



INTERNATIONAL JOURNAL OF INSECT MORPHOLOGY & EMBRYOLOGY

Editor-in-Chief: A P GUPTA,
*Department of Entomology and
Economic Zoology, Rutgers
University, New Brunswick,
NJ 08903, USA*

The journal publishes original contributions on all aspects of the gross morphology, paleomorphology, macro- and microanatomy and ultrastructures of insects, and similar studies of other related arthropods, which have direct bearing on our understanding of insect morphology. In addition to descriptive embryologic and post-embryologic papers, the journal will accept reviews developing new concepts, hypotheses and theories, and a limited number of notes and book reviews. Relevant papers are welcomed for editorial consideration. Papers in German and French will be published on a restrictive basis.

Software Survey Section — This new section reports developments in appropriate specialist software.

Subscription Information

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US\$190.00
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A selection of papers

Ultrastructural detection of endocrine activities in the ventral glands of the head of *Carausius* (Phasmida:Lonchodidae) during embryonic development, A HAGET *et al.*

Midgut cellular responses to bloodmeal digestion in the mosquito, *Culex tarsalis* Coquillett (Diptera:Culicidae), E J HOUK & J L HARDY.

Contact chemoreceptors on the ovipositor of the potato moth, *Phthorimaea operculella* (Zell.) (Lepidoptera: Gelechiidae), L VALENCIA & M J RICE.

Tarsal sensilla of *Chironomus* (Diptera:Chironomidae): number, parasitogenic changes, ultrastructure, and function, W WULKER *et al.*

Contact chemoreceptors among wind-sensitive head hairs of *Locusta migratoria* L. (Orthoptera:Acrididae), H WUNDERER & U SMOLA.

Larval hemocytes in Noctuidae (Insecta:Lepidoptera), J W ARNOLD.

Interpopulation differences in egg sculpturing of the stick insect, *Clonopsis gallica* (Charp.) (Phasmatodea: Bacillidae), V SCALI & M MAZZINI.

Stages of living embryos in the jewel wasp *Mormoniella* (*Nasonia*) *Vitripennes* (Walker) (Hymenoptera: Pteromalidae), A L BULL.

Stridulatory structure and acoustic spectra of seven species of New Zealand wetas (Orthoptera: Stenopelmatidae), L H FIELD.

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Journal of STORED PRODUCTS RESEARCH

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JOURNAL OF STORED PRODUCTS RESEARCH

Editor: C E DYTE, *Pest Infestation Control Laboratory, Ministry of Agriculture Fisheries & Food, London Road, Slough, Berkshire, UK*

This journal provides an international medium for the publication of original research results from laboratory and field studies dealing with the biology, ecology, physiology, behavior, taxonomy, genetics or control of the insects, mites, fungi, and other organisms associated with stored products. It also covers studies on the physical and chemical nature of the stored product environment which have relevance to these organisms and their control.

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The moisture content-equilibrium relative humidity relationship of cocoa beans, S HENDERSON.

Some further observations on the effect of temperature on the fecundity and longevity of *Dermestes lardarius* L. (Coleoptera: Dermestidae), T A JACOB & D A FLEMING. Evaluation of three compounds with insect juvenile hormone activity as grain protectants against insecticide-susceptible and resistant strains of *Sitophilus* species (Coleoptera: Curculionidae), J P EDWARDS & J E SHORT.

An investigation of the entomogenous fungus *Beauveria bassiana* (Bals.) Vuill. as a potential biological control agent for *Oryzaephilus surinamensis* (L.), T SEARLE & J DOBERSKI.

Toxicity of deposits of an amorphous silica dust on different surfaces and their pick-up by *Sitophilus granarius* (L.) (Coleoptera: Curculionidae), S L GOWERS & G N J LE PATOUREL.

Effect of pesticides on the seed-borne fungi and fungal succession on rice in Malaysia, A J KUTHUBUTHEEN.

Screening of some indigenous plants as repellents or antifeedants for stored grain insects, M M MALIK & S H MUJTABA NAQVI.

The toxicity of phosphine to adults of *Tribolium castaneum* (Herbst): time as a dosage factor, R G WINKS.

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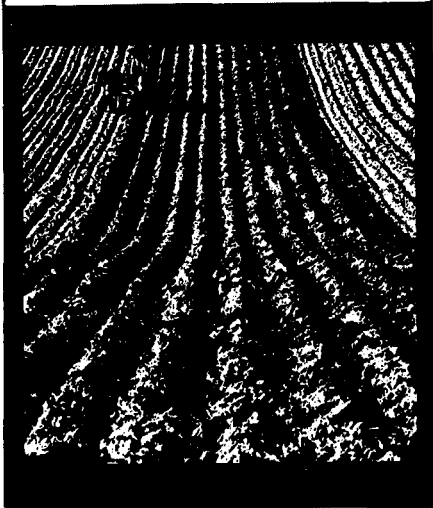
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Soil Biology & Biochemistry acts as an outlet for research studies on soil organisms, their biochemical activities, and their influence on the soil environment and plant growth. Original work is presented on quantitative, analytical and experimental aspects of such studies, providing a record of the progress of these studies throughout the world. The scope of the journal is wide and embraces accounts of original research into the biology, ecology and biochemical activities of all forms of life that exist in the soil environment. Relevant papers are welcomed for editorial consideration.

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SOIL BIOLOGY & BIOCHEMISTRY

Executive Editor: J S WAID,
Department of Microbiology, La Trobe University, Bundoora, Victoria 3083, Australia

A selection of papers

Soil acidity and the composition of an indigenous population of *Rhizobium trifolii* in nodules of different cultivars of *Trifolium subterraneum* L, M H DUGHRI & P J BOTTOMLEY.

Comparaison des aptitudes parasitaires de clones de trichoderma vis-à-vis de quelques champignons à sclérotés, M ARTIGUES & P DAVET.

ATP in soil: a new extractant and extraction procedure, J J WEBSTER *et al.*

Non-polar macroreticular resin to recover phenolic acids from a subtropical latosol, C C YOUNG.

Kinetics and characteristics of humic acids produced from simple phenols, M SCHNITZER *et al.*

Réponse de la biomasse microbienne à l'adjonction au sol de matériel végétal marqué au ¹⁴C: rôle des racines vivantes, P BOTTNER *et al.*

Moisture content and water potential of abscised leaves in relation to decay, N J DIX.

Soluble root exudates of maize: influence of potassium supply and rhizosphere microorganisms, I KRAFFCZYK *et al.*

Suppression of wheat take-all and Ophiobolus patch by fluorescent pseudomonads from a Fusarium-suppressive soil, P T W WONG & R BAKER. Inhibition of germination of spores of a *Gigaspora* species in sterilised soils, J M WILSON.

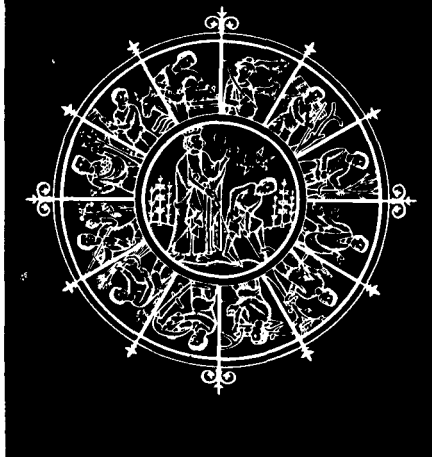
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Outlook
on agriculture



OUTLOOK ON AGRICULTURE

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Outlook on Agriculture covers the whole field of modern scientific agriculture. It reviews on a global basis the principal food and industrial crops and their management in health and disease; soil science; agrochemicals; agricultural engineering; animal husbandry; energy utilization; economics; education; and history. The guiding principle in the choice of articles is the intrinsic interest and importance of the subject and the authority of the writer. In addition, the journal publishes critical reviews of important books in the agricultural field.

Outlook on Agriculture is essential reading for all those concerned with agriculture in a world where efficient production and high yields are increasingly dependent on the progress and application of science. This includes those particularly concerned with the problems of introducing new techniques into the many communities in which food is still produced by traditional methods on small family holdings.

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US\$70.00
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A selection of papers

The Asswan High Dam and its effect on Egyptian agriculture, A M BALBA.
Potentialities of short-rotation forestry for developing countries, K STEINBECK.
The Soviet chemical industry's response to agriculture's needs, P HANSON.
Protein deposition in animals, P J BUTTERY.
African food production: research against time, E H HARTMANS.
Chromosomes of crop plants, G P CHAPMAN.
Intensive tilapia culture, J D BALARIN.
Trypanotolerant cattle, M MURRAY *et al.*
Copper deficiency in world crops, B J ALLOWAY & A R TILLS.
CIMMYT's maize improvement programme, E W SPRAGUE & R L PALIWAL.

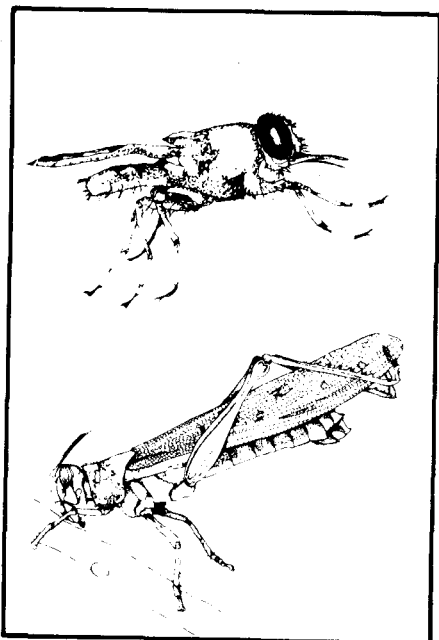
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INSECT BIOCHEMISTRY

Editor: L I GILBERT, *Wilson Hall
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Insect Biochemistry publishes original contributions in the field of insect biochemistry including papers on:

- * Neurochemistry
- * Hormone and pheromone biochemistry
- * Histochemistry
- * Development and tissue culture of insect systems

Papers on the biochemistry of other groups of arthropods are published if of general interest, while papers describing new techniques and methods may be accepted if they contribute to the solution of biochemical problems.

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Prostaglandins in insects, U E BRADY.
Detoxification of plant toxins by insects,
P F DOWD *et al.*

The amounts of trail pheromone substances in the venom of workers of four species of Attine ants, R P EVERSHED & E D MORGAN.

Electrochemical and enzymatic oxidation of catecholamines involved in sclerotization and melanization of insect cuticle, K J KRAMER *et al.*

Binding and degradation of juvenile hormone III by haemolymph proteins of the Colorado potato beetle: a re-examination, C A D DE KORT *et al.*

Cystathionine synthetase and cystathionase activities in the fat body during fifth instar larval stage of the silkworm, *Bombyx mori*, H SHINBO.

A developmental study of the composition and biosynthesis of the cuticular hydrocarbons of *Trichoplusia ni* (Lepidoptera: noctuidae),

M DE RENOBALES & G J BLOMQUIST.

Volatile constituents in a methylene chloride extract of a ponerine ant, *Rhytidoponera aciculata* (Smith), J J BROPHY *et al.*

Dufour gland secretions of workers of the ants *Myrmica sulcinodis* and *Myrmica lobicornis*, and comparison with six other species of *Myrmica*, A B ATTYGALLE *et al.*

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