

SCIENTIFIC COMMUNICATION

**Additional morphological characters and a new host for *Aceria gymnoscuta* Navia & Flechtmann (Acari, Eriophyidae)**

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**ABSTRACT.** *Aceria gymnoscuta* Navia & Flechtmann, 2002 was originally described based on specimens collected on *Syagrus cocoides* Mart. and *Syagrus flexuosa* (Mart.) Becc. (Arecaceae). Slight variations in the dorsal shield pattern and the sternal line, in relation to the original description, and details on male and female genitalia are mentioned in this paper, based on specimens collected on a new host, *Syagrus oleracea* (Mart.) Becc..  
**KEY WORDS.** Arecaceae, Eriophyoidea, mite, taxonomy.

**RESUMO.** Caracteres morfológicos adicionais e um novo hospedeiro para *Aceria gymnoscuta* Navia & Flechtmann (Acari, Eriophyidae). *Aceria gymnoscuta* Navia & Flechtmann, 2002 foi originalmente descrita com base em espécimes coletados sobre *Syagrus cocoides* Mart. e *Syagrus flexuosa* (Mart.) Becc. (Arecaceae). Pequenas variações no padrão do escudo dorsal e na linha esternal em relação à descrição original e detalhes das genitálias do macho e da fêmea são apresentadas neste trabalho, com base em espécimes coletados sobre um novo hospedeiro, *Syagrus oleracea* (Mart.) Becc.

**PALAVRAS CHAVE.** Ácaro, Arecaceae, Eriophyoidea, taxonomia.

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Most eriophyoids are quite host specific, reported from single hosts or from few related hosts (KOZLOWSKI & BOČZEK 1987 *apud* OLDFIELD 1996). However, there are exceptions among eriophyids. Some species may occur on several species of plants (RICE & STRONG 1962). Maybe the same may occur with *Aceria gymnoscuta* Navia & Flechtmann, 2002. This mite was described based on specimens from fruits of *Syagrus cocoides* Mart. collected in Campinas and from growing tips of *Syagrus flexuosa* (Mart.) Becc. (Arecaceae) collected in Jundiaí, both in the State of São Paulo, southeastern Brazil (NAVIA & FLECHTMANN 2002). *A. gymnoscuta* is reported in this paper on a new host, *Syagrus oleracea* (Mart.) Becc. Complementary information on the morphology of this mite species is given in this paper based on the analysis of seven females and four males collected on *S. oleracea*, in Olímpia, State of São Paulo (20°43'53"S, 49°03'38"W), about 350 km away from the type locality.

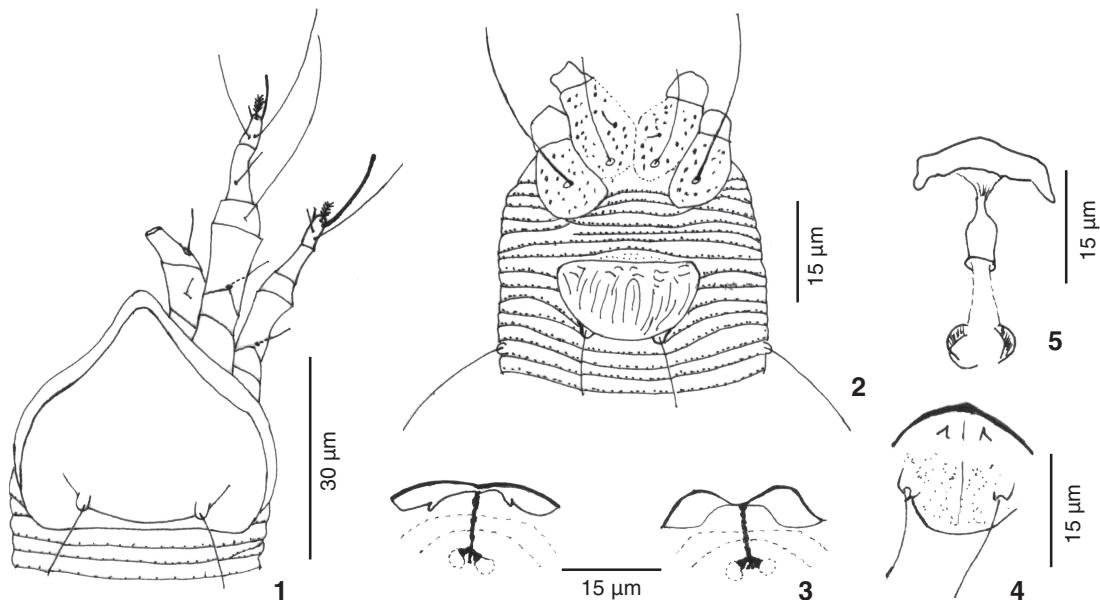
On the adult females, the line running antero-laterally to

each prodorsal tubercle is only about half as long as the prodorsal seta (sc) (Fig. 1a instead of almost as long as that seta, indicated in the original description. The sternal line, though light, is distinguishable (Fig. 2), rather than indistinct as in the type specimens. Figures 3-5 show some details of female and male genitalia not provided in the original description.

The new information on morphological characters as well as the variation of measurements (Tabs I e II) may facilitate future identification of *A. gymnoscuta*.

**ACKNOWLEDGEMENTS**

To C.H.W. Flechtmann and D. Navia for confirming the identification of the species and for comments on this note. This work was supported by the State of São Paulo Research Foundation (FAPESP) within the BIOTA/FAPESP – The Biodiversity Virtual Institute Program ([www.biotaesp.org.br](http://www.biotaesp.org.br)), and corresponds to part of the MS dissertation of the senior author.



Figures 1-5. *Aceria gymnoscuta* from *S. oleracea*: (1) dorsal shield of female; (2) ventral aspect of female; (3) internal female genitalia; (4) external male genitalia; (5) internal male genitalia.

Table I. Comparison of measurements of the morphological characters of *A. gymnoscuta* females collected on *S. oleracea* with those in the original description (NAVIA & FLECHTMANN 2002). (L) = length, (W) = width ( $\mu\text{m}$ ).

Character	<i>S. oleracea</i> (n = 7)	NAVIA & FLECHTMANN 2002 (n = 10)	Character	<i>S. oleracea</i> (n = 7)	NAVIA & FLECHTMANN 2002 (n = 10)
Idiosoma (L.)	169-227	178-222	Tarsal solenidion II ( $\omega$ ) (L.)	12-13	11-12
Idiosoma (W.)	40-43	48-54	Tarsal empodium II (em) (L.)	4-5	4-5
Prodorsal shield (L.)	31-33	37-40	Tarsal empodium II (rays)	5	5-6
Prodorsal shield (W.)	33-37	41-46	Tarsal dorsal seta II (ft') (L.)	3-5	4-6
Dorsal seta (sc) (L.)	10-12	11-13	Tarsal lateral seta II (ft'') (L.)	22-25	21-24
Rostrum (L.)	21-22	17-21	Unguinal seta II (u') (L.)	2-3	3-4
Basal seta (ep) (L.)	3	3	Femur II (L.)	5-7	5-6
Antapical seta (d) (L.)	6-8	5-7	Genu II (L.)	3-4	4
Leg I (L.)	31-35	29-31	Femur II (L.)	10-12	8-10
Tarsus I (L.)	5-7	6-8	Femoral seta II (bv) (L.)	6-8	7-8
Tarsal solenidion I ( $\omega$ ) (L.)	6-8	5-7	1 <sup>st</sup> coxal seta (1 <sup>b</sup> ) (L.)	4-7	4-5
Tarsal empodium I (em) (L.)	4-5	4-5	2 <sup>nd</sup> coxal seta (1 <sup>a</sup> ) (L.)	20-22	18-20
Tarsal empodium I (rays)	5	6	3 <sup>rd</sup> coxal seta (2 <sup>a</sup> ) (L.)	31-37	33-37
Tarsal dorsal seta I (ft') (L.)	12-17	11-15	Sternal line (L.) *	7-10	absent
Tarsal lateral seta I (ft'') (L.)	21-22	19-22	Genital coverflap (L.)	11-13	13-16
Unguinal seta I (u') (L.)	2-3	3-4	Genital coverflap (W.)	21-22	20-22
Femur I (L.)	6-7	6-7	Genital seta (3 <sup>a</sup> ) (L.)	11-15	12-15
Tibial seta I (l') (L.)	5-7	7-9	Coverflap lines	16-18	16-20
Genu I (L.)	3-5	4	Coxal-genital (annuli) (CG)	7-8	6-8
Genual seta I (l'') (L.)	29-33	27-32	Lateral seta (c <sup>2</sup> ) (L.)	28-30	25-29
Femur I (L.)	11-15	9-10	1 <sup>st</sup> Ventral seta (d) (L.)	53-61	51-59
Femoral seta I (bv) (L.)	7-10	9-11	2 <sup>nd</sup> Ventral seta (e) (L.)	42-50	44-49
Leg II (L.)	27-31	26-27	3 <sup>rd</sup> Ventral seta (f) (L.)	24-28	23-26
Tarsus II (L.)	5-7	5-7	Caudal seta (h2) (L.)	42-49	53-61

In some specimens the sternal line may be absent or lightly fused.

Table II. Comparison of measurements of the morphological characters of *A. gymnoscuta* males collected on *S. oleraceae* with those in the original description (NAVIA & FLECHTMANN 2002). (L) length, (W) width (μm).

Character	<i>S. oleraceae</i> (n = 4)	NAVIA & FLECHTMANN 2002 (n = 5)	Character	<i>S. oleraceae</i> (n = 4)	NAVIA & FLECHTMANN 2002 (n = 5)
Idiosoma (L.)	144-158	151-160	Tarsal solenidion II ( $\omega$ ) (L.)	10-11	10-11
Idiosoma (W.)	33-34	39-44	Tarsal empodium II (em) (L.)	4-5	4
Prodorsal shield (L.)	27-28	28-31	Tarsal empodium II (rays)	5	5
Prodorsal shield (W.)	29-31	39-44	Tarsal dorsal seta II (ft') (L.)	4-5	3-4
Dorsal seta (sc) (L.)	9-10	10-11	Tarsal lateral seta II (ft'') (L.)	17-19	16-18
Rostrum (L.)	18-19	16-18	Unguinal seta II (u') (L.)	2-3	2
Basal seta (ep) (L.)	3	2-3	Tibia II (L.)	4-5	4-5
Antapical seta (d) (L.)	6-7	5-6	Genu II (L.)	3-4	3-4
Leg I (L.)	27-28	24-26	Femur II (L.)	9-10	7-8
Tarsus I (L.)	4-6	4-6	Femoral seta II (bv) (L.)	6-7	5-6
Tarsal solenidion I ( $\omega$ ) (L.)	7-9	5-6	1 <sup>st</sup> coxal seta (1 <sup>b</sup> ) (L.)	4-5	4-5
Tarsal empodium I (em) (L.)	4-6	4	2 <sup>nd</sup> coxal seta (1 <sup>a</sup> ) (L.)	14-17	16-18
Tarsal empodium I (rays)	5	5	3 <sup>rd</sup> coxal seta (2 <sup>a</sup> ) (L.)	21-24	26-30
Tarsal dorsal seta I (ft') (L.)	9-12	8-11	Sternal line (L.)	6-7	6-8
Tarsal lateral seta I (ft'') (L.)	16-18	14-17	Genital coverlap (L.)	11-12	11-13
Unguinal seta I (u') (L.)	2-3	2-3	Genital coverlap (W.)	14-14	14-15
Femur I (L.)	5-6	5-6	Genital seta (3 <sup>a</sup> ) (L.)	9-11	9-11
Tibial seta I (l') (L.)	4-6	4-5	Coxal-genital (annuli) (CG)	9-11	8-9
Genu I (L.)	3-4	4	Lateral seta (c <sup>2</sup> ) (L.)	20-21	21-26
Genual seta I (l'') (L.)	23-24	21-25	1 <sup>st</sup> Ventral seta (d) (L.)	47-53	44-48
Femur I (L.)	9-11	7-8	2 <sup>nd</sup> Ventral seta (e) (L.)	29-33	29-32
Femoral seta I (bv) (L.)	7-8	6-7	3 <sup>rd</sup> Ventral seta (f) (L.)	20-23	17-19
Leg II (L.)	21-22	23-24	Caudal seta (h2) (L.)	33-36	37-44
Tarsus II (L.)	4-6	5			

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Received in 17.VIII.2004; accepted in 19.V.2005.