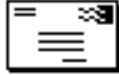


# Acarology Bulletin

Online at: [www.nhm.ac.uk/hosted\\_sites/acarology/saas/ab.html](http://www.nhm.ac.uk/hosted_sites/acarology/saas/ab.html)

A Newsletter of the **SYSTEMATIC AND APPLIED ACAROLOGY SOCIETY**

## President's message



Dear colleagues:

I am delighted to report that vol. 4 (1999) of *Systematic and Applied Acarology* is now published. The full content of this volume can be found on page 29 of this issue. I would like to use this opportunity to thank Dr **Anne Baker** (The Natural History Museum, London, UK) and Dr **Ting-Kui Qin** (Australian Quarantine and Inspection Service) for their careful reading the final version of the volume.

I would also like to thank Dr **Qinghai Fan** (Fujian Agricultural University, Fuzhou, China) for agreeing to be the **Production Editor** of SAA from year 2000. He will be responsible for page-setting the journal and producing the camera-ready copy for our printer.

Zhi-Qiang Zhang



## *In this issue.....*

- 25 President's Message
- 26 Acarology and Member News
- 26 Election of SAAS Officers
- 26 Prasad's visit to China
- 26 New publisher: Exp. Appl. Acarol.
- 27 African Acarology Association
- 27 Renjie Hu moved to California
- 28 Zhimin Zhu's project on Acaroidea
- 28 Yanxuan Zhang's visit to Japan
- 28 New books; Book review
- 29 Contents of Journals
- 35 New members
- 35 Address change for members
- 35 Acknowledgement
- 36 Application form for SAAS

SAAS Officers & Executive Committee	
President	Zhi-Qiang Zhang (New Zealand)
Secretary	Xiaoyue Hong (China)
Treasurer	Ting-Kui Qin (Australia)
Executive Committee Members	Lairong Liang (China)
	Y. S. Chow (Taiwan)
	Chengfeng Mo (Hong Kong)
	Zhimo Zhao (China)
	Long-Shu Li (China)
	Renjie Hu (USA)

## Acarology Bulletin Editors

Editor:

Dr. Renjie Hu (USA)

Assistant editors:

Dr. Xiaoyue Hong (China)

Dr. Ting-Kui Qin (Australia)

Dr. Zhi-Qiang Zhang (New Zealand)

## Acarology and Member News

### **Election of Officers of SAAS for 2000-2003**

Since the last call for nominations of candidates for SAAS Officers 2000-2003 in the last issue of *Acarology Bulletin*, SAAS received nominations from only 3 members. The lack of participation in the nomination and election of new SAAS office made it impossible for the process to continue. Therefore the office of 1996-1999 will need to continue its service for the period 2000-2003, provided that the current officials are willing to continue to serve the society. Zhi-Qiang Zhang will contact each officers to confirm this.

The current officers will also need to select three more members for the Executive Committee to reflect the representation of members from different parts of the world. The announcement will be made in the next issue of *Acarology Bulletin*.

**Checklist of Chinese Mites and Ticks:** As announced earlier in the *Acarology Bulletin*, this book will be edited and published by SAAS this year in memory of the late Professor Jie-Liu Xin on his 90th Anniversary and also in celebration of the achievement of Chinese acarologists in the understanding of acarine fauna of China. Specialists of various families who are interested in contributing to this volume should contact the editors as soon as possible: Zhi-Qiang Zhang, Lairong Liang and Tinghuan Wen.

**Dr. V. Prasad**, editor of *International Journal of Acarology*, visited Beijing from March 3-6, 1999. Requested by Dr. Prasad, three acarologists in Beijing, Prof. Dunxiao Hu of Beijing Agricultural University, Prof. Huifu Wang of Institute of Zoology, Academia Sinica, and Miss Jing Shen of Beijing Normal University, organized a workshop. Dr. Prasad gave an introduction of what IJA has done to improve the development of Acarology during the past 25 years. He also expressed his willingness to help the acarological research in developing countries (China and India etc.). For example, it will be free of page charge for Chinese acarologists to publish papers in IJA, and he will also supply some fellowship to support young researchers on Acarology in China. Dr. Prasad is enthusiastic and is willing to do his best to enhance the development of acarology in China. (Wang Huifu, Shen Jing)

**Dr. Leo van der Geest**, editor of *Experimental & Applied Acarology*, informed that the journal is now published by Kluwer Academic Publishers in Dordrecht, The Netherlands. Formerly, the journal was published by Chapman & Hall, but this publisher has now been taken over by Kluwer. For the journal, this transition will cause only minor changes. You may have noticed that there was a short delay in the publication schedule since January 1999 and now the publication is almost back to the normal schedule again. The number of pages has been increased to 94 per issue (was 64

pages), ensuring quick publication of your manuscripts.

Manuscripts should be sent in four-fold to the editors: tick-related manuscripts should be sent to

Dr. Frans Jongejan  
Faculty of Veterinary Medicine  
University of Utrecht  
P.O. Box 80.165  
3508 TD Utrecht  
The Netherlands  
e-mail: F.Jongejan@wxs.nl

All other manuscripts should be sent to  
Drs L.P.S. van der Geest and/or Jan Bruin  
Section Population Biology  
University of Amsterdam  
Kruislaan 320  
1098 SM Amsterdam  
The Netherlands  
E-mail addresses:  
geest@bio.uva.nl  
leo.geest@wxs.nl and bruin@bio.uva.nl.

**Dr. Eddie A. Ueckermann** sent the following message to the acarology network: I must have informed you earlier of the newly founded *African Acarology Association* but, became so busy that I almost forgot to do it. To address the issue of cooperation amongst acarologists, in this case African acarologists, my colleague Charnie Craemer came up with the idea of starting an Acarology Working Group in Africa. When Dr. Prasad of IJA asked me to arrange a conference in South Africa to celebrate the 25th birthday of the journal, we used this opportunity to organize the *First African Acarology*

*Symposium*, with the idea to establish an African Acarology Working Group. At this symposium, participants made a rather quick decision to form the group. We were fortunate to have Enrico de Lillo (Italy), Don Griffiths (UK), Glen Needham (USA), and Dr. Prasad and his wife attended the symposium.

The symposium took place in November 1998 in Pretoria and 55 delegates attended. Most were from South Africa, however, Prof. K. El Kammah, Prof. L. Oyoun and Dr. Z. Soliman from Egypt, Drs. Sammy Kubasu, Markus Knapp and Esther Sebitosi, from Kenya and Dr. Enala Mwase from Zambia also attended it. The *African Acarology Association* was established during the business meeting, with Prof. P.D. Theron (Potchefstroom University) as chairman, I am the secretary, Prof. El Kammah is the representative of Northern Africa, Dr. Sammy Kubasu of Eastern and Central Africa, and Dr. Enala Mwase of Southern Africa. Prof. Agbede of Nigeria was nominated as representative of Western Africa afterwards and he accepted. The next symposium will be held in 2001 in either Cairo, Egypt or Nairobi, Kenya.

**Dr. Renjie Hu**, the Editor of *Acarology Bulletin*, has accepted a permanent position as public health biologist with the California State Department of Health Services, Vector-borne Disease Section. He will supervise and coordinate vector-borne disease control and prevention programs in

southern California. Effective as of June 1, 1999, he can be reached at:

California Department of Health Services  
2151 Convention Center Way, Suite 218B  
Ontario, CA; 91764  
USA

Tel: (909) 937-3440  
Fax: (909) 937-3456  
E-mail: drrenjie@hotmail.com  
rhu@dhs.ca.gov

**Yanxuan Zhang** of Fujian Academy of Agricultural Sciences (Fuzhou, China) recently attended the *Fourth International Symposium of Population Dynamics of Plant-inhabiting Mites* in Kyoto, Japan. She gave an invited presentation on the “*Biology and Population Dynamics of Mites on Bamboo Forests in Fujian*” in the symposium “Acarology in Asia”. She is the only participant from mainland China. Another SAAS member, Dr Chyi-Chen Ho of Taiwan Agricultural Research Institute also attended the meeting. While in Japan, Yanxuan Zhang also visited the laboratory of Dr Y. Saito of Hokkaido University in Sapporo and discussed about plans for collaborative research on the social behaviour of bamboo mites in Fujian.

**Bin Xia and Pingyu Wang** of Nanchang University (Jiangxi, China) informed us that Prof **Zhimin Zhu** of Biology Department of Nanchang University was recently awarded a grant by the National Natural Science Foundation of China for a project entitled “Studies on the Systematics of Acaroidea”. Prof Zhu

will study systematically the Chinese fauna of Acaroidea, aiming to produce a catalogue of Chinese species and a classification system for Chinese Acaroidea. It is anticipated that this study will provide a basis for the control of harmful species and the utilization of beneficial species of Acaroidea in China.

---

### New Book

**Taxonomic revision of the genus *Dinogamasus* Kramer (Acari: Mesostigmata: Laelapidae)** by L. Lundqvist. It is published in the series of *Entomologica Scandinavica Supplement* as No. 54. Price: U.S. \$40 plus postage. Bank checks, personal check and postal giro are accepted; Eurochecks are not accepted by Swedish banks.

Orders could be sent to: Scandinavian Entomology, Ltd. to either of the following addresses:  
Mail: VstervÅng 28, S- 247 34 S.  
Sandby, Sweden  
e-mail: Lennart.Cederholm@zool.lu.se  
Fax: +46/46 579 69.

### Book Review

**Fauna of Russia & Neighbouring Countries. Arachnoidea Volume IV, issue 5. Ixodid Ticks of Subfamily Amblyomminae.** 1997. edited by N.A. Filippova. Nauka,

publishing House, Sankt-Petersburg. ISBN 5-02-026081-9 436pp. (in Russian).

This monograph is one of the *Fauna of Russia*” in the field of ticks. Other two books edited by the same author were published formerly: Family Argasidae (1996) and Ixodid Ticks of Subfamily Ixodinae (1977).

This book consists of a General Part and a Taxonomic Part. The General Part deals with morphology, evolution, classification, phylogeny, distribution and ecology of ixodid ticks of the subfamily Amblyomminae.

The Taxonomic Part includes descriptions of the external structure of female, male and immature stages. Many organs and their systems traditionally used in taxonomy have been reinvestigated by the author. The method of scanning electron microscopy has permitted the examination of the structure of many organs. These organs are apparently species-specific in their shape, size and topography in all active stages of the given species. The section contains keys for identification and detailed differential diagnoses of all taxa (2 tribes, 6 genera, 16 subgenera and 37 species) for the entire fauna of the former Soviet Union by female, male, nymph and larva.

The book ends with a detailed English summary. This monograph includes 245 figures and 44 photograph plates. The total number of references listed in this book is 468, 197 of which are of foreign authors.

Zaijie JIANG  
Beijing Normal University  
Beijing 100875, CHINA

## Contents of Journals

### Systematic & Applied Acarology Volume 4, July 1999

#### *Physiology, Toxicology & Molecular Biology*

Effects of juvenile hormone III on *Haemaphysalis longicornis* (Acari: Ixodidae). **J.-Z. Liu et al.** pp 3-7

Resistance and cross-resistance of *Tetranychus viennensis* (Acari: Tetranychidae) to 14 insecticides and acaricides. **H.-M. Shen.** pp 9-14

Comparative studies on molecular techniques for detecting *Rickettsia tsutsugamushi* in *Leptotrombidium deliense* and mice. **Z.-Y. Xi et al.** pp 15-20

Morphometric and DNA analysis of midgut digestive cells of *Ixodes sinensis* after infesting rabbits. **Q.-X. Zhu et al.** pp 21-30

#### *Biocontrol, Ecology & Behaviour*

An improved method for predicting duration of blacklegged tick (*Ixodes scapularis*) attachment. **C. Kelly et al.** pp. 31-38

Clusters of ectoparasitic gamasid mites and their small mammal hosts in different habitat regions in western Yunnan. **X.-G. Guo** pp. 39-48

Species-abundance distribution and expected species estimation of the gamasid mite community in western Yunnan, China. **X.-G. Guo** pp 49-56

Biology of *Typhlodromus bambusae* (Acari: Phytoseiidae), a predator of *Schizotetranychus nanjingensis* (Acari: Tetranychidae) on bamboos in Fujian, China. **Y.-X. Zhang** et al. pp. 57-63

Predation of *Amblyseius longispinosus* (Acari: Phytoseiidae) on *Schizotetranychus nanjingensis* (Acari: Tetranychidae), a spider mite injurious to bamboo in Fujian, China. **Y.-X. Zhang** et al. pp. 63-67

Life table studies of *Eotetranychus kanakitus* (Acari: Tetranychidae) at different temperatures. **L. Zhou** et al. 69-74

Biology of *Schizotetranychus nanjingensis* (Acari: Tetranychidae) with reference to effects of temperature on and importance of nests to its survival and development. **Y.-X. Zhang** et al. pp 75-82

Effects and mechanisms of simulated acid rain on plant-mite interactions in agricultural systems. I. The direct effects of simulated acid rain on carmine spider mite, *Tetranychus cinnabarinus*. **Z.-M. Zhao** et al. pp 83-90.

Studies on aphid host selection by parasitic larvae of *Allothrombium ovatum* (Acari: Trombidiidae). **H.-J. Zhang** et al. pp 91-95.

### *Systematics, Morphology & Evolution*

The genus *Proprioseius* Chant (Acari: Phytoseiidae), with descriptions of two new species. **G.J. De Moraes & H.A. Denmark** pp 97-102

A new species group of the genus *Amblyseius*, with descriptions of two new species (Acari: Phytoseiidae) from China. **W.-N. Wu & J.-F. Ou** pp 103--110.

Notes on the development of *Afronothrus incisivus* (Acari: Oribatida) with new distribution records from Asia and Australia. **H.-F. Wang** et al. pp 111-120

Three new species of oribatid mites from Tibet, China (Acari: Oribatida). **J. Shen** et al. pp. 121-126

A new species of *Steneotarsonemus* from Inner Mongolia, China (Acari: Tarsonemidae). **J.-Z. Lin & A.-P. Liu** pp 127-130

A new species of *Chrysomelobia* (Acari: Podapolipidae) from Central America. **G.J. De Moraes** et al. pp 131-136

Two new eriophyid mites (Acari: Eriophyidae) from Zapote tree *Matisia cordata* (Bombacaceae) from Colombia. **D. Návía** pp 137-142

Three new species of Phyllocoptinae (Acari: Eriophyidae) from China. **S.-G. Wei** et al. pp 143-147

A new species of the genus *Cheletonella* (Acari: Cheyletidae) from China and a key to the species. **B. Xia et al.** pp 149-151

New species of *Ledermuelleriopsis* Willmann and *Pseudostigmaeus* Wood from China (Acari: Prostigmata: Stigmaeidae). **Q.-H. Fan & X. Liu** pp 153-158

A new larval *Leptus* Latreille (Acari: Erythraeidae) from Iran. **A. Saboori & A. Atamehr** pp 159-163

New taxa and tentative rearrangement of Walchiidae stat. n. with remarks on Trombiculoidea *nec* Welbourn, 1991 (Acari: Acariformes). **T.-H. Wen** pp 165-178

*Traudia* sg. n., an intranasal sand-mite subgenus of *Walchia* with description of a new species (Acariformes:Walchiidae). **T.-H. Wen** pp 179-183

Revision of sand-mite tribe Intermedialiini Wen, 1984 with redescription of *Wuella quadriseta* Wang *et al.*, 1997 and key to species of the tribe (Acariformes: Walchiidae). **T.-H. Wen** pp 185-196

#### Short Notes

Description of *Allothrombium shirazicum* adult (Acari: Trombidiidae) from Iran. **A. Saboori** pp 197-198

Biology of *Allothrombium shirazicum* Zhang (Acari: Trombidiidae) in Garmsar, Semnan province, Iran. **A. Saboori & K. Kamali** pp 199-200

#### Acarologia

**Vo. 39 No. 4 (1999)**

**Moraza, M.L. & E.E. Lindquist.** Coprozerconidae, a new family of zerconoid mites from North America (Acari: Mesostigmata: Zerconoidea). 291

**Doby, J.M.** Contribution to knowledge of the biology of *Ixodes (Trichotoixodes) pari* Leach (= *I. frontalis* (Panzer)) (Acari: Ixodidae), a bird-specific tick. 315

**Rosso de Ferradas, B.** New *Arrenurus* (Acari: Hydrachnidia: Arrenuridae) from Parana River Basin (Argentina). 327

**Cook, D.R.** New genera and species of Notoaturinae (Acari, Aturidae) from South Africa. 335

**Behan-Pelletier, V.** Ceratozetoidea (Acari: Oribartida) of lowland tropical rainforest, La Selva, Costa Rica. p 349

**Palacios, J.G., G. Rios & M. Vazquez.** A new Mexican *Scapheremaeus* (Oribatei: Cymbaeremaeidae) from tropical forests. p 383

#### Experimental and Applied Acarology

Vol. 23, No. 2, 1999

**Houck, M.A.** Review Phoresy by *Hemisarcoptes* (Acari: Hemisarcoptidae) on *Chilocorus* (Coleoptera):

Coccinellidae): influence of subelytral ultrastructure. 97

**Krips, O.E., Kleijn, P.W., Willems, P.E.L., Gols, G.J.Z., and Dicke, M.** Leaf hairs influence searching efficiency and predation rate of the predatory mite *Phytoseiulus persimilis* (Acari: Phytoseiidae). 119

**Boot, W. J., Calis, J. N.M., Beetsma, J., Hai, D. M., Lan, N. K., Toan, T. V., Trung, L.Q., and Minh, N.H.** Natural selection of *Varroa jacobsoni* explains the different reproductive strategies in colonies of *Apis cerana* and *Apis mellifera*. 133

**Waite, G.K.** New evidence further incriminates honey-bees as vectors of lychee erinose mite *Aceria litchii* (Acari: Eriophyiidae). 145

**Nielsen, P.-S.** The impact of temperature on activity and consumption rate of moth eggs by *Blattisocius tarsalis* (Acari: Ascidae). 149

**Aguirre, D.H., Viñabal, A.E., and Guglielmone, A.A.** The life cycle of *Amblyomma neumanni* Ribaga, 1902 (Acari: Ixodidae) in the laboratory. 159

**Alekseev, A. N., Dubinina, H. V., Rijpkema, S. G.T. and Schouls, L. M.** Sexual transmission of *Borrelia garinii* by male

*Ixodes persulcatus* ticks (Acari, Ixodidae). 165

**Fernandez-Ruvalcaba, M., Cruz-Vazquez, C., Solano-Vergara, J. and Garcia-Vazquez, Z.** Anti-tick effects of *Stylosanthes humilis* and *Stylosanthes hamata* on plots experimentally infested with *Boophilus microplus* larvae in Morelos, Mexico. 171

Vol. 23, No. 3, 1999

**Witte, H. and Dööring, D.** Review Canalized pathways of change and constraints in the evolution of reproductive modes of microarthropods. 181

**Castagnoli, M. and Simoni, S.** Effect of long-term feeding history on functional and numerical response of *Neoseiulus californicus* (Acari: Phytoseiidae). 217

**Auger, P., Tixier, M.-S., Kreiter, S. and Fauvel, G.** Factors affecting ambulatory dispersal in the predaceous mite *Neoseiulus californicus* (Acari: Phytoseiidae). 235

**Kaufman, W.B., Sloley, B.D., Tatchell, R.J., Zbitnew, G.L., Diefenbach, T.J. and Goldberg, J.I.** Quantification and cellular localization of dopamine in the salivary gland of the ixodid tick *Amblyomma hebraeum*. 251

**Pichon, B., Mousson, L., Figureau, C., Rodhain, F. and Perez-Eid, C.** Density of deer in relation to the prevalence of *Borrelia burgdorferi* s.l. in *Ixodes ricinus* nymphs in Rambouillet forest, France. 267

**Cruz-Vazquez, C. and Garcia-Vazquez, Z.** Seasonal distribution of *Rhipicephalus sanguineus* ticks (Acari: Ixodidae) on dogs in an urban area of Morelos, Mexico. 277

Volume 23, Issue 4, April 1999

**Paul C. van Rijn, Lynell K. Tanigoshi.** The contribution of extrafloral nectar to survival and reproduction of the predatory mite *Iphiseius degenerans* on *Ricinus communis*. pp. 281-296

**Peter Schausberger.** Juvenile survival and development in *Euseius finlandicus*, *Typhlodromus pyri* and *Kampimodromus aberrans* (Acari: Phytoseiidae) feeding on con and heterospecific immatures. pp. 297-307

**Anke Essig, Heinz Rinder, Rainer Gothe, Monika Zahler.** Genetic differentiation of mites of the genus *Chorioptes* (Acari: Psoroptidae) pp. 309-318

**S.K. Raut, S.S. Bhattacharya.** Pests and diseases of betelvine piper beetle and their natural enemies in India pp. 319-325

**P. Zeman, M. Daniel** Mosaic pattern of *Borrelia* infection in a continuous population of the tick *Ixodes ricinus* (Acari: Ixodidae). pp. 327-335

**Augustín Estrada peña.** Geostatistics as predictive tools to estimate *Ixodes ricinus* (Acari: Ixodidae) habitat suitability in the Western Palearctic from AVHRR satellite imagery. Augustín Estrada peña. pp. 337-349

**Ronald B. Davey, John E. George, James S. Hunter III, Philippe Jeannin.** Evaluation of a [our on formulation of fipronil against *Boophilus annulatus* (Acari: Ixodidae) under natural south Texas field conditions. pp. 351-364

Volume 23, Issue 5, May 1999

**Anastasia Tsagkarakou, Maria Navajas, Fran is Rousset, Nicole Pasteur.** Genetic differentiation in *Tetranychus urticae* (Acari: Tetranychidae) from greenhouses in France. pp. 365-378

**James D. Fry.** The role of adaptation to host plants in the evolution of reproductive isolation: negative evidence from *Tetranychus urticae* Koch. pp. 379-387

**Peter Schausberger.** Predation preference of *Typhlodromus pyri* and *Kampimodromus aberrans* (Acari: Phytoseiidae) when offered con and

heterospecific immature life stages. pp. 389-398

**Jacek Radwan, Marzena**

**Rysinska.** Effect of mating frequency on female fitness in *Caloglyphus berlesei* (Astigmata: Acaridae) pp. 399-409

**Kotaro Mori, Yutaka Saito,**

**Takane Sakagami** Effects of the nest web and female attendance on survival of young in the subsocial spider mite *Schizotetranychus longus* (Acari: Tetranychidae). pp. 411-418

**Kouichi Goka** The effect of patch size and persistence of host plants on the development of acaricide resistance in the two spotted spider mite *Tetranychus urticae* (Acari: Tetranychidae) pp. 419-427

**Dimitri S. Koveos, George D.**

**Broufas** Feeding history affects the response of the predatory mite *Typhlodromus kerkirae* (Acari: Phytoseiidae) to volatiles of plants infested with spider mites. pp. 429-436

Volume 23, Issue 6, June 1999

**Jacek Dabert, Serge V. Mironov**

Origin and evolution of feather mites (Astigmata) pp. 437-454

**Wojciech Witalinski** Sperm competition in the Acari pp. 455-465

**E. Palevsky, H. Reuveny, O.**

**Okonis, U. Gerson** Comparative behavioural studies of larval and adult stages of the phytoseiids (Acari: Mesostigmata) *Typhlodromus athiasae* and *Neoseiulus californicus*. pp. 467-485

**Fernando Garc Mar Jose Enrique Gonzalez Zamora** Biological control of *Tetranychus urticae* (Acari: Tetranychidae) with naturally occurring predators in strawberry plantings in Valenica, Spain. pp. 487-495

**David J. Skirvin, Michael De**

**Courcy Williams** Differential effects of plant species on a mite pest (*Tetranychus urticae*) and its predator (*Phytoseiulus persimilis*): implications for biological control. pp. 497-512

**F.J. Van der Lingen, L.J. Fourie, D.J. Kok, J.M. Van Zyl** Biology of *Ixodes rubicundus* ticks under laboratory conditions: observations on oviposition and egg development pp. 513-522

Volume 23, Issue 7, July 1999

**Serge V. Mironov, Jacek Dabert**

Phylogeny and co speciation in feather mites of the subfamily Avenzoariinae (Analgoidea: Avenzoariidae) pp. 525-549

**P.D. Pratt, P. Schausberger, B.A.**

**Croft** Prey food types of *Neoseiulus fallacis* (Acari:Phytoseiidae) and literature versus experimentally derived prey food estimates for five phytoseiid species. pp. 551-565

**N.M. Greco, G.G. Liljeström,**

**N.E. Sánchez** Spatial distribution and coincidence of *Neoseiulus californicus* and *Tetranychus urticae* (Acari: Phytoseiidae, Tetranychidae) on strawberry. pp. 567-579

**W.B. Strong, D.H. Slone, B.A. Croft** Hops as a metapopulation landscape for tetranychid phytoseiid interactions: perspectives of intra and interplant dispersal pp. 581-597

**B.A. Croft, H. K. Luh, P. Schausberger** Larval size relative to larval feeding, cannibalism of larvae, egg or adult female size and larval–adult setal patterns among 13 phytoseiid mite species. pp. 599-610

## New members

Kazak, Cengiz  
Department of Plant Protection  
Agricultural Faculty  
Cukurova University  
01330 Adana  
Turkey  
e-mail: kazak@pamuk.cu.edu.tr  
Specialization: Phytoseiidae,  
Tetranychidae, biological control and IPM  
in greenhouses.

Solhoy, Torstein  
Zoological Institute  
University of Bergen  
Allegat 41  
N5007 Bergen  
Norway  
E-mail: torstein.solhoy@zoo.uib.no

Specialization: Taxonomy and ecology of oribatid mites, esp. in Arctic, High Northern Mountains and Himalaya.

Vella, Antoine  
Institute of Agriculture  
University of Malta  
Msida  
Malta  
E-mail: avel2@um.edu.mt  
Specialization: Mites of stored products:  
systematics and ecology

## Address change for members

Dr Renjie HU  
California Department of Health Services  
2151 Convention Center Way, Suite 218B  
Ontario, CA; 91764  
USA  
Tel: (909) 937-3440  
Fax: (909) 937-3456  
E-mail: drrenjie@hotmail.com

## Acknowledgements

*SAAS thanks the following members  
for their financial contributions  
of \$10 or more to SAAS:*

Huiqin Dong, China  
Marco Pagani, Italy  
Torstein Solhoy, Norway  
Bin Xia, China  
Hongren Yao, USA  
Zhi-Qiang Zhang, New Zealand  
Zhimin Zhu, China

# Systematic & Applied Acarology Society

Application for membership

*Systematic and Applied Acarology Society* (SAAS) aims at promoting the development of acarology in China and fostering cooperation among acarologists in China and other parts of the world. Anyone interested in the study of mites and ticks is welcome to join SAAS. There is no membership fee. A voluntary contribution of US\$10 is welcome. Members receive free of charge SAAS newsletter (*Acarology Bulletin*) and can publish free of charge in the journal *Systematic and Applied Acarology* (SAA). Members are advised to subscribe to SAA.

Name: \_\_\_\_\_ Title (Prof / Dr / Mr / Mrs / Miss /Ms) \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: Business: \_\_\_\_\_ Home: \_\_\_\_\_  
FAX : \_\_\_\_\_ E-mail: \_\_\_\_\_

Degrees:	Institution	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____

Research Interest: \_\_\_\_\_

Please send the completed application form to :

Dr. Zhi-Qiang Zhang, President SAAS  
Landcare Research  
Private Bag 92-170  
Auckland  
New Zealand

or  
Dr. Xiaoyue Hong, Secretary SAAS  
Dept. of Plant Protection  
Nanjing Agricultural University  
Nanjing, Jiangsu 210095, CHINA

ACAROLOGY BULLETIN (ISSN 1361-8091) is a newsletter of the Systematic and Applied Acarology Society (c/o Dept. of Entomology, The Natural History Museum, London SW7 5BD, UK). It is published in four issues in 1998 (January, April, July and October) and is distributed free to members of SAAS. All correspondence should be sent to the Editor Dr. Renjie HU, California Department of Health Services, 2151 Convention Center Way, Suite 218B, Ontario, CA; 91764, USA; Tel: (909) 937-3440; Fax: (909) 937-3456; E-mail: drenjie@hotmail.com. Non-member subscribers should order the journal from Magnolia Press (5922, 123rd Avenue S.E., Bellevue 98006, USA). Subscription rate for vol. 4 in 1999 is US\$10 plus \$6 for postage.