

NEW RECORDS AND NOTES ON ERIOPHYID MITES FROM BRAZIL
AND PARAGUAY, WITH A LIST OF ERIOPHYIDAE FROM
SOUTH AMERICA

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ABSTRACT—New distribution records and biological notes are given for 13 species of eriophyid mites and a list of the 39 species of Eriophyidae known to occur in South America is presented.

As stated by Ehara (1966), little is known about the plant mites of South America. Gonzalez-Rodriguez and Schuster (1962), and Ehara (1966) published studies on the Phytoseiidae of Chile and Brazil, respectively. Ehara (1966), and Flechtman and Baker (1970) reported on the Tetranychidae of Brazil.

So far as the authors are aware, 39 species of Eriophyidae are known from South America. Twenty-six species are recorded from Brazil, five from Argentina, five from Venezuela, one from Colombia, one from Chile and one from Paraguay.

The present study is based on material collected by the senior author from plants in Brazil and by the junior author from plants in Paraguay, in 1967 and 1969. The following species were recorded:

Dichopelmus notus Keifer

Dichopelmus notus Keifer, 1959, Calif. Dep. Agr. Bur. Ent. Occas. Papers 2:10–11.

Specimens examined: Two females, Colonia Genaro Romero, Paraguay. 13 January 1969. On *Ilex paraguariensis* St. Hil. (Yerba mate), Aquifoliaceae.

Distribution and hosts: Paraguay (new record), Argentina. On *I. paraguariensis*.

Remarks: These are rust mites, living on the open leaf surface.

Catarhinus tricholaenae Keifer

Catarhinus tricholaenae Keifer, 1959, Calif. Dep. Agr. Bur. Ent. Occas. Papers 1:11–12.

Specimens examined: Four females, Coronel Oviedo, Paraguay, 11 January 1969. On *Zea mays* L. (corn), Graminae.

Distribution and hosts: Paraguay (new record), Brazil. On *Tricholaena rosea* Nees (natal grass), and *Zea mays* L., Graminae.

Remarks: These mites live on the leaf surface, causing discoloration.

***Aculus pelekassi* Keifer**

Aculus pelekassi Keifer, 1959, Calif. Dep. Agr. Bur. Ent. Occas. Papers 1:6-7.

Specimens examined: Two females, Coronel Oviedo, Paraguay, 11 January 1969. On *Citrus* spp.

Distribution and hosts: Paraguay (new record). On citrus.

Remarks: This species is a rust mite of economic importance.

***Phyllocoptruta oleivorus* (Ashmead)**

Typhlodromus oliioorus Ashmead, 1879, Can. Ent. 11:160.

Phyllocoptruta oleivorus (Ashmead) Keifer, 1938, Bul. Calif. Dep. Agr. 27(2): 193-194.

Specimens examined: Three females, Cecilio Baez, Paraguay, 8 January 1969. On *Citrus* spp.

Distribution and hosts: Paraguay (new record), Brazil. On citrus.

Remarks: *P. oleivorus* is a citrus rust mite of economic importance.

***Tegonotus guavae* Boczek**

Tegonotus guavae Boczek, 1960, J. Kansas Ent. Soc. 33(1):11-14.

Specimens examined: Eight females, Piracicaba, Sao Paulo, Brazil, August 1968. On *Psidium guajava* Raddi, Myrtaceae.

Distribution and hosts: Brazil (new record). On *P. guajava*.

Remarks: This mite is a lower leaf surface vagrant, causing considerable leaf rusting.

***Abacarus sacchari* Channabasavanna**

Abacarus sacchari Channabasavanna, 1966, Contrib. knowledge Indian eriophyid mites, Univ. Agr. Sci., Bangalore, India.

Specimens examined: Ten females, Piracicaba, Sao Paulo; five females, Araras, Sao Paulo; six females, Dois Corregos, Sao Paulo, Brazil, October 1968. On *Saccharum officinarum* L. (sugar cane), Graminae.

Remarks: These mites were found in great numbers along furrows on upper surface of the newer leaves.

***Tegolophus braziliensis* Keifer**

Tegolophus braziliensis Keifer, 1969, U. S. Dep. Agr., A.R.S., Eriophyid Studies C—1:11.

Specimens examined: Six females, Matao, Sao Paulo, Brazil. On *Desmodium* sp., Leguminosae.

Distribution and hosts: Brazil. On *Desmodium*.

Remarks: This mite is a leaf vagrant, causing severe rusting.

Several other eriophyid mites were also collected, but not in sufficient number for adequate identification. These could only be identified at the generic level as follows.

***Rhynacus* sp.**

Collected at Coronel Oviedo, Paraguay, 11 January 1969, on *Psidium guajava* Raddi, Myrtaceae. Slight leaf rusting was observed.

Rhyncaphytoptus sp.

Collected at Cecilio Baez, Paraguay, 8 January 1969. On *Gossypium barbadense* L. (cotton), Malvaceae. No damage was observed.

Aceria sp.

Collected at Piracicaba, Sao Paulo, Brazil, 29 January 1969. On *Zea mays* L. (corn), Graminae. Upper leaf surface vagrants.

Aculus sp.

Collected at Piracicaba, Sao Paulo, Brazil, 1 March 1967. On *Potomorpha sidaefolia* Poll. (caapeba), Piperaceae. Leaf vagrants.

Leipothrix sp.

Collected at Pariquera-açu, Sao Paulo, Brazil, 5 July 1967. On *Thea sinensis* L. (tea), Theaceae. These mites were apparently responsible for intense leaf rusting.

Notalox sp.

Collected at Piracicaba, Sao Paulo, Brazil, 3 March 1967. On *Holocalyx glaziovii*, Leguminosae.

LIST OF ERIOPHYIDAE FROM SOUTH AMERICA, WITH TYPE LOCALITY, AND
DISTRIBUTION RECORDS WITHIN SOUTH AMERICA

SIERRAPHYTOPTINAE

1. *Austracus havrylenkonis* Keifer, 1944. (Isla Victoria, Nahuel Huapi National Park, Argentina).—Argentina. Bul. Calif. Dep. Agr. 33(1):20.

NOTHOPODINAE

2. *Floracarus talisiae* Keifer, 1969. (San Mateo, Aragua, Venezuela).—Venezuela. U. S. Dep. Agr., A.R.S., Eriophyid Studies C—2:17.

ERIOPHYINAE

3. *Aceria bicornis* (Trotter, 1900). (La Plata, Argentina).—Argentina. Bul. Soc. Ent. France 11:224–226.

4. *Aceria rosas-costae* Keifer, 1952. (Cachagua, La Lajuela, Chile).—Chile. Bul. Calif. Dep. Agr. 41(2):66.

5. *Aceria acnisti* Keifer, 1953. (Ouro Preto, Minas Gerais, Brazil).—Brazil. Bul. Calif. Dep. Agr. 42(2):66.

6. *Aceria vaga* Keifer, 1962. (Campinas, Sao Paulo, Brazil).—Brazil. Calif. Dep. Bur. Ent. Ser. B—5:15.

7. *Aceria esculenti* Keifer, 1966. (Rio de Janeiro, Brazil).—Brazil. Calif. Dep. Agr. Bur. Ent. Ser. B—20:2.

8. *Aceria sheldoni* (Ewing, 1937). (California, USA).—Brazil. Biologico, Sao Paulo, 26(2):21–26, 1960.

9. *Aceria ficus* (Cotte, 1920). (France).—Brazil. Ciencia e Cultura, Sao Paulo, 20(2):255, 1968.

10. *Aceria diospyri* Keifer, 1944. (California, USA).—Brazil. *Ciencia e Cultura*, Sao Paulo, 20(2):255, 1968.
11. *Aceria tulipae* (Keifer, 1938). (California, USA).—Brazil.
12. *Aceria guerreronis* Keifer, 1965. (Guerrero, Mexico).—Brazil. *An. IX Reun. Fitosanit. Brazil*:65–70, 1965.
13. *Aceria mangiferae* Sayed, 1946. (Egypt).—Brazil. *Agronomico*, Campinas, 19(9/10):33–34, 1967.
14. *Aceria dorestei* Keifer, 1963. (Maracay, Aragua, Venezuela).—Venezuela. *Calif. Dep. Agr. Bur. Ent. Ser. B*—10:7.
15. *Aceria rossettonis* Keifer, 1969. (Campinas, Sao Paulo, Brazil). *U. S. Dep. Agr., A.R.S., Eriophyid Studies C*—1:5.
16. *Aceria geoffraea* Keifer, 1969. (Santa Fe, Argentina).—Argentina. *U. S. Dep. Agr., A.R.S., Eriophyid Studies C*—2:3.
17. *Aceria biopsidia* Keifer, 1969. (Cagua, Aragua, Venezuela).—Venezuela. *U. S. Dep. Agr., A.R.S., Eriophyid Studies C*—2:5.
18. *Cymoptus spiniventris* Keifer, 1946. (Isla Victoria, Nahuel Huapi National Park, Argentina).—Argentina. *Bul. Calif. Dep. Agr.* 35(1):40.
19. *Eriophyes vitis* Pagenstecher, 1857. (Germany).—Paraguay. *Minist. Agric. Ganad., Serv. Tec. Interam. Coop. Agr., Bol.* 117, Asuncion, Paraguay.

PHYLLOCOPTINAE

20. *Dichopelmus notus* Keifer, 1959. (Misiones, Argentina).—Argentina, Paraguay. *Calif. Dep. Agr. Bur. Ent. Occas. Papers* 2:11.
21. *Heterotergum gossypii* Keifer, 1955. (Rio Grande do Norte, Brazil).—Brazil. *Bragantia*, Campinas, 15:XXI, 1956.
22. *Aculus cornutus* (Banks, 1905). (Washington, DC, USA).—Brazil. *Bragantia*, Campinas, 21:XXXVII, 1962.
23. *Aculops lycopersici* (Masee, 1937). (Australia).—Argentina, Brazil. *I D I A*, Buenos Aires, no. 182, 1963. *Bragantia*, Campinas, 21:LXXXVII, 1962.
24. *Aculus pelekassi* Keifer, 1959. (Greece).—Paraguay.
25. *Aciota costae* Keifer, 1959. (Campinas, Sao Paulo, Brazil).—Brazil. *Bragantia*, Campinas, 19:VII, 1960.
26. *Abacarus sacchari* Channabasavanna, 1966. (Mysore, India).—Brazil.
27. *Tegolophus pfaffiae* Keifer, 1963. (Campinas, Sao Paulo, Brazil).—Brazil. *Calif. Dep. Agr. Bur. Ent. Ser. B*—10:15.
28. *Tegolophus perseafloreae* Keifer, 1969. (Recife, Pernambuco, Brazil).—Brazil. *U. S. Dep. Agr., A.R.S., Eriophyid Studies C*—1:9.
29. *Tegolophus braziliensis* Keifer, 1969. (Matao, Sao Paulo, Brazil).—Brazil. *U. S. Dep. Agr., A.R.S., Eriophyid Studies C*—1:11.
30. *Phyllocoptes bougainvilleae* Keifer, 1959. (Campinas, Sao Paulo, Brazil).—Brazil. *Bragantia*, Campinas, 19:CXXXIX, 1960.
31. *Phyllocoptruta oleivorus* (Ashmead, 1879). (Florida, USA).—Brazil, Paraguay. *Arq. Inst. Biol.*, Sao Paulo, 5:245–250, 1934.
32. *Dicothrix anacardii* Keifer, 1966. (San Felix, Bolivar, Venezuela).—Venezuela. *Calif. Dep. Agr. Bur. Ent. Ser. B*—18:7.
33. *Dicothrix secundus* Keifer, 1966. (San Felix, Bolivar, Venezuela). *Calif. Dep. Agr. Bur. Ent. Ser. B*—18:9.
34. *Calepitrimerus vitis* (Nalepa, 1905). (Austria).—Brazil. *Ciencia e Cultura*, Sao Paulo, 20(2):255, 1968.

35. *Tegonotus guavae* Boczek, 1960. (Lakeland, Florida, USA).—Brazil.
 36. *Mesalox abathus* Keifer, 1969. (Campinas, Sao Paulo, Brazil).—Brazil.
 U. S. Dep. Agr., A.R.S., Eriophyid Studies C—2:11.
 37. *Catachela machaerii* Keifer, 1969. (Piracicaba, Sao Paulo, Brazil).—Brazil.
 U. S. Dep. Agr., A.R.S., Eriophyid Studies C—2:15.

RHYNCA PHYTOPTINAE

38. *Catarhinus tricholaenae* Keifer, 1959. (Campinas, Sao Paulo, Brazil).—Brazil, Paraguay. Calif. Dep. Agr. Bur. Ent. Occas. Papers 1:12.
 39. *Rhynacus kraussi* Keifer, 1962. (Cali, Colombia).—Colombia. Calif. Dep. Agr. Bur. Ent. Ser. B—5:1.
 40. *Rhynacus globosus* Keifer, 1969. (Campinas, Sao Paulo, Brazil).—Brazil.
 U. S. Dep. Agr., A.R.S., Eriophyid Studies C—1:15.

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NEW SPECIES IN THE GENUS SERICOPHANES REUTER (HEMIPTERA: MIRIDAE)

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ABSTRACT—Five new species of *Sericophanes* are described from northern South America, **fuscus**, **nigripes**, **oscurus**, **pulidoi** and **constrictus**, and comparative notes given.

Five Neotropical species of the Pilophorini genus *Sericophanes* Reuter are described in this paper which increases the number of Neotropical species to 12. Knight (1968) recently described four species from western United States bringing the total number of species in the genus to 20.

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