

Contents—continued from outside back cover]

W. S. BOWERS, B. SENER, P. H. EVANS, F. BINGOL and I. ERDOGAN	339	Activity of Turkish medicinal plants against mosquitoes <i>Aedes aegypti</i> and <i>Anopheles gambiae</i>
F. W. WAMUNYOKOLI and E. O. OSIR	343	Characterisation of <i>Bacillus thuringiensis</i> variety <i>israelensis</i> delta-endotoxin
J. BHATTACHARYA, N. KRISHNAN, A. K. CHANDRA, S. K. SEN and B. SARATCHANDRA	351	Evaluation of agar gel double diffusion test for detection of nuclear polyhedrosis virus of silkworm, <i>Bombyx mori</i> L.
F. ORTEGO and W. BOWERS	357	Biological activities of two juvenoids on nymphs of the American bird grasshopper, <i>Schistocerca americana</i> (Drury)
F. M. KIMMINS, D. E. PADGHAM and P. C. STEVENSON	363	Growth inhibition of the cotton bollworm ( <i>Helicoverpa</i> <i>armigera</i> ) larvae by caffeoylquinic acids from the wild groundnut, <i>Arachis paraguariensis</i>
A. KENCE, L. H. OTIENO, N. DARJI and H. MAHAMAT	369	Genetic polymorphisms in natural populations of tsetse fly, <i>Glossina pallidipes</i> Austen in Kenya
S. G. LEITÃO, M. A. C. KAPLAN, F. D. MONACHE, E. NYANDAT and E. F. RWEKIKI	375	Antifeedant activity of two phenylpropanoid glucosides from <i>Aegiphila obducta</i> against <i>Chilo partellus</i> larvae
C. RIVault et A. CLOAREC	379	Analyse de traitements de blattes par insecticides en milieu urbain
		<i>Short Communications</i>
B. S. TOGUEBAYE	387	Evolution de la microsporidiose due à <i>Nosema</i> <i>henosepilachnae</i> dans les populations naturelles de <i>Henosepilachna elaterii</i>
F. B. H. AHMAD, M. M. MACKEEEN, A. M. ALI, S. R. MASHIRUN and M. M. YAACOB	391	Repellency of essential oils against the domiciliary cockroach <i>Periplaneta americana</i>
<i>Editor's Note</i>		i
<i>Announcement</i>		ii
<i>Instructions to Authors</i>		iii–iv
<i>Author Checklist</i>		v

# Insect Science and its Application

The International Journal of Tropical Insect Science

VOLUME 16 NUMBERS 3/4

1995

## CONTENTS

- Mini Review*
- L. E. N. JACKAI 237 Integrated pest management of borers of cowpea and beans
- Research Articles*
- S. NACRO, D. DAKOUO and E. A. HEINRICHS 251 Population dynamics, host plant damage and parasitism associated with the African rice gall midge in southern Burkina Faso
- J. M. STONEHOUSE 259 Pesticides, thresholds and the smallscale tropical farmer
- P. A. SEGEREN, H. A. VAN DEN OEVER and W. SLOBBE 263 Seasonal abundance, damage, cultural control methods and varietal resistance of the four main pest and disease problems in irrigated maize in southern Mozambique
- A. M. NOUR 279 Phenotypic stability of sorghum hybrids for resistance to the spotted stemborer, *Chilo partellus* (Swinhoe)
- C. P. SINGH and G. C. SACHAN 283 Estimation of losses in yield of rapeseed, *Brassica campestris*, by the mustard aphid, *Lipaphis erysimi* (Kalt.) in Tarai, India
- S. BISWAS and R. SINGH 287 Offspring sex ratio of a cereal aphid parasitoid *Lysiphlebus delhiensis* (Subba Rao & Sharma) in response to maternal crowding
- P. MOYAL 293 Stemborer larval growth and tunnelling and its influence on maize vegetative growth in Côte d'Ivoire
- H. CHIASSON and S. B. HILL 303 Dormancy in the stalk-eyed fly, *Diopsis longicornis* Macq., a pest of rice in sub-Saharan Africa
- D. P. GIGA, I. KADZERE and J. CANHÃO 311 Variability in oviposition in four strains of *Callosobruchus rhodesianus* (Pic) from different geographical areas of Zimbabwe
- T. C. BANERJEE and D. RAY 317 Bioenergetics and growth of the fall armyworm, *Spodoptera litura* (F.) larvae reared on four host plants
- P. SHISHEBOR and P. A. BRENNAN 325 Environmental effects on pre-imaginal development and survival of the castor whitefly, *Trialeurodes ricini* Misra
- D. SINGH 333 Development of suitable sampling methods for the arthropods of four mint species

[continued on inside back cover

Indexed/Abstracted in  
Current Contents, CABS, C. A. B. International, BIOSIS, The African  
Book Publishing Record

ISSN 0191-9040  
ISIADL 16(3/4) 237-394 (1995)

Typeset by ICIPE Science Press, Nairobi, Kenya  
Printed by Regal Press, Nairobi, Kenya