



Acarology Bulletin



Newsletter of the **SYSTEMATIC & APPLIED ACAROLGY SOCIETY**

President's message



Dear colleagues:

I am pleased to present to you the first issue of the second volume of *Acarology Bulletin*. Due to many other duties of SAAS, I have decided to end my editorship of *Acarology Bulletin*. Dr. Renjie HU of Iowa State University has kindly agreed to be the editor of the *Bulletin* in 1997. I am sure you will all join me in wishing him great success in editing the newsletter of SAAS in 1997. *Acarology Bulletin* is a member service newsletter. It provides acarological news and information to members. It is also a forum for members to discuss issues related to our science. If you have any news, views and other contributions that you wish to publish in *Acarology Bulletin*, please submit them to Dr. HU or any of the assistant editors.

It is proposed that the First Symposium of SAAS should be held in summer 1998 in Shanghai, China. Please let me or Dr. Hong know if you can attend.

□ □

Zhi-Qiang Zhang



In this issue.....

- 1 Message from the President
- 2 Acarology and member news
- 4 New books
- 4 Book reviews
- 7 SAAS Business Meeting minutes
- 7 Poem: The name of a mite
- 8 Contents of Internat. J. Acarol.
- 8 Contents of Acarologia
- 9 Contents of Syst. Appl. Acarol.
- 10 Contents of Exp. & Appl. Acarol.
- 11 Contents of J. Acarol. Soc. Japan
- 11 New members of SAAS
- 12 Application form for SAAS
- 12 About the *Acarology Bulletin*

SAAS Officers & Executive Committee	
President□	Zhi-Qiang Zhang (UK)
Secretary□	Xiaoyue Hong (China)
Treasurer	Ting-Kui Qin (New Zealand)
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 (New Zealand)

Dr. Zhi-Qiang Zhang (UK)

Acarology and member news

International Course on Phytophagous and Predatory Mites: Identification, Biology and Control:

This short course will be held in Serdang, Malaysia during 11-15 March 1997. It is organized by the Malaysian Agricultural Research and Development Institute (MARDI) in collaboration with CAB International Institute of Entomology (London, UK) and is co-sponsored by Australian Centre for International Agricultural Research (Canberra, Australia). This is an introductory course to mites of agricultural importance for trainees in Southeast Asian Countries. There are funds to support 8 students from developing countries. Any interested should send an application to:

Dr. Ahmad Zamzam Mohamed

CABI Asia Regional Office, P.O. Box 11872, 50760 Kuala Lumpur, Malaysia (FAX 03 255 1288; E-mail: cabi-aro@cabi.org)

or

Dr. A. Sivapragasam

Strategic, Environment & Natural Resources Research Centre, MARDI, P.O. Box 12301, 50774 Kuala Lumpur, Malaysia (FAX 03 948 7639; e-mail: sivasam@mardi.my)

An application should include your name, address, phone number, FAX number and e-mail address (if any) together with a brief description of your current job and must be received **no later than 10 February 1997**.

The 3rd Asia-Pacific Conference of Entomology

will be held in November, 1997 in Taichung, Taiwan. There will be a session on Acarology. For further information, please contact:

Dr. Chyi-Chen HO or Dr. Paul K.C. LO
Department of Applied Zoology
Taiwan Agricultural Research Institute
Wufeng, Taichung
Taiwan

"A Checklist of Insects From Henan" was published by China Agricultural Sci-Tech Publishing House in late 1993. One hundred and sixteen acarine species in twenty-eight families and sixty-eight genera were reported from central Henan Province in the book. The recorded families are as follows: Ixodidae, Tetranychidae, Phytoseiidae, Eriophyidae, Tenuipalpidae, Acaridae, Cheyletidae, Cunaxidae, Tarsonemidae, Ascidae, Penthaleidae, Glycyphagidae, Histiostomidae, Chortoglyphidae, Pyroglyphidae, Demodicidae, Sarcoptidae, Psoroptidae, Oribatullidae, Haemogamasidae, Laelapidae, Ameroseiidae, Dermanyssidae, Macrochellidae, Trombiculidae, Pediculoidae, Parasitidae and Trombidiidae.

[This item was contributed by Xiaoyue HONG]

Dr. Daochao JIN of Guizhou Agricultural University was recently promoted to Full Professor. He continues to work on water mites of China.

Qin Hai FAN successfully defended his Ph.D. thesis at Fujian Agricultural University in late 1996. He recently received a major grant from the National Science Foundation of China to continue his work on the Raphignathoidea of China.

Yingcai DONG of Northwest Agricultural University was recently promoted to Associate Professor. He continues to work on the ecology of mites and insects associated with cotton.

Yanxuan ZHANG of Institute of Plant Protection, Fujian Academy of Agricultural Sciences was awarded a special grant from Fujian Government to study the biology and control of spider mites on bamboo in Fujian Province. Two species of spider mites have become important pests on bamboo in Fujian, causing major damages. The studies on their biology and control are in progress and results will be reported soon.

Prof. Guofan Deng passed away : We sadly learned that Prof. Guofan Deng passed away in Beijing China, on Nov. 26, 1996, following an illness. He was 76. Prof. Deng graduated from Beijing Furen University in 1945 and received his master's in 1947. He participated actively in the establishment of Institute of Zoology, Academia Sinica and had been a research professor until his death. He was one of the founding fathers of acarology in China and contributed significantly to the development of medical, agricultural, and soil acarological research in China. He was an editor or a member of editorial board of a number of journals. During his career, Prof. Deng published more than 60 articles and books. Recently, he was nominated a member to the Advisory Committee of the SAAS. His untimely death is a great loss to entomology and acarology in China as well as to the SAAS. He will be remembered by many of us for his contributions to the field and his friendship.

Neoleiopothrix alocasiae, a new mite pest, has been found in budlet of witches broom of Longan in Guangdong Province, South China. Longan is a typical southern China fruit and has been attacked by the witches broom disease, which was reported to be transmitted by an insect. The researchers found that the mite hides in non-developed leaflet of top bud and floweret of panicle. Among the old aged Longan trees, the mite was found on 76.89% witches broom; while on the newly developed Longan trees, the mite was found on 90.13% witches broom. This indicates that the mite is somewhat related to the symptom of witches broom. This was reported by Dengping HE et al. *Natural Enemies of Insects*, 1996, 18: 44.

Anoetus laboratorium (Hughes) and *Pterolichus obtusus* Robin have been reported for the first time in mainland China by Professor Dunqing WANG, Mr. Guocheng HUANG, Mr. Jiexiang CHEN from Fujian Province. The first species was found on the fruit fly and the second on the feather of Chinese francolin (partridge).

Mr. Shibing CAI, a researcher at Suixi County Agricultural Research Institute in Anhui, has improved the method for determining the mite resistance to miticides. His method is as follows. Let the mites rest on a piece of filter tissue by using a fine brush. Use a glassslide bound with adhesive tape to touch the mites. The mites are then treated with the miticides for 5 seconds. More in *Entomological Knowledge*, 33(6): 355-356.

Eutetranychus orientalis has caused great damages to *Euongmus japonicus*, a main ornamental tree in Tai'An City, Shandong in recent years. About 40% trees were attacked by the mite. The injured leaves lost the colour and the damaged plants grew slowly, which greatly influenced the ornamental value. [Plant Protection, 22(5): 29-30].

Tetranychus urticae Koch has occurred in some orchards in north China in recent years and has spreaded gradually. Because of its polyphagy and high resistance to miticides, it replaced other spider mites and became the dominant mite pest in some orchards. According to Mr. Yushu ZHOU, Chunshu PU and Chilin LIU, the mite is currently distributed in Beijing; Hebei (Changli); Gansu (Tianshui, Lanzhou) and Shandong (Linyi, Rizhao, Qixia, Zhaoyuan, Laiyang, Laizhou, Pingdu, Penglai, Longkou and Changdao). The authors warned that plant protection personnels should be aware of this and should take actions to prevent the spread of the mite. [Plant Protection, 22(5): 51-52].

Eight mushroom mites have been recently identified from Fujian Province: *Tyrophagus putrescentiae* (Shrank), *Histiostoma feroniarum* Dufour, *Tarsonemus confusus* Ewing, *Cheletomorpha lepidopterorum* Shaw, *Siteroptes kreeboni* (Wicht), *S. muscarius* Martin, *S. portatatus* Martin and *Pseudopygmephorus quadratus* Ewing. [Xiansen ZENG, Yuqing HUANG & Jianzhen LIN, 1996, *Entomological Journal of East China*, 5(1): 107-111].

□ □ [The above six items were contributed by Xiaoyue HONG]

NEW BOOKS



Book Review



Eriophyoid mites of the United States. (1996) by Baker, E.W., Kono, T., Amrine, J.W., Jr., Delfinado-Baker, M.D., & Stasny, T.N. Indira Publishing House, USA, ISBN: 0-930337-15-8. US\$ 166.00

Urban entomology: Insect and mite pests in the human environment. W.H. Robinson (1996). London: Chapman & Hall. 430 pp. ISBN 0-412-60705-6. £24.99.

Keys to the world genera of the Eriophyoidea. (1996) by Amrine, J.W., Jr. Indira Publishing House, USA, ISBN: 0-930337-16-6. US\$ 96.00

Les Acariens Oribates (1996) by J. Trave, H. M. Andre, G. Taberly & F. Bernini. viii+110 pages. ISBN 2-87257-002-0, published jointly by AGAR Publishers and the Societe internationale des Acarologues de Langue francaise (SIALF).

This introductory textbook, written in French, is richly illustrated with many SEM photographs, drawings by Grandjean and diagrams. The book begins with a chapter on techniques, followed by two main parts. The first part is devoted to morphology and classification and offers a digest of Grandjean's observations. The second part describes the biology, biogeography and ecology of oribatids. This work is intended for experts in acarology and soil biologists, as well as students, teachers and researchers.

Price: BEF 580 (handl. & surface post. included) (USD 20.00, North America only)
Address orders to your usual supplier, or to:

AGAR Publishers
39, Venelle du Bois de Saras
B-1300 Wavre
BELGIUM

Further information available by e-mail from agar@infoboard.be.

[This book was announced by the co-author H. Andre on the Acarology e-mail list]

Keys to the world genera of the Eriophyoidea. (1996) by Amrine, J.W., Jr. Indira Publishing House, USA, ISBN: 0-930337-16-6. US\$ 96.00

Because of the differences in the research techniques and understanding of the eriophyoid mites, there were three classification systems prior to the new system erected by Professor James W. Amrine, Jr. in this new book. Professor Shevchenko (1974) divided the eriophyoid mites into three superfamilies: Phytoptoidea, Trisetioidea and Eriophyoidea. This system was and is still used in Russia and some east European countries. The system established by Newkirk and Keifer in 1975 has been widely accepted by many eriophyoid researchers including Chinese ones in the world. In this system, the eriophyoid mites were divided into three families, Nalepellidae, Eriophyidae and Rhyncaphytopitidae, and each family was further divided into several subfamilies. The father of the modern eriophyoid mites, Professor Jan Boczek, and Dr. Shevchenko and Dr. Davis (1989) proposed a system which classified the eriophyoid mites into five families: Ashieldophidae, Nalepellidae, Phytoptidae, Eriophyidae and Diptilomiopidae. The system was not as popular as the one by Newkirk and Keifer and was not very different from the previous system.

The new system established by Professor James W. Amrine Jr. in his new book divided the eriophyoid mites into three families: Phytoptidae, Eriophyidae and Diptilomiopidae. The Phytoptidae consists of five subfamilies: Nalepellinae, Phytoptinae, Sierraphytopitinae, Novophytopitinae and a new subfamily Prothricinae. Nalepellinae was further divided into three tribes: Trisetacini, Nalepellini and Pentasetacini; and Sierraphytopitinae two tribes: Sierraphytopitini and Mackiellini. The Eriophyidae consists of six subfamilies: Ashieldophyinae, Aberoptinae, Nothoptinae including Colopadacini and Nothopodini, Ceciophyinae including

Cecidophyini and Colomerini, Eriophyinae including Diphoptini, Eriophyini and Acerini, Phyllocoptinae including Acaricalini, Calacarini, Phyllocoptini and Anthocoptini tribes. The Diptilomiopidae was divided into Diptilomiopinae and Rhyncaphyoptinae. This system is similar to the Newkirk and Keifer's system in structure. However the new system covers the progresses of recent eriophyoid studies and provides a very detailed classification. New subfamilies and new tribes are of great importance in helping the classification of the eriophyoid mites and in improving the old system which had mistakes in describing the morphology. For example, the author told me that there were some mistakes in the description of the Ashieldophyidae by the original author in a personal communication.

The book provides detailed keys to the world known genera arranged according to the new system. The key is the main part of the book and is accompanied by very meticulous representative illustrations. This arrangement certainly helps the readers to understand the characters of the tiny eriophyoid mites which cause difficulties in observation.

The synopsis of the Eriophyoidea (p. 131-143) gives information on type genus of each family, subfamily and tribe, type species of each each genus and the original sources. The eriophyoid genera part (p. 143-165) provides us with information on the host, locality, etymology, type species and the original resource of each genus. This kind of information is very helpful for users.

In my opinion, this is a very well prepared book and very useful tool for acarologists, especially for eriophyoid specialists in the world. The system and keys will be widely noticed and used.

References

Boczek, J. H., Shevchenko, V. G. & Davis, R. (1989). Generic keys to world fauna of Eriophyoid mites (Acarida: Eriophyoidea). Warsaw, Warsaw Agricultural University Press, 192 pp.

Newkirk, R. A. & Keifer, H. H. (1975) In: Mites Injurious to Economic Plants. Berkeley, University of California Press. Pp.562-587.

Shevchenko, V. G. (1974). The current state of nomenclature of Tetrápodili (Acari). Plant Protection, (12): 37-38.

Xiaoyue HONG

Department of Plant Protection
Nanjing Agricultural University
Nanjing, Jiangsu 210095, China

Book Review

Acari and Human Diseases. Ed. by MENG, Yangchun, LI, Chaopin & LIANG, Guoguang. (1995) China Science and Technology University Press, Hefei. 395 pp. Hard cover. ISBN 7-312-00611-6/R. 26. [In Chinese].

Several general books on acarology have been published in China during the last 15 years (Xin 1984, 1988; Li & Li 1988; Deng et al. 1989; Chen & Ma 1992). There are also a few books on agricultural acarology (Jiangxi University 1984; Kuang 1986; Xin 1988). General texts on medical and veterinary acarology, however, are lacking, except a monograph on ticks and diseases (Chen 1983). **Acari and Human Diseases** fills this gap and provides a comprehensive treatment of medical and veterinary acarology.

This book is the joint effort of 15 Chinese experts of medical and veterinary acarology. The text is divided into nine chapters based on taxonomic groups of medical and veterinary importances: 1, General consideration; 2, Tick and diseases; 3, Gamasid mites and diseases; 4, Chigger mites and diseases; 5, Sarcoptic mites and scabies; 6, Demodicid mites and diseases; 7, Acarid mites and diseases; 8, Dust mites and diseases; 9, Pyemotid mites and other mites. There are two indexes: one for Chinese names and the other for Latin names.

Chapter 1 is a detailed introduction of medical and veterinary acarology with discussions of the history of acarology, the relationships between the Acari and human kind, the Acari and human diseases, the biology of medical and veterinary mites, the epidemiology, diagnosis and control of mite transmitted diseases. I find the section on the history and developments of acarology in China very interesting and informative. Prof Meng gave a summary of five symposia on acarology held in China during 1963-1991.

Chapters 2-9 are similar in structure and each covers more or less the following topics on a major group of mites of medical and veterinary importance: external morphology, internal anatomy, systematic account of important species (dignosis, key, distribution), biology, relation to diseases, control, and techniques for study (collecting, rearing, and preparing specimens for study). Each of these chapters is amply illustrated and ends with a list references.

Each chapter is a comprehensive review of a group of mites. The reviews are based on the research published in China and in the world. The length of each chapter varies considerably. For example, chapter 3 on gamasid mites is most extensive and consists of 80 pages of text and illustrations, about 1/5 of the entire book, whereas the last chapter is fewer than 10 pages.

The lists of references are extensive. For example, the list at the end of chapter 3 include 165 papers, 109 of which were published by Chinese acarologists. The total number of references listed in the book amounts to 773. The only Chinese book with a larger list than this is that of Chen and Ma (1992) which covers Chinese acarology in general.

The two indexes are extensive in coverage, but they are merely a small dictionary of Chinese-English (Latin) and English (Latin)-

Chinese) terms in medical and veterinary acarology. They could have been much more useful had page numbers been added.

Chapter 7 on acarid mites and chapter 8 on dust mites overlap quite a lot and it would make more sense to combine them into one chapter. The selection of authors could be more comprehensive. For example, many leading specialists of chigger mites (e.g. Prof. Tinghuan WEN, Prof. Dunqing WANG) are not contributors of the chapter on these mites. In general this book is a very useful contribution to medical and veterinary acarology in China.

References

- Chen, G.-S. (1983) *An Introduction to Ticks and Diseases*. Beijing, People's Health Press. 279 pp.
- Chen, X.-B. & Ma, E.-P. (1992) *Researches of Acarology in China*. Chongqing, Chongqing Press. 170 pp + 15 plates. (in English)
- Deng, G.-F., Wang, H.-F., Xin, J.-L., Wang, D.-Q, Wu, W.-N. & Wang, X.-Z. (1989) *Essentials of Chinese Acari*. Beijing, Science Press. 240 pp.
- Jiangxi University (ed) (1984) *Agricultural Mites of China*. Shanghai, Shanghai Science & Technology Press. 406 pp.
- Kuang, H.-Y. (1986) *Agricultural Acarology*. Beijing, Agriculture Press. 290 pp.
- Li, L.-S. & Li, Y.-R. (1988) *Acarology*. Chongqing, Chongqing Press. 520 pp.
- Xin (1984) *Outlines of Acarology*. Beijing, Higher Education Press.
- Xin, J.-L. (1988) *Applied Acarology*. Shanghai, Fudan University Press. 222 pp.
- Xin, J.-L. (1988) *Agricultural Acarology*. Beijing, Agriculture Press. 466 pp..

Zhi-Qiang ZHANG
International Institute of Entomology

Systematic & Applied Acarology Society Business Meeting Minutes

A business meeting of the SAAS was held on Oct. 29, 1996 at Fudan University, Shanghai, China. Participants included Zhi-Qiang Zhang of International Institute of Entomology, Lairong Liang, Qianhong Wu, Chenye Hu, Huiqing Dong of Fudan University, Tinghuan Wen of Shanghai Medical University, Xiaozu Wang, Decheng Ding of Shanghai Institute of Entomology, Enpei Ma and Peifang Fan of Shanghai Agricultural College, and Xiaoyue Hong of Nanjing Agricultural University. A variety of issues concerning the society and its journal, Systematic and Applied Acarology, was discussed during the meeting and participants unanimously agreed the followings:

1. The SAAS decided

#1 To establish an Advisory Committee formed by mainly Chinese acarologists who have contributed significantly to the development of acarology in China and are currently holding no posts from the society. Meeting participants nominated Guofan Deng, Tinghuan Wen, Minghua Qiu, Dunqing Wang, Yiming Gu, Yangchun Meng, Zaijie Jiang, Xiaozu Wang, Enpei Ma, Peifang Fan, Suigong Yin, Haiyuan Kuang, Huifu Wang, and Weinan Wu as members of the committee. In addition, the society will also select renowned acarologists overseas as members.

#2 To hold its first International Conference in Shanghai, in summer 1998.

#3 To accept group (organization) membership and sponsor membership

#4 To purchase a stamp bearing the emblem (Logo) of the society.

2. Systematic and Applied Acarology

#1 Paper submission: Manuscripts on Agricultural Acarology should be sent to

Prof. Liang Lairong of Fudan University and those on Medical Acarology to Prof. Wen Tian Huan of Shanghai Medical University. [Papers originated from outside mainland China should be sent to Zhi-Qiang Zhang of the International Institute of Entomology].

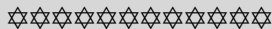
#2 Reprints: 30 copies of reprints will be provided to the author(s).

#3 Advertisement: The society encourages members to arrange some commercial advertisements for the journal to increase revenue for its production.

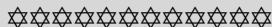
#4 Journal Exchange: It was agreed that SAAS should exchange our journal with related journals in China and elsewhere. SAAS now has an exchange agreement with Acarological Society of Japan.

3. Workshop

Workshop is considered one of the quick and effective ways for training acarologists. If possible, the society will conduct a workshop on acarology every other year in China.



POEM



The Name of A Mite

Typhlodromus occidentalis
Metaseiulus occidentalis
Galendromus occidentalis
 All Nesbitt's *occidentalis*

Typhlodromus cucumeris
Amblyseius cucumeris
Neoseiulus cucumeris
 Simply Oudemans' *cucumeris*

Taxonomists' disagreements
 Biologists' puzzlements

- Zhi-Qiang Zhang

Current contents of acarological journals

International Journal of Acarology
Vol. 22, No. 3 September, 1996

Smiley, R.L., Frost, W.E. & Gerson, U. A revision of the subfamily Tegopalpinae, with the description of two new genera and five new species (Acari: Tenuipalpidae). 167-180.

Fain, A. & Estebanes, M-L. New fur mites of the family Listrophoridae (Acari: Astigmata) from Mexico. 181-186.

Desch, C.E., Jr. *Demodex nycticeii*: a new species of hair follicle mite (Acari: Demodicidae) from the evening bat, *Nycticeius humeralis* (Chiroptera: Vespertilionidae). 187-191.

Husband, R.W. & Eidelberg, M. A new species of *Eutarsopolipus* (Acari: Podapolipidae) from *Trichognathus marginipennis* (Coleoptera: Carabidae) from Brazil. 193-197.

Ochoa, R. *Nasutitarsonemus alvuventris* spec. nov. (Acari: Tarsonemidae) associated with hispine beetles (Coleoptera: Chrysomelidae) in Indonesia. 199-202.

Ochoa, R. & OConner, B.M. A new genus of Tarsonemidae (Acari: Heterostigmata) associated with an archid bee, *Euglossa* sp. (Hymenoptera: Apidae) in Brazil. 203-207.

Ochoa, R., OConner, B.M. & Klompen, J.S.H. A new genus and species of tarsonemidae (Acari: Heterostigmata) associated with a fruit bat, *Cynopterus nusatenggara* (Chiroptera: Pteropodidae) on Lombok Island, Indonesia. 209-213.

Hubard, C.K. & Fashing, N.J. *Carpoglyphus nidicolus* - a new species of Carpo-glyphidae (Acarina: Astigmata) inhabiting the nests of swallows. 215-220.

Hatzinikolis, E.N. & Panou, H.N. *Aegyptobia meyeriae* sp. nov. of Tenuipalpidae (Acari: Tetranychidae) from Greece. 221-224.

Acarologia
Vol. 37, No. 2, 1996

R. B. Halliday. Comments on the type species of the genus *Trigonuropoda* Trägårdh 1952 (Acarina: Uropodidae). 75-81.

F. M. Momen & L. Lundqvist. Corticolous mites in Southern Sweden; new and unrecorded species of the genus *Tydeus* (Acari: Prostigmata: Tydeidae) and a key to species of southern Sweden. 83-96.

H. M. André. Two new mites of the rare families Barbutiidae and Linotetraniidae (Acari), from the Namib desert. 97-106.

E. N. Hatzinikolis & H. N. Panou. Three new species of *Bryobia* (Acari, Tetranychidae) from fruit trees in Greece. 107-113.

L. N. Monetti & N. A. Fernandez. Within-tree distribution of spider mites (Acari: Tetranychidae) in sprayed apple trees of Buenos Aires Province, Argentina. 115-120.

W. Boehle. Contribution to the morphology and biology of larval *Panissellus thienemanni* (Viets, 1920) (Acari: Parasitengonae: Hydrachnidia). 121-125.

C. Perez. Redescription of *Fainalges annulifer* (Trouessart, 1899) with descriptions of the ontogenetic series. 127-131.

L. Miko & J. Travé. *Hungarobelba* n. fam., with a description of *Hungarobelba pyrenaica* n. sp. (Acarina, Oribatida). 133-155.

Acarologia is published quarterly in France. The editor is Prof. Yves Coineau, Acarologia, 61, Rue de Buffon, F-75005, Paris, France.
Phone: +33-40-937-577.
E-mail: acarolog@cimrs1.mnhn.fr

Acarologia
Vol. 37, No. 3, 1996

Systematic & Applied Acarology
Forthcoming papers in Vol. 2, 1997

W. T. Atyeo. Jean Gaud, 1908-1996. 163.

G. D. Ekpenyong. The affect of climate on the seasonal activity and abundance of *Amblyomma variegatum* (Fabricius, 1794) (Acarina: Ixodida) on trade cattle in Ibadan, Nigeria. 165-172.

E. Zhioua, R. A. Lebrun, P. W. Johnson & H. S. Ginsberg. Ultrastructure of the haemocytes of *Ixodes scapularis* (Acari: Ixodidae). 173-179.

L. N. Monetti & N. A. Fernandez. Differences in European red mite infestation (*Panonychus ulmi* (Koch)) in three apple tree varieties of a sprayed apple orchard in Argentina. 181-187.

P. J. A. Pugh. Using artificial substrata to monitor how cryptofaunal Acari colonize littoral algae on sub-Antarctic South Georgia. 189-200.

A. Wohltmann. On the life cycle and parasitism of *Johnstoniana errans* (Johnston, 1852) (Acari: Prostigmata: Parasitengonae). 201-209.

T.-h. Wen, Q.-y. Tian, Y. Guan & W.-l. Wang. First record of Apoloniinae in China – *Straelensia tiani* sp. n. with a revised diagnosis of the genus *Straelensia* (Acariformes: Leeuwenhoekidae). 211-215.

K.-W. Huang & J. Boczek. Some eriophyoid mites on coniferous plants from high mountains in Taiwan (Acari: Eriophyoidea). 217-227.

N. Ohkubo. Some oppiid species (Acari: Oribatida) from Chichijima Island in Bonin Islands, with notes on morphological terms of Oppiidae. 229-245.

□ □ continued right bottom

Hu, R.-j & Hyland, K.E. Human babesiosis in the United States: a review with emphasis on its tick vector.

Lin, Jianzhen. A new species of the genus *Scirula* from Fujian, China (Acari: Cunaxidae).

Goldarazena, A. & Zhang, Z.-Q. First record of larval *Grandjeanella* (Acari: Erythraeidae) from Heteroptera and description of a new species

Liu, J.-Z, Jiang, Z.-J., Yin, C.-M., Zou, B.-X., Sun, R.-Y. & Guan, X.-C. Evidence for the existence of juvenile hormone synthesized by the synganglion of *Haemaphysalis longicornis* (Acari: Ixodidae).

C. H. W. Flechtmann & D. L. Q. Santana . A preliminary note on mites on corn in Brazil with redescrptions of *Catarhinus tricholaenae* and *Oligonychus zaeae* (Acari: Eriophyidae, Tetranychidae).

Liu, Z.-J., Shi, S.-Z., Wang, D.-H., Yang, Y.-S., Zhang, X.-P. & Luo, Y.-Q. Infection rates of *Borrelia burgdorferi* in ticks in Gansu, China.

D. N. M. Ferreira & C. H. W. Flechtmann. Two new phytophagous mites from *Arachis pintoi* from Brazil.

Acarologia Vol. 37, No. 3, 1996 continued....

E. Gordeeva, R. Niemi & A. D. Petrova-Nikitina. A new species, *Sphaerochthonius spectabilis* sp. n., of Sphaerochthoniidae (Acarina, Oribatida) from a termite nest (*Anacanthotermes ahngerianus* Juc.) in the southwestern Turkmenistan desert. 247-253.

Experimetal & Appllied Acarology
Vol. 20, No. 9., September 1996

Kabir, K.H., Chapman, R.B. & Penman, D.R. Miticides bioassay with spider mites (Acari: Tetranychidae): effect of test design and sample size on the precision of lethal concentration estimates. 483

Herron, G., Jiang, L. & Spooner-Hart, R. A laboratory-based method to measure relative pesticide and spray oil efficacy against broad mite, *Polyphagotarsonemus latus* (Banks) (Acari: Tarsonemidae). 495.

Ji, G., Izraylevich, S., Gazit, S. & Gerson, U. A sex-specific tri-trophic-level effect in a phoretic association. 503.

Scheuer, H., Schol, H., Gobel, E. & Gothe, R. Morphology of the foveal glands and foveae dorsales in male *Hyalomma truncatum* and *Rhipicephalus evertsi mimeticus* ticks (Acari: Ixodidae) before and during feeding. 511.

Ginsberg, H.S. & Zhioua, E. Nymphal survival and habitat distribution of *Ixodes scapularis* and *Amblyomma americanum* ticks (Acari: Ixodidae) on Fire Island, New York, USA. 533.

Vol. 20, No. 10., October 1996

Wohltmann, A., Wendt, F-E. & M. Waubke. The life cycle and parasitism of the European grasshopper mite *Eutrombidium trigonum* (Hermann 1804) (Prostigmata: Parasitengona: Microthrombidiidae), a potential agent for biological control of grasshoppers (Saltatoria). 545.

Li, J. & Hoy, M.A. Adaptability and efficacy of transgenic and wild-type *Metaseiulus occidentalis* (Acari: Phytoseiidae) compared as part of a risk assessment. 563.

Duffield, G.A. & Bull, C.M. Host location by larvae of the reptile tick, *Amblyomma vikirri* (Acari: Ixodidae). 575.

Experimetal & Appllied Acarology
Vol. 20, No. 11., November 1996

Salomone, N., Frati, F. & Bernini, F. Investigation on the taxonomic status of *Steganacarus magnus* and *Steganacarus anomalus* (Acari: Oribatida) using mitochondrial DNA sequences. 607-615.

Nazzi, F. & Milani, N. The presence of inhibitors of the reproduction of *Varroa jacobsoni* Oud. (Gamasida: Varroidae) in infested cells. 617-623.

Fielden, L.J. & Rechav, Y. Survival of six species of African ticks in relation to saturation deficits. 625-637.

James, A. & Oilver, J.H. Jr. Vitellogenin concentrations in the haemolymph and ovaries of *Ixodes scapularis* ticks during vitellogenesis. 639-647.

Gern, L. et al. Dynamics of *Borrelia burgdorferi* infection in nymphal Ixodex ricinus ticks during feeding. 649-658.

Madder, M. et al. Inheritance of weight in *Rhipicephalus appendiculatus* ticks (Acari: Ixodidae) in the laboratory. 659-665.

Continued from right bottom

Gaspar, A.R.M.D., Joubert, A.M., Crause, J.C. & Neitz, A.W.H. Isolation and characterization of an anticoagulant from the salivary glands of the tick, *Ornithodoros savignyi* (Acari: argasidae). 583.

Norval, R.A.I., Sutherst, R.W. & Kerr, J.D. Infestation of the bont tick *Amblyomma hebraeum* (Acari: Ixodidae) on different breeds of cattle in Zimbabwe. 599.

Experimental & Applied Acarology is published by Chapman & Hall (2-6 Boundary Row, London SE1 8HN, UK). Editorial enquiries to: Dr. L.P.L. van der Geest, Section Population Biology, University of Amsterdam, Kruislaan 320, 1098 SM Amsterdam, The Netherlands.

Journal of the Acarological Society of Japan**Vol. 5, No. 2, November 25, 1996**

Takafuji, A., T. Yokotsuka, K. Goka and H. Kishimoto. Ecological performance of the spider mite, *Tetranychus okinawanus* Ehara (Acari, Tetranychidae), a species newly described from Okinawa Islands (1). 75-81.

Mochizuki, M. and A. Takafuji. Effect of photoperiod and temperature on the diapause termination of the Kanzawa spider mite, *Tetranychus kanzawai* Kishida (Acari: Tetranychidae). 83-88.

Gotoh, T., A. Takafuji and K. Gomi. Tetranychid mites of Okinawa Island (Acari: Tetranychidae). 89-94.

Fujimoto, K. An analysis of the seasonal activity of *Ixodes monospinosus* adults (Acari: Ixodidae) observed under experimental conditions of outdoors. 95-98.

**List of new members**

continued from right bottom

WEI, Xiuyu 魏喜玉
Medical and Veterinary Station of Fengxian County, Shanghai 201400

XIONG, Rongjiong 熊荣炯
Institute of Military Medicine of Chengdu Military Region, Kunming

YANG, Liqin 杨立勤
Dept. of Parasitology, Shanghai Chinese Medicine University, Shanghai

ZHOU, Kai 周凯
Department of Biology, Nanchang Univ., Nanchang, Jiangxi 330047, China



Please send corrections of addresses to the editors.

New members of SAAS

The following is a list of members joined since 15 October 1996.

ALI, Omran
University College Dublin, Faculty of Agriculture, Department of Environ., Resources Management, Dublin, Rep. of Ireland

DENG, Xingping 邓兴平
Dept. of Plant Protection, Southwest Agricultural University, Chongqing 630716

EMMANOUEL, N.
Agricultural University of Athens, Lab of Agricultural Zoology and Entomology, IERA ODOS 75, 118 55 Athens, GREECE

GUI, Yanyun 顾彦云
Zhangjiakou Medical College, Zhangjiakou, Hebei 075029

HATZINIKOLIS, E. N.
Livini 3, GR-114 71 Athens, GREECE

Joon-Hak Lee
Department of Entomology, Iowa State University, Ames, IA 50011, USA

LI, Yiping 李逸平
Department of Insect Biochemistry & Physiology, Institute of Zoology, Academia Sinica, 19 Zhongguan Cunlu, Haidian, Beijing 100080, China

PAPADOULIS, G.
Agricultural University of Athens, Lab of Agricultural Zoology and Entomology, IERA ODOS 75, 118 55 Athens, GREECE

PEDHIBOLTA, Venkat
Department of Entomology, Iowa State University, Ames, IA 50011, USA

SMILEY, R. L.
Systematic Entomology Laboratory, USDA, ARS, BARC-W, Bldg. 046, 10300 Baltimore Ave., Beltsville, MD 20705, USA

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 for 1997. A voluntary contribution of £6/\$10 is welcome. Members receive free of charge the newsletter of the Society (*Acarology Bulletin*) and can publish free of charge in *Systematic and Applied Acarology* (SAA). Members are, however, obliged 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 or
International Institute of Entomology Dr. Xiaoyue Hong, Secretary SAAS
c/o The Natural History Museum Dept. of Plant Protection
London SW7 5BD Nanjing Agricultural University
United Kingdom Nanjing, Jiangsu 210095, CHINA

ACAROLOGY BULLETIN (ISSN 1361-8091) is a newsletter of the Systematic and Applied Acarology Society (c/o Dr. Z.-Q. Zhang, Dept. of Entomology, The Natural History Museum, London SW7 5BD, UK). It is published in four issues in 1997 (January, April, July and October) and is distributed free to members of SAAS. All correspondence should be sent to the Editor Dr. Renjie HU, Department of Entomology, Iowa State University Ames, IA 50011, USA (FAX 515-294-5957; E-mail rhu@iastate.edu). Non-member subscribers should order the journal from Panda Books Society (P.O. Box 8773, London SW7 4ZF, UK). Subscription rate for vol. 2 in 1997 is £6 or \$10 plus £4 or \$6 for post by air.
© 1997 Systematic & Applied Acarology Society. Printed in England.