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PLANT MITES (ACARI) OF THE FRENCH ANTILLES — 5.
STIGMAEIDAE (PROSTIGMATA)

by Carlos H. W. FLECHTMANN*, Serge KREITER **, Jean ETIENNE *** and Gilberto J. DE MORAES *

(Accepted September 1999)

PREDACEOUS MITES
AGISTEMUS INFISSUS
AGISTEMUS FLORIDANUS
CARIBBEAN

INTRODUCTION

The mites recorded here were collected during a survey of plant mites of the French Antilles. All the stigmaeid mites were collected in Guadeloupe at various locations during the three trips (April and December 1997 and March 1998).

The following abbreviations are used in this paper: ENSAM (École Nationale Supérieure Agronomique de Montpellier, France); ESALQ (Escola Superior de Agricultura “Luiz de Queiroz”, Piracicaba, Brazil); INRA (Institut National de la Recherche Agronomique; Centres de Recherche Antilles-Guyane et Montpellier). The abbreviations CF, JE and SK refer to the collectors.

ACARIENS PRÉDATEURS
AGISTEMUS INFISSUS
AGISTEMUS FLORIDANUS
CARAIBES

SUMMARY: Two species of stigmaeid mites are reported from Guadeloupe, one of which, Agistemus infissus, is new to science.

Agistemus floridanus Gonzalez

Agistemus floridanus Gonzalez, 1965: 42.

Specimens examined: 1 deutonymph, 1 female and 1 male, Guadeloupe, Col des Mamelles, SK, April 1997, on Inga ingoides (Mimosaceae).

Agistemus infissus n. sp.
(Figs. 1–9)

DIAGNOSIS. — Agistemus infissus is a member of the Agistemus group with smooth, feebly sclerotized plates and with the median plate entirely divided by a
Figs. 1–3: *Agistemus infissus* n. sp., female. 1. — Dorsum of idiosoma. 2. — Palp. 3. — Genito-anal area.
Figs. 4–5: *Agistemus infissus* n. sp., female. 4. — Tarsus and tibia I. 5. — Tarsus and tibia II.
Figs. 6–9: Agistemus infissus n. sp., male.
6. — Dorsum of idiosoma. 7. — Gnathosoma, dorsal (left) and ventral (right). 8. — Tarsus and tibia I. 9. — Tarsus and tibia II.
central band of longitudinal striae in the female. It resembles *A. denotatus* Gonzalez, 1965, but differs in the much longer dorsal setae set on tubercles (these are absent in *A. denotatus*) and the males having a partially divided dorsal shield.

**FEMALE**: measurements in micrometers of halotyope and, in parentheses, of 5 paratypes. Idiosoma (Fig. 1) 280 (338–363) long, 210 (256–268) wide; rostrum (extended palpi) 114 (112–149) long. Gnathosoma palp (Fig. 2) femur with 3 setae, genu with one seta, tibia with 2 setae and 2 ‘claws’, displacing tarsus laterally. Palp tarsus with 3 setae, one basoventral solenidion, one tiny distal solenidion, and a 3-pronged distal sensillum. Two pairs of infracapitular setae. Prodorsum (figure 1): propodosomal plate entire, smooth, posterior border excavated medially, with 3 pairs of setae; the external vertical (*ve* or *be*) longest and strongest, and internal vertical (*vi* or *ae*) shortest. Post-ocular body present, larger than ocellus. Hysterosoma (figure 1): median plate entirely divided by a central band of longitudinal striae; each half bearing setae *c1 (a)*, *d1 (b)*, *d2 (la)*, *e1 (c)* and *e2 (lm)*. Setae *c2* (*humeral, he*) and *f1 (li)* each on separate platelets. Setae *h1 (e)* on one platelet and *h2 (le)* on the integument. Dorsal setae robust, long, far surpassing bases of consecutive posterior pair, set on strong tubercles. Venter (figure 3) with 4 pairs of anogenital setae (*g*, *ps1*, *ps2*, *ps3*) and one pair of aggenital setae (*ag*). Legs (Figs 4 & 5): chaetotaxy, from coxae to tarsi, tactile setae, solenidia in parentheses and alternate count in brackets:


Empodium padlike with 3 pairs of tenent hairs.

**MALE** (*n* = 4). Smaller than female; idiosoma (Fig. 6) 254–291 long, 186–221 wide; rostrum (extended palps) 96–123 long. Gnathosoma (Fig. 7) similar to female. Prodorsal shield (Fig. 6) as in female, setae smaller. Median hysterosomal plate (Fig. 6) partially divided by a central band of longitudinal striae extending to height of setae *dl* and by a central band of transverse striae between setae *e2*; median plate entire posteriorly, presenting setae *e1* and *f1*. Setae *h1* and *h2* set on a plate. All dorsal setae set in tubercles.

Leg chaetotaxy (Figs 8 & 9):


**TYPE MATERIAL.** — Female holotype, 4 female paratypes and 4 male paratypes, on 6 microscopic preparations, collected from *Piscidia carthagenensis* (Fabaceae) leaves, in Guadeloupe, Marigot, SK, 25 April 1997. Two female paratypes, on 2 microscopic preparations, collected from *Zizyphus mauritiana* (Rhamnaceae) leaves, in Guadeloupe, Beausoleil, CF, 16 December 1997; two female paratypes, same data, SK. One female paratype, collected from *Pluchea symphytifolia* (Asteraceae), in Guadeloupe, Baie Mahault, Jarry, JE, 22 March 1998. One female paratype and one male paratype deposited in *Pluchea symphytifolia* (Asteraceae), in Guadeloupe, Baie Mahault, Jarry, JE, 22 March 1998. One female paratype and one male paratype deposited in Museum national d’Histoire naturelle, Paris; two female paratypes in ENSA-M/INRA, Departement de Protection des Plantes, Laboratoire d’Acarologie, Montpellier; holotype and remaining paratypes in the collection of Department of Zoology, University of São Paulo/ESALQ, Piracicaba, São Paulo, Brazil.

**ETYMOLOGY.** — The species name, *infissus*, is from the Latin *fissus*, meaning cleave, split, referring to the divided median plate in the female.

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REFERENCE