

CHAPTER 6

CONCLUSION

Soil samples were collected on 30 January 2007 along an altitudinal gradient in Doi Inthanon National Park, Chiang Mai province, Thailand. Five different forest types were chosen at 500 meters intervals: dry deciduous dipterocarp forest; mixed deciduous forest; lower evergreen forest; upper evergreen forest; and cloud forest, respectively. At each site, 10 soil samples were collected using a 15 × 15 centimeters quadrat to a depth of 5 centimeters. The soil samples were then transferred to Berlese funnels for 72 hours in order to extract the arthropod fauna. The proturan specimens were separated and permanent slides were made for each sample.

After specimen preparation and identification, it was determined that eleven species and two subspecies of proturans were collected. These 11 species and 2 subspecies consist of 3 described species (*Condeillum regale* (Condé), *C. ishiiianum ishiiianum* Imadaté, *Silvestridia keijiana* (Imadaté)), one newly recorded subspecies for Thailand (*C. ishiiianum setosum* Imadaté), and 8 undescribed species (*Australentulus* sp., *Baculentulus* sp., *Kenyentulus* sp. 1, *Kenyentulus* sp. 2, *Eosentomon* sp. 1, *Eosentomon* sp. 2, *Eosentomon* sp. 3, and *Eosentomon* sp. 4). The 8 undescribed species have high probabilities of being new species.

Previously, there have been few studies of proturan taxonomy in Thailand. Therefore, the main objective of this study was to make a basic guide, including life history aspects of general biology and more importantly, taxonomic keys for future researchers who wish to study proturans in Thailand. The morphology and diagnostic characters of proturans are reviewed in some detail. In addition, pictorial keys to genera and species of adult proturans were constructed to aid in identification. This study begins a necessary taxonomic base for any studies of proturan in the future.