A new species and a new record of the genus Agistemus from China (Acari: Stigmaeidae)

SIQIN HU, XIWEN CHEN & LINGSHENG HUANG
Department of Biological Science and Engineering, Nanchang University, Nanchang 330047, China

Abstract

Agistemus pinus Hu & Chen sp. nov. is described and A. siamensis Ehara & Wongsiri is recorded for the first time from China.

Key words: Acari, Stigmaeidae, Agistemus, new species, China

Introduction

The mites of the genus Agistemus are often found on plants. They can prey on many kinds of harmful mites. Fifteen species of the genus Agistemus have been reported from China (Wang 1981; Tseng 1982; Hu & Chen 1994; Fan et al. 1997). In this paper, two species are reported from Jiangxi, China. Type specimens are deposited in the Department of Biological Science and Engineering, Nanchang University, Nanchang, China. All measurements are given in micrometres.

Agistemus pinus Hu & Chen sp. nov. (Figs. 1-2)

FEMALE. All dorsal plates smooth. Dorsal setae relatively long, stout, barbed, tapering distally and each set on a tubercle. Setae la longest and le shortest dorsal setae. Proecular be more than twice distance between be and ce. Ratios: ae/ae-ae = 1.76, be/be-ce = 2.26, a/a-a = 3.42, c/c-c = 1.89. Maxillicoxal seta m longer than seta n and than distance from m to n, m-m > n-n. Ratios: 1a/1a-1a =
0. 67, 3a/3a-3a = 0. 34, 4a/4a-4a = 0. 56. 2 pairs of paragenital setae. Setae pg1 slightly longer than pg2. Anogenitals ag4 thickened, barbed and longer than others. Palpus extending to base of tibia I. Palptibial claw longer than tarsus. Accessory claw more than one-third length of tibial claw. Palptibia, palpgenu and palpfemur bearing 3, 1 and 3 setae, respectively. Counts of setae and sensilla on legs I-IV: coxae 2-1-2-2, trochanters 1-1-1-1, femora 5-4-2-2, genua 4-1-0-0, tibiae 6-6-6-6, tarsi 13-10-8-7. Measurements: body length (including gnathosoma) 453, body width 282, gnathosoma 109; setae ae 60, be 104, ce 96, he 76, a 82, b 99, c 104, la 117, lm 109, li 81, e 50, le 30, m 42, n 50, la 30, 3a 21, 4a 18, pg1 14, pg2 11, ag1 12, ag2 10, ag3 12, ag4 15, ø 26, ø1 30, ø 16; distances: ae-ae 34, ae-be 29, be-ce 46, a-a 24, a-b 83, a-la 94, b-ø 29, b-lm 57, b-c 88, la-lm 68, c-c 55, c-ø 60, li-li 65, la-la 45, 3a-3a 62, 4a-4a 32, m-m 51, n-n 42, ø1-ø1 16(13), ag1-ag2 9, ag2-ag3 7, ag3-ag4 15.

Remarks: This new species closely resembles A. longisetus Gonzalez, 1963, but can be distinguished from it by the following characters: setae pg1 longer than pg2; ratios: ae/ae-ae = 1.76, a/a-a = 3.42, c/c-c = 1.89.

Etymology: This species is so named because it was collected from Pinus sp.


Agistemus siamensis Ehara & Wongsiri, 1984

Agistemus siamensis Ehara & Wongsiri, 1984: 116

FEMALE: Body length (including gnathosoma) 410, body width 245. All dorsal plates smooth. Postocular body small. Dorsal setae stout, barbed, set on tubercles. Setae be (82) longer than others. 2 pairs of paragenital setae, pg1 longer than pg2, and distance between pg1 and pg2. First pair of anogenital setae smooth but other 3 pairs setose. Setae ag1, ag2 and ag3 subequal and slightly longer than ag4. Ratios: ae/ae-ae = 1.25, be-be-ce = 1.63, a/a-a = 1, c/c-c = 1.43.

MALE: Body length (including gnathosoma) 335, body width 182. Ratios: ae/ae-ae = 1.14, be-be-ce = 1.28, a/a-a = 0.89, c/c-c = 0.61.

This species has been recorded from Doi Chiang Dao, Thailand on tea. It is recorded from China for the first time.

Habitat and locality: 1 female and 2 males, Lichuan, Jiangxi Province, China, 27. X. 1988 (S. Q. Hu & P. H. Hou), on Ilex sp.
FIGURES 1-2. Agistemus pinus Hu & Chen sp. nov. (female). 1, dorsal view; 2, anogenital area.
Acknowledgements

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