

# Acarology Bulletin

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A Newsletter of the SYSTEMATIC AND APPLIED ACAROLOGY SOCIETY

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## Acarological News

### 5TH SYMPOSIUM OF THE EUROPEAN ASSOCIATION OF ACAROLOGISTS

#### *Acarine Biodiversity in the Natural and Human Sphere*

Berlin, Germany, 26–30 July 2004

First Announcement

Links: <http://www.fu-berlin.de/euraac/>

On behalf of the congress committee it is a great pleasure to invite you to attend the Fifth Symposium of the EURAAC. The scientific meeting will be held at the Free University of Berlin from 26 – 30 July 2004 in a central building of the Institute of Biology.

We are pleased to host the European Acarologists and guests from other countries in Germany and in Berlin, which is on the way to a modern exciting city some years after the reunion of Berlin, of Germany and Europe. Many of you who knew Berlin before 1990 will be surprised and will enjoy the new flair, as we hope.

This first announcement will be distributed by internet, only (or on personal request). In practice, often a first circular without registration is answered by about 30 % of the definitive participants, only. So we like to cut down expenses and we will distribute to european acarologists each personally only the next Circular with registration and call for papers.

We plan to distribute the circular in second half of September, by e-mail (we have a long list of email addresses) or by letter mail. Everybody who is interested and has got a new email account or mail address within the last 4 years is asked to send me the information, and we will include you to the mailing lists.

#### *Congress format and topics*

We try to avoid parallel sessions as far as possible. The definitive congress schedule will depend on the number of lectures. We will organize scientific sessions with lectures of invited speakers and with shorter contributions, additionally there will be a poster session. The sessions on different general topics will include groups of lectures on more specialized themes and symposia on actual topics. The definitive plan will be distributed in the circular. In the general sessions we interpret the thematic frame more broadly, that is, offer your contribution also when it does not fit optimally into the thematic headers. The symposia will be organized separately and will focus to the special topics.

Provisionally, the topics for the scientific sessions and symposia are:

Functional ecology of Soil Mites and Water Mites

Mites in their Environment and Population Ecology

Soil Mites and their Interactions in the Soil Food Web

Applied Acarology

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Control of Plant Associated Mites  
Ecology of Mites Associated with Stored-products  
Mites and Ticks of Medical and Veterinary Importance  
Diseases caused by Acarine Parasites  
Structures and functions  
Functional Morphology and Anatomy (incl. Histology, Ultrastructure)  
Embryology and Juvenile Development (and an actual special theme)  
Phylogeny, Systematics, Biogeography  
Advances by Molecular Techniques and Genetics  
Solutions in Phylogenetic Systematics  
Patterns and Processes in Acarine Biogeography  
Physiology and Behaviour  
Acarine Physiology  
Reproduction and Behaviour  
Neurobiology

### **ASA ANNUAL MEETING INFORMATION**

The 2004 ASA annual meeting will be held on Sunday, November 14, 2004, as part of the Entomological Society of America annual meeting in Salt Lake City, Utah. We hope to see you there.

#### *Morning Session*

##### ASA Formal Seminar

##### Ecology and Control of the Acari

Organizer: David G. James, Washington State University, Irrigated Agriculture Research and Extension Center, 24106 North Bunn Road, Prosser, Washington 99350

8.00 am. Forty five years of phytoseiids in biological control: some perspectives.

James A. McMurtry, P.O. Box 4487, Sunriver, OR 97707

8.20 am. (withdrawn paper)

8.40 am. HIPPOs and their potential to enhance biological control of spider mites on hops. David G. James, Washington State University, Irrigated Agriculture Research and Extension Center, 24106 North Bunn Road, Prosser, Washington 99350

9.00 am. Within-plant distribution and diversity of mites associated with *Schinus terebinthifolius* (Anacardiaceae) an invasive plant in Florida. Paul D. Pratt, USDA/ARS, Invasive Plant Research Laboratory, 3205 College Ave, Fort Lauderdale, FL 33314

9.20 am. Out of sight, but not out of mites: Invasive mites and Australian ecosystems. David E. Walter, University of Alberta, Department of Biological Sciences, Z-806 Bioscience, Edmonton, Alberta, Canada T6G 2E9

9.40 am. Volatiles found on *Varroa* using SPEM fibers. Diana Sammataro, USDA, Agricultural Research Service, Carl Hayden Bee Research Center, 2000 E. Allen Rd, Tucson, AZ 85719

10.00 BREAK

10.10 am. Future prospects for tick control and Lyme disease prevention. Joseph Piesman, Chief, Lyme Disease Vector Section, CDC, PO Box 2087 Ft. Collins, CO 80522

10.30 am. Where Lyme disease is absent: Is it the tick, the vertebrate host, or just a matter of time? U. Kitron, R. Cortinas, and E. D. Walker,

10.50 am. Tick population ecology – quantitative basis for control. S. Randolph, Department of Zoology, Oxford University, South Parks Road, Oxford OX1, 3PS, UK

11.10 am. Investigations of *Ixodes pacificus* nymphs in California. Robert S. Lane, M. A. Peribanex-Lopez, and J. H. Mun, Division of Insect Biology, University of California, Berkeley, CA 94720

11.30 am. The threat of exotic ticks and tick-borne diseases to cattle and ungulate wildlife in the southern United States: Ecological factors. John E. George, A. M. James, and J. E. Freier, Knippling-Bushland US Livestock Insects Research Laboratory, US Department of Agriculture-Agricultural Research service, 2700 Fredericksburg Road, Kerrville, TX 78028-9184

#### *Afternoon Session*

ASA Submitted Papers

Current Advances in Acarology

Organizers: Douglas E. Norris, Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, 615 N. Wolfe St, Baltimore, MD 21205, and Hans Klompen, Museum of Biological Diversity, Ohio State University, 1315 Kinnear Rd, Columbus, OH 43212-1192

1:00 pm. Introductory Remarks.

1:10 pm. Evaluation of host specificity in mites of the genus *Cheyletophyes* (Acari: Cheyletidae) associated with large carpenter bees (Hymenoptera: Apidae: *Xylocopa*) using linear and non-linear multivariate statistics. Pavel B. Klimov, Andre V. Bochkov<sup>1</sup> and Barry M. OConnor<sup>2</sup>, (1)University of Michigan, Museum of Zoology, 1109 Geddes Avenue, Ann Arbor, MI, (2)University of Michigan, Museum of Zoology and Department of Ecology and Evolutionary Biology, 1109 Geddes Ave, Ann Arbor, MI

1:22 pm. Position of the family Myobiidae in the system of Prostigmata (Acari). Andre V. Bochkov<sup>1</sup>, Barry M. OConnor<sup>2</sup> and G. Wauthy<sup>1</sup>, (1)University of Michigan, Museum of Zoology, 1109 Geddes Avenue, Ann Arbor, MI, (2)University of Michigan, Museum of Zoology and Department of Ecology and Evolutionary Biology, 1109 Geddes Ave, Ann Arbor, MI

1:34 pm. Morphological adaptations associated with dispersal in the Histiostomatidae (Astigmata). Norm J. Fashing, College of William and Mary,

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Department of Biology, Williamsburg, VA and Barry M. OConnor, University of Michigan, Museum of Zoology and Department of Ecology and Evolutionary Biology, 1109 Geddes Ave, Ann Arbor, MI

1:46 pm. Oribatids in the rhizosphere of agroecosystems. D.A. Crossley, The University of Georgia, Institute of Ecology, Athens, GA

1:58 pm. Molecular markers for studying variation in a predatory mite, *Phytosiulus persimilis*. Bhanu Konakandla<sup>1</sup>, Yoonseong Park<sup>2</sup> and David C. Margolies<sup>1</sup>, (1)Kansas State University, Dept. of Entomology, 123 West Waters Hall, Manhattan, KS, (2)Kansas State University, Entomology, 123 Waters Hall, Manhattan, KS

2:10 pm. *Leptotrombidium* (Trombiculidae) and scrub typhus: a taxonomic review and preliminary phylogeny of vector and non-vector species. F. Michael McAloon, University of Connecticut, Department of Ecology and Evolutionary Biology, 75 N Eagleville Rd U-43, Storrs, CT

2:22 pm. Phylogenetics and coevolution of dermanyssoid mites. Ashley P. G. Dowling, University of Michigan, Museum of Zoology and Department of Ecology and Evolutionary Biology, 1109 Geddes Ave, Ann Arbor, MI

2:34 pm. BREAK

2:46 pm. Phylogenetic analysis of hard ticks using the calreticulin (CRT) gene. Quentin Fang, Georgia Southern University, Department of Biology, Georgia Avenue, Statesboro, GA

2:58 pm. Population genetics of hard ticks using Amplified Fragment Length Polymorphism (AFLP). Douglas E. Norris and Aimee J West, Johns Hopkins Bloomberg School of Public Health, Department of Molecular Microbiology and Immunology, 615 N. Wolfe St, Baltimore, MD

3:10 pm. Host-targeted control of the tick *Ixodes scapularis*. Kirby C. Stafford, Connecticut Agricultural Experiment Station, Department of Forestry and Horticulture, 123 Hunnington St Box 1106, New Haven, CT

3:22 pm. Pathogenicity and molecular characteristics of an entomopathogenic fungi isolated from black-legged ticks, *Ixodes scapularis* (Say). Lina B. Flor, University of Minnesota, Department of Entomology, 219 Hodson Hall, 1980 Folwell Ave, St. Paul, MN

3:34 pm. Genetic diversity of *Borrelia burgdorferi* s.l. based on sequences of rrf(5S)-rrl(23S) rRNA from various hosts and vectors in northern California. Jeom-Hee Mun, University of California Berkeley, Division of Insect Biology, 201 Wellman Hall MC 3112, Berkeley, CA and Robert S. Lane, University of California, Department of Environmental Science, Policy, and Management, Berkeley, CA

3:46 pm. Identification of a novel *Rickettsia* species in the bat tick, *Carios kelleyi* (Acari: Argasidae), collected in Iowa. Amanda D. Loftis<sup>1</sup>, James Gill<sup>2</sup>, James Keirans<sup>3</sup>, Marty Schriefer<sup>4</sup>, Marina Eremeeva<sup>1</sup> and G. A. Dasch<sup>5</sup>, (1)Centers for Disease Control and Prevention, Atlanta, GA, Viral and Rickettsial Zoonoses Branch, 1600 Clifton Rd.,

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MS-G13, Atlanta, GA, (2)University of Iowa Hygienic Laboratory, 1 road, Iowa City, IA, (3)Georgia Southern University, Department of Biology, Georgia Avenue, Statesboro, GA, (4)Centers for Disease Control and Prevention, Division of Vector-Borne Infectious Diseases, Fort Collins, CO, (5)Centers for Disease Control and Prevention, Viral and Rickettsial Zoonoses Branch, 1600 Clifton Rd, Atlanta, GA

3:58 pm. Concluding Remarks

4:03 pm. Acarology Society of America Business Meeting

## PRIZES AND AWARDS

### *Outstanding Student Paper Award*

The Acarological Society of America will hold its 2004 competition for the Outstanding Student Paper Award during the Acarology Submitted Papers Session at the annual meeting of the Entomological Society of America. Interested students should contact Sandy Allan (address below) for details. Competitors for the award must be current members of the Acarological Society of America.

### *Student Travel Award*

The Acarological Society of America will award one \$150 Travel Award to an outstanding graduate student presenting his/her research at the Acarology Submitted Papers Session of the annual meeting of the Entomological Society of America. Interested students should contact Sandy Allan (address below) for details. Competitors for the award must be current members of the Acarological Society of America.

### *Joseph A. Camin Fellowship*

This award is intended to support graduate students interested in research on the systematics of mites and ticks. The fellowship will assist students at the graduate level to attend the Acarology Summer Program at Ohio State University or an equivalent institution where they can obtain training in the systematics of acarines. The award is made annually and the value will depend on the interest earned by the endowment. Click here for details.

## Book review

G.J. DE MORAES, J.A. MCMURTRY, H.A. DENMARK & C.B. CAMPOS (2004) **A revised catalog of the mite family Phytoseiidae** (*Zootaxa* 434) Magnolia Press, Auckland. 494 pp.; 30 cm. ISBN 1877354244 (Paperback) US\$89.10 (postage extra); ISBN 1877354252 (Online edition) US\$49.40 (contact [zootaxa@mapress.com](mailto:zootaxa@mapress.com) for information/order).

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The mite family Phytoseiidae are the most common predatory mites found on plants. Many species play important roles in regulating mite and insect prey populations on agricultural crops and forest trees and some species are widely used in biological control of mite pests and also insect pests (e.g. thrips). Because of this, research on the Phytoseiidae is very active. During 1960–1994, over 4000 papers/books were published worldwide on Phytoseiidae ((Kostiainen & Hoy 1996).

This book is a revised and updated catalog of Moraes *et al.* (1986), which included about 1500 described species. During the last 15 years, significant progresses have been made in phytoseiid taxonomy. This updated catalog includes some 2250 species. As in the last catalog, it provides references to descriptions and redescriptions of species, synonymies, host plants and recorded world distributions. The last two of these are not only of great interest to taxonomists, but also to applied entomologists.

The genera are listed alphabetically within the three subfamilies: Amblyseiinae, Phytoseiinae and Typhlodrominae. Species are listed alphabetically within each genus. For each species the following information is given: scientific name, authority, year of publication, page where description starts; type locality, type habitat, synonymies (and corresponding references), other names and combinations with genera and subgenera under which the species was mentioned (and corresponding first references), country and references, references providing morphological information about the species, in addition to the original description; references to breeding studies that corroborate the distinction between two or more species, references providing lists of phytoseiid species in a region, including the species under consideration, based on published information and providing no new information on other items treated in this catalog, and notes/comments, mostly indicating reidentifications of specimens.

There is an extensive bibliography. A useful index to species is included, as well as an index to geographical distribution.

An interesting aspect of this catalog is that it provides a list and index to species and genera, yet has made no taxonomic/nomenclatorial decisions on names included in the catalog. Thus no new combinations are proposed and no new names are proposed for homonymies. Although not ideal, this is sensible in that many phytoseiid taxonomists disagree on the generic classification of the family.

This is an excellent contribution to phytoseiid literature and should be a very addition to personal or institutional libraries of students of systematic and applied acarology.

## References

- Kostiainen, T. & Hoy, M.A. (1996) *The Phytoseiidae as biological control agents of pest mites and insects. A bibliography*. Monograph 17. University of Florida, Agricultural Experiment Station, Institute of Food and Agricultural Sciences, USA, 355 pp.

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Moraes, G.J. de, McMurtry, J.A. & Denmark, H.A. (1986) *A catalog of the mite family Phytoseiidae. References to taxonomy, synonymy, distribution and habitat.* EMBRAPA - DDT, Brasilia, Brazil, 353 pp.

Zhi-Qiang Zhang

Landcare Research, Auckland, New Zealand

## Contents of journals

### Experimental and Applied Acarology

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2004, Volume 32, Issue 1–2

- Williams, M.E. De C., Kravar-garde, L., Fenlon, J.S. & Sunderland, K.D. (2004) Phytoseiid mites in protected crops: the effect of humidity and food availability on egg hatch and adult life span of *Iphiseius degenerans*, *Neoseiulus cucumeris*, *N. californicus* and *Phytoseiulus persimilis* (Acari: Phytoseiidae). **32**(1–2), 1–13.
- Gotoh, T., Yamaguchi, K. & Mori, K. (2004) Effect of temperature on life history of the predatory mite *Amblyseius (Neoseiulus) californicus* (Acari: Phytoseiidae). **32**(1–2), 15–30.
- Faraji, F., Bruin, J. & Bakker, F. (2004) A new method for mite extraction from leaf samples. **32**(1–2), 31–39.
- García, N. (2004) Efforts to control mites on Iberian ham by physical methods. **32**(1–2), 41–50.
- Musyoki, J.M., Osir, E.O., Kiara, H.K. & Kokwaro, E.D. (2004) Comparative studies on the infectivity of *Theileria parva* in ticks fed in vitro and those fed on cattle. **32**(1–2), 51–67.
- Tsunoda, T., Kasuga, S. & Amano, H. (2004) Estimation of the density of nymphs of the bush tick, *Haemaphysalis longicornis* (Acari: Ixodidae), by the catch effort method. **32**(1–2), 69–78.
- Labruna, M.B., Pinter, A. & Teixeira, R.H.F. (2004) Life cycle of *Amblyomma cooperi* (Acari: Ixodidae) using capybaras (*Hydrochaeris hydrochaeris*) as hosts. **32**(1–2), 79–88.
- Leonovich, S.A. (2004) Phenol and lactone receptors in the distal sensilla of the Haller's organ in *Ixodes ricinus* ticks and their possible role in host perception. **32**(1–2), 89–102.

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- Guilfoile, P.G. & Packila, M. (2004) Identification of four genes expressed by feeding, female *Ixodes scapularis* including three with sequence similarity to previously recognized genes. **32**(1–2), 103–110.
- Healy, J.A.E., Cross, T.F. & Healy, A. (2004) The  $\beta$ -Gpdh polymorphism in the tick *Ixodes ricinus*: similar diurnal trends in genotypic composition in Irish and Swedish population samples. **32**(1–2), 111–118.
- Boué, O., Farnós, O., González, A., Fernández, R., Acosta, J.A., Valdés, R., González, L.J., Guanche, Y., Izquierdo, G., Suárez, M., Domínguez, I., Machado, H., Rodríguez, M., Leonart, R. (2004) Production and biochemical characterization of the recombinant *Boophilus microplus* Bm95 antigen from *Pichia pastoris*. **32**(1–2), 119–128.
- Madden, R.D., Sauer, J.R. & Dillwith, J.W. (2004) A Proteomics Approach to Characterizing Tick Salivary Secretions. **32**(1–2), 129.
- Madden, R.D., Sauer, J.R. & Dillwith, J.W. (2004) A Proteomics Approach to Characterizing Tick Salivary Secretions. **32**(1–2), 131–141.
- Instructions for Authors. **32**(1–2), 143–149.

2004, Volume 32, Issue 3

- Danielsen, C., Hansen, L.S., Nachman, G. & Herling, C. (2004) The influence of temperature and relative humidity on the development of *Lepidoglyphus destructor* (Acari: Glycyphagidae) and its production of allergens: a laboratory experiment. **32**(3), 151–170.
- Otranto, D., Milillo, P., Mesto, P., De Caprariis, D., Perrucci, S. & Capelli, G. (2004) *Otodectes cynotis* (Acari: Psoroptidae): examination of survival off-the-host under natural and laboratory conditions. **32**(3), 171–180.
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- Landeros, J., Guevara, L.P., Badii, M.H., Flores, A.E. & Pámanes, A. (2004) Effect of different densities of the twospotted spider mite *Tetranychus urticae* on CO<sub>2</sub> assimilation, transpiration, and stomatal behaviour in rose leaves. **32**(3), 187–198.
- Tønnesen, M.H., Penzhorn, B.L., Bryson, N.R., Stoltz, W.H. & Masibigiri, T. (2004) Displacement of *Boophilus decoloratus* by *Boophilus microplus* in the Soutpansberg region, Limpopo Province, South Africa. **32**(3), 199–208.
- Tomassone, L., Camicas, J.-L., Pagani, P., Diallo, O.T., Mannelli, A. & De Meneghi, D. (2004) Monthly dynamics of ticks (Acari: Ixodida) infesting N'Dama cattle in the Republic of Guinea. **32**(3), 209–218.

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Jasik, K. & Buczek, A. (2004) Development of the salivary glands in embryos of *Ixodes ricinus* (Acari: Ixodidae). **32**(3), 219–230.

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Skoracka, A. & Kuczyski, L. (2004) Demography of the cereal rust mite *Abacarus hystrix* (Acari: Eriophyoidea) on quack grass. **32**(4), 231–242.

Yano, S. (2004) Does *Tetranychus urticae* (Acari: Tetranychidae) use flying insects as vectors for phoretic dispersal?. **32**(4), 243–248.

Van Leeuwen, T., Stillatus, V. & Tirry, L. (2004) Genetic analysis and cross-resistance spectrum of a laboratory-selected chlorfenapyr resistant strain of two-spotted spider mite (Acari: Tetranychidae). **32**(4), 249–261.

Van Tilborg, M., Sabelis, M.W. & Roessingh, P. (2004) State-dependent and odour-mediated anemotactic responses of the predatory mite *Phytoseiulus persimilis* in a wind tunnel. **32**(4), 263–270.

Noronha, A.C.D.S. & De Moraes, G.J. (2004) Reproductive compatibility between mite populations previously identified as *Euseius concordis* (Acari: Phytoseiidae). **32**(4), 271–279.

Goldarazena, A., Aguilar, H., Kutuk, H. & Childers, C.C. (2004) Biology of three species of *Agistemus* (Acari: Stigmaeidae): life table parameters using eggs of *Panonychus citri* or pollen of *Malephora crocea* as food. **32**(4), 281–291.

Fernández-Ruvalcaba, M., Preciado-De-La Torre, F., Cruz-Vazquez, C. & Garcia-Vazquez, Z. (2004) Anti-tick effects of *Melinis minutiflora* and *Andropogon gayanus* grasses on plots experimentally infested with *Boophilus microplus* larvae. **32**(4), 293–299.

Uilenberg, G., Thiaucourt, F. & Jongejan, F. (2004) On molecular taxonomy: what is in a name? **32**(4), 301–312.

### **International Journal of Acarology**

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2004 Vol. 30, No. 1

Coyle, D.R. & Amrine, Jr. J.W. (2004) New collection records and host range of the cottonwood leafcurl mite, *Tetra lobulifera* (Keifer) (Acari: Eriophyidae), in the USA. **30**(1), 3–8.

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- Kawashima, M. & Amano, H. (2004) Seasonal occurrence and association of a gall-forming eriophyid mite and predacious phytoseiid mites (Acari: Eriophyidae, Phytoseiidae) in Japan. **30**(1), 9–15.
- Husband, R.W. & OConnor, B.M. (2004) A new species of *Chrysometobia* Regenfuss (Acari: Podapolipidae) from *Ceralces* sp. (Coleoptera: Chrysomelidae) from Tanzania, with a key to species of *Chrysometobia*. **30**(1), 17–23.
- Khaustov, A.A. & Husband, R.W. (2004) Two new species of *Eutarsopolipus* Berlese (Acari: Podapolipidae) from *Harpalus smaraglinus* and *Acinopus picipes* (Coleoptera: Carabidae) from Ukraine. **30**(1), 25–32.
- Smith, I.M. & Cook, D.R. (2004) Description of *Piona lapointei* n. sp. (Acari: Hydrachnida: Pionidae), the first species of water mite reported from the Hawaiian Islands. **30**(1), 33–36.
- Fain, A. & Bochkov, A.V. (2004) A new species of the genus *Myocoptes* Claparede, 1869 (Acari: Myocoptidae) parasitizing *Pitymys pinetorum* (Rodentia: Cricetidae) from the USA. **30**(1), 37–39.
- Brown, W.A. (2004) Two new species of chiggers (Acari: Trombiculidae) in *Ascoschoengastia* and *Microtrombicula* from hyrax (Hyracoidea) in Serengeti, Tanzania, Africa. **30**(1), 41–44.
- Gotoh, T., Kitashim, Y. & Adachi, I. (2004) Geographic variation of esterase and malate dehydrogenase in two spider mite species, *Panonychus osmanthi* and *P. citri* (Acari: Tetranychidae) in Japan. **30**(1), 45–54.
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- Ansaloni, T. & Perring, T.M. (2004) Biology of *Aceria guerreronis* (Acari: Eriophyidae) on queen palm, *Syagrus romanzoffiana* (Arecaceae). **30**(1), 63–70.
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- News **30**(1), 81–87.
- Index **30**(1), 88.

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**Journal of the Acarological Society of Japan**

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2003, Volume 12, Issue 2

Ohkubo, N. (2003). A revision of Oppiidae and its allies (Acarina: Oribatida) of Japan 2. Genus *Cycloppia*. **12(2)**, 73.

Mizutani, Y., S. Shimano & J. Aoki (2003) A new species of *Hermanniella* (Acari: Oribatida: Hermanniellidae) from forest soil in Tokyo. **12(2)**, 87.

Kojima, T., M. Sakuma, M. Fukui & Y. Kuwahara (2003) Spatial orientation of the mould mite, *Tyrophagus putrescentiae* (Schrank) (Acarina: Acaridae), in the computer-programmed olfactory field. **12(2)**, 93.

Suzuki, H., S. Yamamoto & S. Noda (2003) A new trombiculid mite of the genus *Doloisia* from Kagoshima and Oita prefectures, Japan (Prostigmata: Trombiculidae). **12(2)**, 103.

Ohashi, K., Y. Kotsubo & A. Takafuji (2003) Distribution and overwintering ecology of *Tetranychus takafujii* (Acari: Tetranychidae), a species found from Kinki district, Japan (In Japanese). **12(2)**, 107.

Shimano, S. & R. A. Norton (2003) Is the Japanese oribatid mite *Euphthiracarus foveolatus* Aoki, 1980 (Acari: Euphthiracaridae) a junior synonym of *E. cribrarius*. **12(2)**, 115.

Publications on Japanese mites and ticks (In Japanese). **12(2)**, 127.

Membership list. **12(2)**, 151.

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