



A new genus and species of phytoseiid mite (Acari: Phytoseiidae) from the Brazilian Atlantic Forest

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Abstract

A new genus, *Ingaseius* **nov. gen.**, and a new species, *Ingaseius silvaticus* **nov. sp.**, Phytoseiidae, collected from *Inga edulis* Martius and *Inga marginata* Wild. (Fabaceae) are described from the Brazilian Atlantic Forest. This species is unique in the following characteristics: females and males with few teeth on fixed cheliceral digit and short *Jv5*, without *J2*, *Z1* and leg macrosetae. In addition, females lack *Jv3* and *Zv3*, and have a reduced ventrianal shield.

Key words: Natural environment, *Ingaseius*, Fabaceae, predator, *Inga*

Introduction

Atlantic Forest is one of the main biomes in Brazil, and it is considered to represent a global diversity hotspot under strong anthropogenic pressure (Myers *et al.*, 2000). Work conducted on the Atlantic Forest reveals the high diversity of phytoseiids in this biome (Gondim Jr. & Moraes, 2001; Zacarias & Moraes, 2001; Zacarias *et al.*, 2002; Castro & Moraes, 2010). This paper describes a new genus and species of phytoseiid mite collected on the natural vegetation of the Brazilian Atlantic Forest.

Material and methods

Mites were collected in areas of Atlantic Forest in Pariquera-Açu and Jundiá, State of São Paulo, and Tramandaí, State of Rio Grande do Sul. Idiosomal setal nomenclature is that of Lindquist & Evans (1965), as applied to the phytoseiids by Rowell *et al.* (1978) and Chant & Yoshida-Shaul (1989) for the dorsal surface, and by Chant & Yoshida-Shaul (1991) for the ventral surface. The system of classification follows that of Chant & McMurtry (2007). Measurements of each structure are given in micrometres (µm); for specimens considered in this study, the average of the measurements of each structure is followed (in parentheses) by the respective range.

Ingaseius **nov. gen.**

Type species. *Ingaseius silvaticus* **nov. sp.**, by original designation.

Diagnosis. Females and males with few teeth on fixed cheliceral digit and short *Jv5*, without *J2*, *Z1* and leg macrosetae. Females without *Jv3* and *Zv3*, and with reduced ventrianal shield.

Description. Adult female. Dorsum of idiosoma with 17 pairs of setae, representing a new idiosomal setal pattern for Phytoseiidae, 10A:7F: six setae in the *j*-*J* series (*j1*, *j3*–*j6*, *J5*), five setae in the *z*-*Z* series (*z2*, *z4*, *z5*, *Z4* and *Z5*), four setae in the *s*-*S* series (*s4*, *S2*, *S4* and *S5*) and two setae in the *r*-*R* series (*r3* and *R1*). Dorsal idiosomal

Paulo, 07 September 2008, J.C. de Souza coll.; two paratype females and one paratype male from *I. edulis*, Pariquera-Açu, State of São Paulo, 9 October 2001, L.V.F. Silva coll.; deposited at the Acari Collection of the Departamento de Zoologia e Botânica (DZSJRP-Acari), Universidade Estadual Paulista (UNESP), Campus de São José do Rio Preto, State of São Paulo, Brazil.

Notes

Three specimens collected in Rio Grande do Sul (about 800 km south of the type locality of the *I. silvaticus*) resemble closely the new species here described, except that they have longer ventrianal shield, spermathecal calyx and Z5 (44, 40 and 15%, respectively) and S3 inserted on a platelet separated from the sternal shield. We consider them to represent intraspecific variations of the new species here described, given that they are also distinctly larger than the specimens from São Paulo (dorsal shield about 30% longer). Further collections of specimens of this genus in areas between Rio Grande do Sul and São Paulo should be conducted to confirm the validity of that conclusion.

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