Discovery of the first telemid spider (Araneae, Telemidae) from South America, and the first member of the family bearing a stridulatory organ

NADINE DUPÉRRÉ1 & ELICIO TAPIA2

1Research Associate, Fundación OTONGA, Calle Rither y Bolivia, Quito, Ecuador. Research Associate, American Museum of Natural History, New York, NY, USA. E-mail: nadineduperre@gmail.com
2Researcher, Centro Jambatu, Investigación y Conservación de Anfibios, San Rafael, Ecuador. E-mail: eliciotapia@hotmail.com

Abstract. The genus *Kinku* n. gen. is established for the first telemid spider found in South America. The new species, *Kinku turumanya* n. sp. is characterized by the unique conformation of the male palp and the presence of an abdominal anterioventral stridulatory organ.

Key words: new genus, new species, cloud forest, Ecuador

Introduction

The family Telemidae is a relatively small family composed of 61 species and 8 genera, most species are found in the Old World (World Spider Catalog 2015). As currently delimited *Telema* is the most speciose genus and includes 40 species from Thailand, Vietnam, Singapore, Japan, Spain, France and China, but this is likely an artifact as relationships of Asian species are uncertain (Ledford pers. comm.). In the New World, 5 species occur, 4 species in the genus *Usofila* are known from USA (Alaska to south California, east to Colorado) and Canada (Alberta) (Bennett & Ledford 2005) and 1 species in the genus *Telema, Telema maymena* Gertsch 1973 known from a Guatemalan cave. Gertsch mentioned that the generic position of the later species was somewhat doubtful due to the lack of males (Gertsch 1973). The Old World telemid fauna was mainly studied by Wang & Li (2010a, 2010b, 2011, 2012) and Wang et al. (2012), whereas the New World fauna was in the process of revision by Gertsch but never completed (D. Ubick pers. comm. in Bennett & Ledford 2005). Bennett & Ledford (2005) also mention the existence of numerous undescribed species, and Ledford (pers. comm.) is in the process of describing several species from caves in the western USA.

Telemids are small (1.0-1.7mm) araneomorph, ecribellate, haplogyne spiders, with six eyes or eyeless and a rebordered labium (Jocqué & Dippenaar-Schoeman 2006). They are characterized by the presence of a zigzag sclerotized ridge on the anteriodorsal region of the abdomen and the occurrence of Emerit’s glands (Bennett & Ledford 2005). Telemids are mainly cave dwelling spiders (Jocqué & Dippenaar-Schoeman 2006), where they can be very abundant, but are also found in moist and stable microenvironments such as in leaf litter, rotting logs, and under rocks (Bennett & Ledford 2005).

We describe the first telemid spider from South America, found in the cloud forest of Ecuador, but we hypothesize that due to their small size and cryptic lifestyle many more species await discovery. We also report the first case of a male telemid spider with a stridulatory organ. Stridulatory organs are known to occur in various spiders families. Uetz and Stratton (1982) reported on the occurrence of such organs in 22 families, and since then several families have been added to the list including, Corinnidae, Tetragnathidae and Zodariidae (Jocqué 2005). Stridulatory organs were primarily studied by Legendre (1963) and Uetz & Stratton (1982). In 2005, Jocqué summarized the various types of spider stridulatory organs and illustrated their different forms. The stridulatory organ is composed of two parts: first the “pars stridens”, a sclerotized area provided with a series of ridges referred to as “the file” or simply “the ridge” and second the “plectron”, which may be one or a series of stiff setae or pegs, sometimes called “the plectrum” or “the scraper” in the case of a single peg (Uetz & Stratton 1982; Jocqué 2005: 597).