

# A New Subspecies of *Philiris diana* Waterhouse & Lyell, 1914 (Lepidoptera: Lycaenidae) from the Wet Tropics of Northern Australia

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**ABSTRACT.** *Philiris diana* Waterhouse & Lyell, 1914 from the Wet Tropics of northeastern Queensland was previously thought to be monotypic, being most closely related to *Philiris papuanus* Wind & Clench, 1947 from Cape York Peninsula, Australia, and mainland New Guinea. However, a new subspecies was recently discovered on the Atherton Tableland, which we illustrate, diagnose and describe as *Philiris diana fortuna* ssp. nov. It appears to be a narrow-range endemic, restricted to montane forest (750–1,090 m asl) and allopatric or parapatric from the nominotypical subspecies *Philiris diana diana* Waterhouse & Lyell, 1914, which is largely restricted to low to mid-altitude forests in the coastal escarpment in the Cairns-Kuranda district. Despite being separated by a minimum distance of only 20–25 km, the two taxa show substantial phenotypic differences in wing pattern elements, but negligible differences according to the mitochondrial COI barcode region (mean p-distance = 0.28%). The habitat and biology of the new taxon are summarized, and likely historical processes driving divergence between upland and lowland populations of this species hypothesized.

## Introduction

*Philiris* Röber, 1891 is a large genus of lycaenid butterflies occurring in Australia and mainland New Guinea and its adjacent islands. It is closely related to *Hypochrysops* C. & R. Felder, 1860 in the *Hypochrysops* section of the tribe Lucini (Eliot, 1973), but unlike most related genera in that tribe, the ventral patterns of *Philiris* species are relatively unmarked and they typically exhibit a silvery-white underside ground colour. Parsons (1998) and Braby (2000) noted that the genus, at that time, contained approximately 65 species.

Since then, eight more species have been described or recognized, mainly from New Guinea and nearby islands (Müller, 2014; Sands, 2015; Tennent, 2016). Only nine species are currently recognized from Australia (Sands, 2015; Braby, 2016), most of which are restricted to eastern and northeastern Queensland. The majority of species are associated with tropical rainforest or rainforest regrowth (pioneer vegetation).

Parsons (1998), following the classifications of Tite (1963) and Sands (1979, 1981a,b), proposed several informal species groups within the genus according to various morphological

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