

# **Article**



# A Taxonomic Study of the Scaly Cricket Family Mogoplistidae (Orthoptera: Ensifera: Grylloidea) in Korea

#### TAEWOO KIM

Exhibition & Education Division, National Institute of Biological Resources, Gyeongseo-dong, Seo-gu, Incheon, 404-170, Korea. E-mail: pulmuchi@korea.kr

#### **Abstract**

The little-known scaly cricket family Mogoplistidae is reviewed for Korea for the first time. Three members are confirmed: *Ectatoderus tamna* **sp. nov.** is newly described from Jejudo Island; *Ornebius bimaculatus* (Shiraki, 1930) is newly recognized from Marado Island, a small island near Jejudo Island; and *Ornebius kanetataki* (Matsumura, 1904) is reconfirmed. A key to the species, descriptions, photographs, and figures are provided for their identification. All type and voucher specimens are deposited in the Entomological Collection of the National Institute of Biological Resources.

Key words: taxonomy, Orthoptera, Mogoplistidae, Ectatoderus, Ornebius, Korea

## Introduction

The family Mogoplistidae includes 355 species, which are distributed mostly across tropical and sub-tropical regions (Eades *et al.*, 2011). The members of this group are called 'scaly crickets' because fine scales cover the entire body surface. Given their small sizes (between 4 and 13 mm) and cryptic nocturnal lifestyles, the scaly crickets are poorly known orthopteran insects and poorly represented in entomological collections compared to their diversity (Rehn and Hebard, 1912; Ingrisch, 2006).

In Korea, which belongs to the East Asian temperate region, only one mogoplistid is known: *Ornebius kanetataki* (Matsumura, 1904). No taxonomic study has been attempted, and the information on the group has not been updated. There is considerable information on species in neighboring areas, including Japan (Ichikawa *et al.*, 2000), China (Yin and Liu, 1995), Taiwan (Yang and Yen, 2001a, b), and Southeast Asia (Ingrisch, 2006), and more distant areas such as India (Chopard, 1969), Australia (Otte and Alexander, 1983), and North America (Hebard, 1931; Love and Walker, 1979).

In recent collecting trips targeting little-known Korean orthoptera, two other scaly crickets were collected and identified: *Ectatoderus tamna* **sp. nov.** and *Ornebius bimaculatus* (Shiraki, 1930). The former was discovered on Jejudo, the biggest island in southern Korea, and the latter was collected on Marado, a small island near Jejudo.

This paper reports the species diversity of the poorly known Korean Mogoplistidae and describes their taxonomic characteristics. A key to the species, descriptions, photographs, and figures are provided to compare the three species. The diagnostic characters and terminology follow Yang and Yen (2001a) and Ingrisch (2006). All of the voucher specimens were deposited in the entomological collection of the National Institute of Biological Resources (NIBR).

# **Taxonomic accounts**

# Family Mogoplistidae

**Diagnosis.** Body slender, flat, depressed, always covered with delicate fine scales; head short, the clypeus extending onto the dorsum of the head; the entire rostrum composed of the clypeus; pronotum longer than wide, espe-