

biochemical systematics and ecology

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Botanical Aspects

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Aims and Scope

*** BIOCHEMICAL SYSTEMATICS AND ECOLOGY** is devoted to the publication of original articles and occasional invited reviews on the application of biochemistry and chemistry to systematic problems in biology.

* All classes of organisms susceptible to chemical or biochemical study are covered — from bacteria to higher plants and animals, including fossil forms.

* Any type of chemical or biochemical information may be used in demonstrating their phyletic or other interrelationships, including the elucidation of biosynthetic pathways, feedback control, hybridization and other techniques of molecular biology and the distribution of discrete chemical compounds.

* Systematics is interpreted in the widest sense to include studies on variation in populations, classification of living organisms, inter-specific relationships and phylogenetic affinities of major taxa.

Papers in a recent issue included:

PLANTS

Neutral and Amino Sugars from the Cell Walls of Oomycetes, **B Vaziri-Tehrani & M W Dick**
An Approach to Chemotaxonomy of the *Asarum* Subgenus *Heterotropa*, **N Hayashi et al.**
The Identification of Poinsettia Cultivars by HPLC Analysis of their Flavonol Content, **R N Stewart et al.**

Essai Chimiosystématique sur la Tribu des Lotées, **M Jay et al.**

Quinolizidine Alkaloids as Systematic Markers of the Papilionoideae, **A Salatino & O R Gottlieb.**

Flavonoids of *Sullivantia*: Taxonomic Implications at the Generic Level within the Saxifraginae, **D E Soltis.**

ANIMALS

Influence de la Température sur quelques Activités Enzymatiques chez *Palaemon serratus*, **J Trelu & H J Ceccaldi.**

Acides Aminés de Microsporidies Parasites de Crustacés Décapodes Marins, **C P Vivares et al.**
How are Feathers digested by Raptors?, **P Leprince et al.**

Effect of Ambient Temperature on Perinatal Variations of Cyclic AMP and Cyclic GMP in Rat Brown Adipose Tissue, **R Bertin et al.**

Information on submission of manuscripts may be obtained from either of the Executive Editors at the addresses above.

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TOXICON

An International Journal Devoted to the Exchange of Knowledge on the Poisons
Derived from Animals, Plants and Microorganisms

Official Journal of the International Society on Toxicology

Editor: Philip Rosenberg, *University of Connecticut, School of Pharmacy, Storrs, Connecticut, 06268, USA*

Assistant Editor: Gerhard Habermehl, *Technische Hochschule Darmstadt*

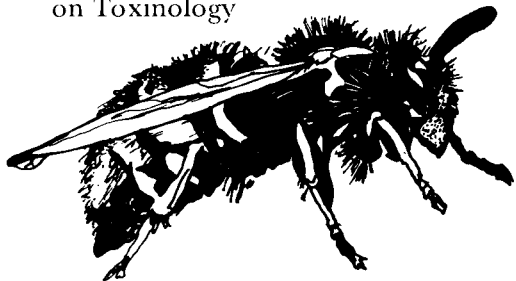
Aims and Scope

Toxicon provides a first-class medium for the publication of the following extensive range of material:

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- *Clinical observations on poisoning where a new therapeutic principle has been proposed or a decidedly superior clinical result has been obtained
- *Material on the use of toxins in studying biological processes and on subjects related to venom-antivenin problems
- *Occasional review articles on problems related to toxinology

In addition, **Toxicon**

- *Abstracts the current literature on venoms, antivenins and other poisons and antipoisons
- *Encourages the exchange of ideas through short communications, letters to the Editor, and reports on the activities of the International Society on Toxinology



A selection of recent papers

Research Papers

Characterization of a protein toxin from dried specimens of the garden tiger moth (*Arctia caja L.*), T H Hsiao *et al.*

Pharmacokinetics of ¹²⁵I-labelled venom from the scorpion *Androctonus amoreuxi*, Aud. and Sav., M Ismail *et al.*

Cardiohepatic and gross pathological changes in rhesus monkeys after intravenous injection of purified cholera enterotoxin, C T Liu *et al.*

A hemolytic principle associated with the red-tide dinoflagellate *Gonyaulax monilata*, G P Clemons *et al.*

Cardiovascular effects of venom from the scorpion *Buthus occitanus*, Amoreux, M Ismail *et al.*

Short Communications

Presynaptic effects of midgut extract from larvae of the oriental hornet (*Vespa orientalis*), N Dascal & J S Ishay.

Purification and characterization of two mammalian toxins from the venom of the Mexican scorpion *Centruroides noxius* Hoffman, M A R Dent *et al.*

Relation between serum creatine phosphokinase activity and the amount of Habu (*Trimeresurus flavoviridis*) snake venom injected in thigh muscle in rabbits, F Nakada *et al.*

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Electron Probe Micro-Analysis, Image Processing
and Associated Techniques

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Acta Zoologica

International Journal for Zoology
Now in its 62nd year of publication

Chief Editor: **Ragnar Olsson**, ACTA ZOOLOGICA,
P O Box 6801, S-11386, Stockholm, Sweden
Executive Editor: **Kaj Holmberg**, Stockholm
Supported by an International Advisory Council

Acta Zoologica is an International Journal for Zoology, publishing original research reports on all aspects of animal structure. It includes articles on functional cytology, histology and gross morphology as well as papers describing techniques of use in zoological investigation.

A Selection of Forthcoming Papers

The ultrastructure of special epidermal organs in Psychodidae (Diptera). I. Appendages on the mesothorax of male *Ulomyia fuliginosa* (Meigen), M Elger
Digitiform sensilla on the maxillar palp of Coleoptera. III. Fine structure in *Tenebrio molitor* L and *Dermestes maculatus* De Geer, K Honomichl and G-W Guse
Sense organs of two marine Arthrotardigrades (Heterotardigrada, Tardigrada), R M Kristensen
Ultrastructure of elasmobranch and teleost erythrocytes, A Zapata and A Carrato
Interrelationships between arteries, veins and lymphatics in the head region of the eel, *Anguilla anguilla* L, C G M Rowing
The rete tibiotarsale and arterio-venous association in the hind limbs of birds: A comparative morphological study on counter-current heat exchange systems, U Midtgård
Electron microscopic study of development in a sea cucumber, *Stichopus tremulus* (Holothuridea) from unfertilized egg through hatched blastula, N D Holland

The thyrotropic cell in the Atlantic salmon, *Salmo salar*, G Fridberg, K Lindahl and B Ekengren
Biology of the wild rabbit, *Oryctolagus cuniculus*, in southern Sweden. IV. Leydig cell activity and seasonal development of two male accessory organs of reproduction, M Dahlbäck and M Andersson
Factors associated with the seasonal variation in the incidence of pituitary cysts in nine-spined sticklebacks, *Pungitius pungitius* L, M Benjamin

An Invitation to Contribute

The Chief Editor will be pleased to receive contributions from authors for editorial consideration. Manuscripts and enquiries should be sent to Ragnar Olsson at the address given above. Authors are advised that articles of purely local interest or of a descriptive or systematic character will not generally be considered.

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Photochemistry and Photobiology

An International Journal

Official Organ of the American Society for Photobiology

Editor

Pill-Soon Song, *Dept of Chemistry, Texas Tech University, Lubbock, Texas 79409, USA*

All aspects of photochemistry and photobiology are covered in the journal, but its primary concern is with articles having either current or foreseeable biological relevance.

Appropriate subjects include:

* bioluminescence * chronobiology * environmental photobiology * photomedicine
* photochemistry of biomolecules * photomorphogenesis * photomovement and photoreception * photosensitization * photosynthesis * phototechnology * spectroscopy
* UV radiation effects * vision

Special features:

* research notes and technical notes describing in brief new developments or techniques
* occasional invited review articles
* listings of current papers published elsewhere help the reader to keep pace with the literature
* yearly reviews of recent literature in selected areas

Recent papers have included:

B E ANDERSON and P R CALLIS: Polarized fluorescence of 5-methylcytosine species in solution at room temperature

H MASUHARA *et al*: Photophysics and ionic photodissociation of polyesters with pendant 1-pyrenyl groups in solution

J DILLON: The anaerobic photolysis of tryptophan containing peptides

O V H OWENS and D T KRIZEK: Multiple effects of UV radiation (265-330nm) on fungal spore emergence

P JURSNIC: Polarographic detection of an endogenous reductant generated during flash illumination of chloroplasts

M KAVALIERS: Circadian rhythm of extraretinal photosensitivity in hatching alligators, *Alligator mississippiensis*

G CHEDDAR, F CASTELLI and G TOLLIN: Chlorophyll photochemistry in condensed media -I. Triplet state quenching and electron transfer to quinone in cellulose acetate films

J K HURLEY, F CASTELLI and G TOLLIN: Chlorophyll photochemistry in condensed media -II. Triplet state quenching and electron transfer to quinone in liposomes

An Invitation to Contribute

The Editor will welcome the submission of high quality manuscripts which combine scientific rigor with clarity and brevity. Manuscripts will be carefully reviewed and every effort made to provide useful editorial assistance to authors. For further details please write directly to the Editor at the address above.

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International Journal for PARASITOLOGY

Sponsored by the Australian Society for Parasitology

Published bi-monthly by Pergamon Press for the Australian Society for Parasitology

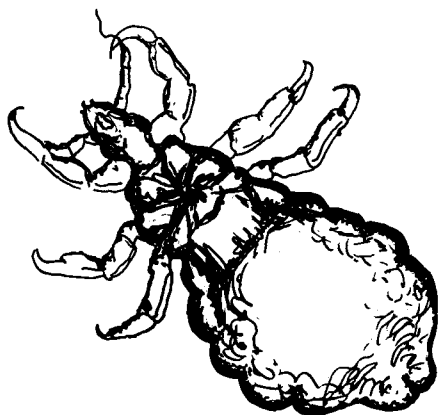
Editor-in-Chief: J F A Sprent, *Department of Parasitology, University of Queensland, St Lucia, Brisbane 4067, Australia*

Aims and Scope

The *International Journal for Parasitology* serves as a medium for communication between parasitologists at an international level.

It publishes original research papers dealing with parasites, parasitism and parasitic infection.

Other features include news items, reports of meetings, and a Parasitological Calendar which lists forthcoming meetings and symposia.



A selection of recent papers

Polyacrylamide gel electrophoresis in the differentiation of *Taenia* (Cestoda) by total protein, C C Bursey, J A McKenzie and M D B Burt

Carbohydrate energy metabolism in *Fasciola gigantica* (Trematoda) G M Umezurike & A O Anya

Comparison of stain reactions in different cyclical stages of haemoproteids and haemogregarines, F E Ahmed & A -H H Mohammed

Identification and quantification of some elements in the hog roundworm, *Ascaris lumbricoides suum*, and certain tissues of its host, A Greichus & Y A Greichus

Apical end organ structure and histochemistry in plerocercoids of *Proteocephalus ambloplitis*, J R Coggins

Effect of thiamine deficiency on the filarial infection of albino rats with *Litomosoides carinii*, R Prasad *et al.*

Regulatory properties of a partially purified preparation of pyruvate kinase from *Fasciola hepatica*, C A Behm & C Bryant

Catabolic metabolism in *Trypanosoma cruzi*, G W Rogerson & W E Gutteridge

Peroxide metabolism in the cestodes *Hymenolepis diminuta* and *Moniezia expansa*, J M Paul & J Barrett

Strongyloides ratti: susceptibility to infection and resistance to reinfection in inbred strains of mice as assessed by excretion of larvae, H J S Dawkins *et al.*

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Insect Science and its Application

The International Journal of Tropical Insect Science

Aims and Scope

Insect Science and its Application deals comprehensively with all aspects of scientific research targeted on tropical insects (and related arthropods), and the application of new discoveries to such diverse fields as pest and vector management and the use of insects for human welfare.

A distinctive feature of the journal is its multi- and interdisciplinary nature, which transcends the traditional boundaries of entomology.

Its second feature is its concentration on the recording and reviewing of the progress of insect science in the tropical and sub-tropical regions of the world. Thus, without excluding any area of the wide field encompassed by insect science, the journal will accept manuscripts in environmental physiology, the regulation of development and reproduction, population modelling, chemical ecology, natural products chemistry, plant resistance, host/insect relations, behaviour of tropical pest species, epidemiology of tropical diseases, vector biology, pest and vector management research, entomo-meteorology, insects in relation to farming systems, forest entomology, insect pathology, social insects and arthropods, and the uses of insects. It is the intention of the Editors to have manuscripts published rapidly, consistent with the needs of quality control.

In addition to articles of original research, the journal also publishes book reviews, announcements and reports of meetings and mini-reviews. Each regular issue of the journal contains a short review article on a critical or rapidly developing area of tropical insect science; normally the Editors will have invited an author to contribute such a mini-review.

Continued from outside back cover

Scientific Meeting of the African Association of Insect Scientists (AAIS) at the University of Ibadan, Ibadan, Nigeria, 4-8 December 1979

	421	Contents
	423	Report and recommendations of the Working Committee of the Workshop on Insect Identification Services and Taxonomic Research Centres in Africa, 6 December 1979
		<i>Papers presented</i>
R. KUMAR	425	The case for the establishment of an insect identification service and taxonomic research centre(s) in Africa
M. E. A. MATERU	431	The status of present taxonomic services in Southern Africa
M. HAFEZ	435	The status of present taxonomic services in Northern Africa
W. A. SANDS	443	Identification services for Africa
A. AGGUNDEY	445	National Museums of Kenya proposed insect identification centre for Africa
C. O. DUDLEY	447	The status of insect identification services and insect collection resources in Malawi

Insect Science and its Application

The International Journal of Tropical Insect Science

VOLUME 1 NUMBER 4

1981

CONTENTS

- P. O. ODIYO 305 Development of the first outbreaks of the African armyworm, *Spodoptera exempta* (Walk.), between Kenya and Tanzania during the 'off-season' months of July to December
- R. SUBRA 319 Biology and control of *Culex pipiens quinquefasciatus* Say, 1823 (Diptera, Culicidae) with special reference to Africa
- J. B. ODEBIYI 339 Studies on the biology of the cowpea pod-borer, *Maruca testulalis*, in Kenya—I. Determination of the larval instars
- R. C. SAXENA, S. H. OKECH and N. J. LIQUIDO 343 Wing morphism in the brown planthopper, *Nilaparvata lugens*
- L. RYAN and D. H. MÓLYNEUX 349 Non-setting adhesives for insect traps
- S. KHASIMUDDIN 357 Phase variation and 'off-season' survival of the African armyworm, *Spodoptera exempta* (Walker) (Lepidoptera: Noctuidae)
- J. G. YARRO, B. L. OTINDO, A. G. GATEHOUSE and M. C. LUBEGA 361 Dwarf variety of coconut, *Cocos nucifera* (Palmae), a hostplant for the African armyworm, *Spodoptera exempta* (Wlk.) (Lepidoptera, Noctuidae)
- A. A. SEIF 363 Seasonal fluctuation of adult population of the whitefly, *Bemisia tabaci*, on cassava
- K. OGWARO and E. D. KOKWARO 365 Development and morphology of the immature stages of the sorghum shootfly, *Atherigona soccata* Rondani
- I. FAGOONEE and G. UMRIT 373 Anti-gonadotropic hormones from the goatweed, *Ageratum conyzoides*
- S. C. RAWLINS and A. MANSINGH 377 Susceptibility of engorged adults of the cattle tick, *Boophilus microplus* (Canestrini), to acaricides
- M. J. MUTINGA and G. MADEL 379 The role of coprophagous beetles in the dissemination of taeniasis in Kenya
- N. Y. PATEL, A. YOUDEOWEI and T. R. ODHIAMBO 383 The composition of the salivary gland secretion of the tsetse, *Glossina morsitans morsitans* Westwood 1850 (Diptera: Glossinidae)
- M. F. FELDLAUER, M. W. EBERLE and G. A. H. MCCLELLAND 389 Developmental and teratogenic effects of precocene 2 on the bed bug, *Cimex lectularius* L.
- R. K. SAINI 393 Effects of age and hunger on the pattern of sound production in the tsetse, *Glossina morsitans morsitans* Westwood 1850 (Diptera, Glossinidae)
- K. JEEVARATNAM and R. H. S. RAJAPAKSE 399 Studies on the chemical control of the mirid bug, *Helopeltis antonii* Sign., in the cashew
- P. O. LAWRENCE 403 Developmental and reproductive biologies of the parasitic wasp, *Biosteres longicaudatus*, reared on hosts treated with a chitin synthesis inhibitor
- R. P. SINGH and S. P. CHAND 407 Effect of thiotepa on ovarian development of the flesh fly, *Sarcophaga ruficornis* Fabr. (Diptera: Sarcophagidae)
- M. L. A. OWAGA 411 Trypanosome infection rate in the tsetse species, *Glossina pallidipes* Austen, in a rural situation in Kenya
- I. I. OFFOR, D. A. CARLSON, N. M. GADZAMA and H. T. BOZIMO 417 Sex recognition pheromone in the West African tsetse fly, *Glossina palpalis palpalis* (Robineau-Desvoidy)

Continued on inside back cover

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