





# New records of mites for Puerto Rico<sup>1</sup>

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## ABSTRACT

A checklist of 29 new records of mites for Puerto Rico is presented. Locality, hosts or habitat, date of collection, and collector is given for each record.

## INTRODUCTION

Mites constitute a very large group of small to minute animals; more than 30,000 species have been described and perhaps more than a half million more are still undescribed. Mites occur in practically all habitats in which animals and plants are found. Mites rival insects in their variations in habitats and life histories.

In Puerto Rico, except for few families and some species studied, described or listed previously, the mite fauna, in general, is still unknown. Wolcott (12) cited several species and gave references to publications on mites up to that date, most of them mites of economic importance. Fox (4, 5, 6, 7), Fox and de León (9, 10), Tamsitt & Fox (14) and Tamsitt et al. (13) have been describing and reporting species of general or medical importance from Puerto Rico. Cromroy (1), De León (2), Denmark and Muma (3) have described and reported most species of botanical economic importance. Peck (11) and Peck and Kukalova (12) reported species mostly related to bats and guano in caves.

This article reports 29 species collected by the authors from different habitats and hosts in Puerto Rico. Soil mites were collected from Berlese funnel, and animal or plant mites were collected from their hosts. Specimen slides are deposited in the senior author's collection in the Museum of the Systematic Entomology Laboratory (SEL) in Maryland or in the Acarology Laboratory in Ohio (ALO). The acarologists who identified the specimens are mentioned on the label of the corresponding slides<sup>2</sup> and in the records listed below.

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## ORDER PARASITIFORMES

## SUBORDER MESOSTIGMATA

1. AMEROSEIIDAE: *Kleemannia plumigera* Oudemans. Collected in Ciales, Rd. 163; Aug. 17, 1978 by S. Medina & E. Abreu, ex cave litter. Acc. No. PR-22-78. Det. R. L. Smiley, SEL.
2. ASCIDAE: *Asca garmani* Hurlbutt. Collected in Mayagüez, Cerro Las Mesas, Rd. 349, km 5.3, June 1975 by J. Maldonado, ex forest litter. Acc. No. I-29-75. Det. G. S. Ide, ALO.
3. ASCIDAE: *Cheiroseius* sp. Collected in Mayagüez, June-July 1975 by J. Maldonado, ex forest litter. Acc. No. I-22-75. Det. G. S. Ide, ALO.
4. LAELAPIDAE: *Pseudoparasitus domrovi* Hunter. Collected in Mayagüez, Feb. 14, 1977 by J. Maldonado, ex forest litter. Acc. No. I-1-77, Det. G. S. Ide, ALO.
5. MACROCHELIDAE: *Holostaspella* sp. Collected in Cayey, June-July, 1975 by J. Maldonado, ex forest litter. Acc. No. I-3-75. Det. G. S. Ide, ALO.
6. PODOCINIDAE: *Podocinum* sp. Collected in Mayagüez, Cerro Las Mesas, Rd. 349, km 5.3, June 1975 by J. Maldonado, ex forest litter. Acc. No. I-33-75. Det. G. S. Ide, ALO.
7. UROPODIDAE: *Clausiadinychus* sp. Collected in Cayey, June-July, 1975 by J. Maldonado, ex forest litter. Acc. No. I-2-75. Det. G. S. Ide, ALO.
8. VEIGAIIDAE: *Veigaia* cf. *uncata*. Collected in Cayey, June-July, 1975 by J. Maldonado, ex forest litter. Acc. No. I-8-75. Det. G. S. Ide, ALO.

## ORDER ACARIFORMES

## SUBORDER ACTINEDIDA

9. CHEYLETIDAE: *Cheyletus malaccensis* Oudemans. Collected in Adjuntas, April 29, 1976 by J. F. Vera, ex dry coffee cover. Acc. No. PR-26-76. Det. E. W. Baker, SEL.
10. CHEYLETIDAE: *Cheyletus cacahuamilpensis* Baker. Collected in Ciales, Rd. 163, Don Hito Cave, Aug. 17, 1978 by S. Medina & E. Abreu, ex cave litter. Acc. No. I-2-78.
11. CHEYLETIDAE: *Hemichyletia bergetonae* (Volgin). Collected in Isabela, Agric. Exp. Stn., Apr. 2, 1986 by E. Abreu, ex *Hibiscus rosa-sinensis*. Acc. No. I-11-86.
12. CHEYLETIDAE: *Hemichyletia wellsi* (De León). Collected in Isabela, Agric. Exp. Stn., Apr. 2, 1986 by E. Abreu, ex *Hibiscus rosa-sinensis*. Acc. No. I-11-86.
13. ERIOPHYIIDAE: *Eriophyes mangiferae* (Sayed). Collected in Isabela, Agric. Exp. Stn., June 16, 1986 by E. Abreu, ex *Mangifera indica*. Acc. No. I-15-86.

14. ERIOPHYIIDAE: *Tegonotus mangiferae* (Keifer). Isabela, Agric. Exp. Stn., June 16, 1986 by E. Abreu, ex *Mangifera indica*. Acc. No. I-15-86.
  15. ERYTHRAEIDAE: *Callidosoma* sp. Collected in Isabela, Agric. Exp. Stn., Mar. 13, 1985 by E. Abreu, ex *Heliothis virescens* and *Hedylopta indicata*. Acc. No. I-8-85.
  16. EUPODIDAE: *Linopodes* sp. Collected in Mayagüez, Cerro Las Mesas, Rd. 349, km 5.3, June 1975 by J. Maldonado, ex forest litter. Acc. No. I-31-75. Det. G. S. Ide, ALO.
  17. PYEMOTIDAE: *Pyemotes* sp. near *tritici* (Lagrèze-Fossat & Montagne). Collected in Juana Díaz, Fortuna Agric. Exp. Stn., Dec. 1978 by E. Abreu, ex parasitized egg mass of *Diaprepes abbreviatus*. Acc. No. I-17-78. Det. W. C. Welbourn, ALO.
  18. STIGMAEIDAE: *Apostigmaeus* sp. Collected in Ciales, Aug. 17, 1976 by S. Medina and E. Abreu, ex cave litter. Acc. No. I-2-78. Det. R. L. Smiley, SEL.
  19. TETRANYCHIDAE: *Tetranychus abacae* Banks and Pritchard. Collected in Juncos, May 24, 1976 by C. Ortiz, ex banana. Acc. No. PR-52-76. Det. E. W. Baker, SEL.
  20. TUCKERELLIDAE: *Tuckerella* sp. Collected in Isabela, Oct. 5, 1983 by E. Abreu, ex *Hibiscus rosa-sinensis*. Acc. No. I-9-83.
  21. TYDEIDAE: *Lorryia boycei* Baker. Collected in Isabela, Agric. Exp. Stn., Aug. 28, 1985 by E. Abreu, ex *Citrus* sp. Acc. No. I-17-85.
- SUBORDER ACARIDIDA
22. CHAETODACTYLIDAE: *Horstia* sp. Collected in Caguas, Nov. 21, 1978 by A. Worry, ex *Xylocopa brasilianorum*. Acc. No. PR-40-78. Det. E. W. Baker, SEL.
- SUBORDER ORIBATIDA
23. BELBIDAE: *Belba* sp. Collected in Ciales, Aug. 18, 1978 by S. Medina & E. Abreu, ex cave litter. Acc. No. PR-27-78. Det. R. L. Smiley, SEL.
  24. EREMULIDAE: *Eremulus nigriretosus* Hammer. Collected in Guánica, June-July, 1976 by J. Maldonado, ex forest litter. Acc. No. I-24-75. Det. G. S. Ide, ALO.
  25. GYMNODAMAEIDAE: *Gymnodamaeus* sp. Collected in Guánica, June-July, 1975, J. Maldonado, ex forest litter. Acc. No. I-26-75. Det. G. S. Ide, ALO.
  26. NOTHRIDAE: *Nothrus* sp. Collected in Cayey, June-July, 1975 by J. Maldonado, ex forest litter. Acc. No. I-25-75. Det. G. S. Ide, ALO.
  27. OPPIDAE: *Oppia* sp. Collected in Río Piedras, Agric. Exp. Stn., Aug. 11, 1978 by E. Abreu, ex litter. Acc. No. PR-27-78. Det. R. L. Smiley, SEL.

28. OPPIDAE: *Lanceoppia* sp. Collected in Cayey, June-July, 1975 by J. Maldonado, ex forest litter. Acc. No. I-20-75. Det. G. S. Ide, ALO.

29. THRYPOCHTHONIIDAE: *Allonothrus* sp. Collected in Cayey, June-July, 1975 by J. Maldonado, ex forest litter. Acc. No. I-7-75. Det. G. S. Ide, ALO.

#### RESUMEN

Se presenta una lista anotada de 29 especies de ácaros informados por primera vez en Puerto Rico. Para cada especie se incluye la localidad, el hospedero o hábitat, fecha de captura, el nombre del colector y el acarólogo que la identificó.

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