

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

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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. Procular *be* more than twice distance between *be* and *ce*. Ratios: $ae/ae-ae = 1.76$, $be/be-ce = 2.26$, $ala-a = 3.42$, $c/c-c = 1.89$. Maxillicoxal seta *m* longer than seta *n* and than distance from *m* to *n*, $m-m > n-n$. Ratios: $la/la-la =$

0. 67, $3a/3a-3a = 0$. 34, $4a/4a-4a = 0$. 56. 2 pairs of paragenital setae. Setae pg_1 slightly longer than pg_2 . Anogenitals ag_4 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, $1a$ 30, $3a$ 21, $4a$ 18, pg_1 14, pg_2 11, ag_1 12, ag_2 10, ag_3 12, ag_4 15, ω_1 26, ω_2 30, ω_3 16; distances: $ae-ae$ 34, $ae-be$ 29, $be-ce$ 46, $a-a$ 24, $a-b$ 83, $a-la$ 94, $b-b$, $b-la$ 29, $b-lm$ 57, $b-c$ 88, $la-lm$ 68, $c-c$ 55, $c-lm$ 60, $li-li$ 65, $1a-1a$ 45, $3a-3a$ 62, $4a-4a$ 32, $m-m$ 51, $n-n$ 42, $m-n$ 10, pg_1-pg_2 16(13), ag_1-ag_2 9, ag_2-ag_3 7, ag_3-ag_4 15.

Remarks: This new species closely resembles *A. longisetus* Gonzalez, 1963, but can be distinguished from it by the following characters: setae pg_1 longer than pg_2 ; 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.

Types: Holotype female, paratype female, Lichuan (27°18' N, 116°54' E), Jiangxi Province, China, 27. X. 1988 (S. Q. Hu & P. H. Hou), on *Pinus* sp.

Agistemus siamensis Ehara & Wongsiri, 1984

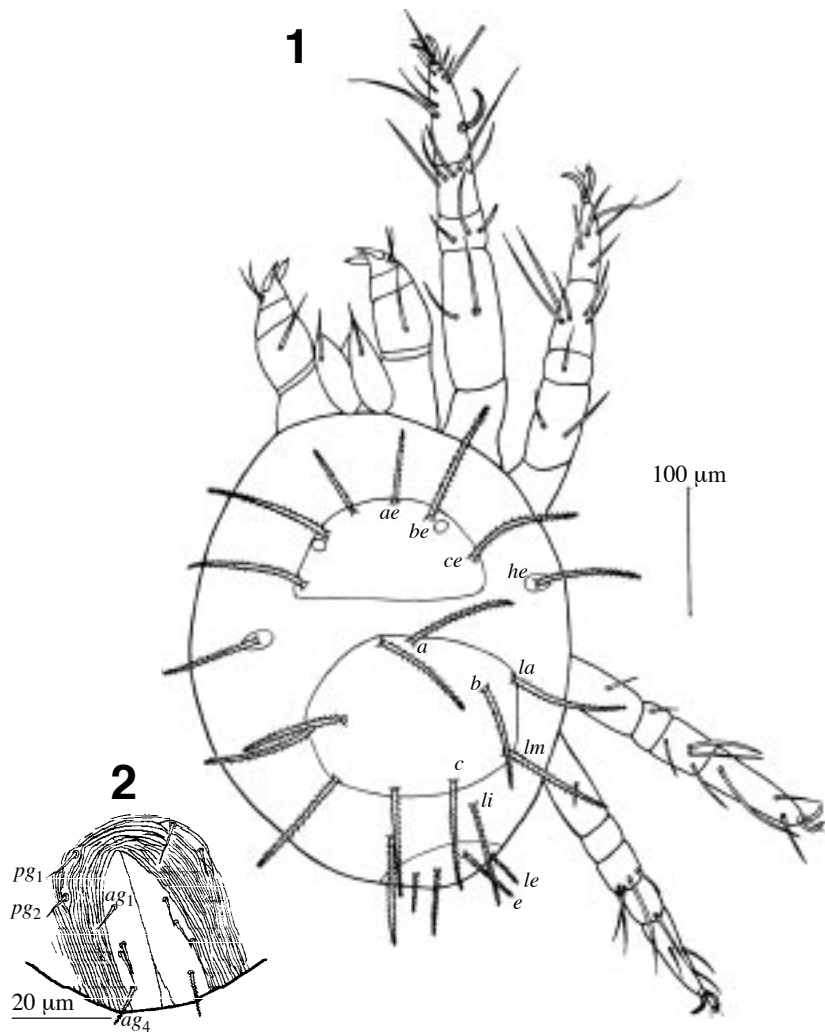
Agistemus siamensis Ehara & Wongsiri, 1984: 116

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, pg_1 longer than pg_2 and distance between pg_1 and pg_1 . First pair of anogenital setae smooth but other 3 pairs setose. Setae ag_1 , ag_2 and ag_3 subequal and slightly longer than ag_4 . 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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