

Seven New Species of Spiders of the Subfamily Coelotinae (Araneae: Agelenidae) from Kyushu, Japan

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Seven new species of the subfamily Coelotinae are described from Kyushu, Japan, under the names *Coelotes unzenensis* sp. nov., *C. saikaiensis* sp. nov., *C. koshikiensis* sp. nov., *C. iriei* sp. nov., *C. oxyacanthus* sp. nov., *Draconarius verrucifer* sp. nov., and *D. dialeptus* sp. nov. *Coelotes unzenensis* sp. nov. and *C. saikaiensis* sp. nov. are unique in comparison with all the known Japanese coelotine spiders with two exceptions, *Alloclubionoides grandivulva* (Yaginuma, 1969) and *C. motobuensis* (Shimojana, 2000), in lacking the patellar apophysis of the male palpus. *Coelotes koshikiensis* sp. nov. has genital organs similar to those of *C. gotoensis* Okumura, 2007 and is endemic to the Koshiki Islands, Kagoshima Prefecture. *Coelotes iriei* sp. nov. has genital organs similar to those of *C. decolor* Nishikawa, 1973, and these two species are closely related. *Coelotes oxyacanthus* sp. nov. resembles *C. hiradoensis* Okumura and Ono, 2006. This new species is endemic to the Goto Islands, Nagasaki Prefecture. *Draconarius verrucifer* sp. nov. is distinguished from the other known coelotine spiders from Japan by having a small protrusion on the epigynum. *Draconarius dialeptus* sp. nov. is found only on Yaku Island, Kagoshima Prefecture. Its male palpal structure is similar to that of some other species of *Draconarius*, including *D. aspinatus* Wang, Yin, Peng, and Xie, 1990, *D. bituberculatus* Wang, Yin, Peng, and Xie, 1990, and *D. venustus* Ovtchinnikov, 1999. In this paper, *D. verrucifer* sp. nov. is described based only on females, *D. dialeptus* sp. nov. on males, and the other new species on both sexes.

Key Words: Taxonomy, Araneae, Coelotinae, *Coelotes*, *Draconarius*, new species, Kyushu, Japan.

Introduction

Spiders of the subfamily Coelotinae are restricted to the Northern Hemisphere. More than 600 species have been described, especially from East Asia (Platnick 2012). In Japan, 111 species have been known up to the present (Okumura *et al.* 2009, 2011; Okumura 2010). Coelotine spiders generally live on the ground, being found under stones, logs, and leaf litter; some cave-dwelling species are also known. Species in this group tend to show regional distribution and geographical variation because most of the species do not disperse by ballooning. Therefore, it is believed that many unidentified or undescribed species remain.

Nishikawa (2009) described 44 new species of Japanese spiders in the subfamily Coelotinae, largely from Honshu and Shikoku. Three of the 44 species, viz., *Coelotes ikiensis* Nishikawa, 2009, *C. osamui* Nishikawa, 2009, and *C. exilis* Nishikawa, 2009, were added to the fauna of Kyushu and its surrounding islands, with the latter two species being endemic to Yaku Island. These finds suggest that many unknown coelotine spiders might be discovered in this region.

My survey of Kyushu and neighboring islands in recent years has yielded a number of species that are new to science. Some have already been described (Okumura and Ono 2006; Okumura 2007), while others have remained undescribed due to the small number of samples or absence of both sexes. In this paper, with additional material in hand,

I describe seven new species of the subfamily Coelotinae from Kyushu and surrounding islands as members of the genera *Coelotes* Blackwall, 1841 and *Draconarius* Ovtchinnikov, 1999.

Materials and Methods

Specimens were examined and illustrated using an Olympus SZX-7 stereomicroscope. All measurements are given in millimeters. Leg measurements are given as total length (femur, patella plus tibia, metatarsus, and tarsus). Abbreviations used in this paper are as follows: ALE, anterior lateral eye; AME, anterior median eye; LTA, lateral tibial apophysis; MOA, median ocular area; PLE, posterior lateral eye; PME, posterior median eye; RTA, retrolateral tibial apophysis.

All the specimens were collected by K. Okumura if not otherwise indicated. Type specimens of the new species described in this paper have been deposited in the collections of the Department of Zoology, National Museum of Nature and Science, Tsukuba (NSMT).

Coelotes unzenensis sp. nov.

[Japanese name: Unzen-yachigumo]
(Fig. 1A–D)

Material examined. *Holotype.* NSMT-Ar 9848, male, Mt. Kusenbu, 620 m alt., Unzen city, Nagasaki Prefecture