian region.

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This paper is the first of two treating new butterflies from little known montane forests of New Ireland. It describes a new species of *Graphium*. New Ireland is a long (c. 400 km) ancient island arc situated northeast of New Britain (2°–4°S 151°–153°E). The highest land reaches 2399 m in the southern “Lak” district and represents eroded, andesitic volcanoes, approximately 25 million years old (Pigram *et al.*, 1990). The biomes here are vertically diverse with lowland rainforest, mid and upper montane moss forest and a high montane heath vegetation, shown in Fig. 1 (McCallum & Sekhran, 1997). The International Conservation and Development Organisation (ICAD) attempted to procure the land proximal to the Weiten Rift

Valley as World Heritage during 1992–1996 but terminated the project due to “land ownership difficulties” (P. Lavender, Pacific Heritage Foundation, pers. comm., 1998).

The “*weiskei*” group of butterflies within the genus *Graphium* comprises six closely related species: *G. macleayanum*, *G. weiskei*, *G. batjanensis*, *G. stresemanni*, *G. gelon* and the new species described here, *G. kosii* n.sp. All the species are restricted to the Australasian region, generally in and adjacent to mountainous areas. Saigusa *et al.*, (1977) showed more general phylogenetic relationships of this group with *G. empedovana* (Corbet), *G. codrus* (Cramer), *G. sarpedon* (Linnaeus), and *G. cloanthus* (Westwood).