

**BULLETIN**  
**OF**  
**ENTOMOLOGICAL RESEARCH.**

ISSUED BY THE IMPERIAL  
BUREAU OF ENTOMOLOGY.

EDITOR: THE DIRECTOR.

---

**VOL. XVIII.**

---

LONDON:  
THE IMPERIAL BUREAU OF ENTOMOLOGY,  
41, QUEEN'S GATE, S.W. 7.  
1927-28.

# IMPERIAL BUREAU OF ENTOMOLOGY.

## Honorary Committee of Management.

The **EARL BUXTON, G.C.M.G.**, *Chairman.*

- Major E. E. AUSTEN, D.S.O., Keeper, Entomological Department, British Museum (Natural History).  
Dr. A. G. BAGSHAWE, C.M.G., Director, Bureau of Hygiene and Tropical Diseases.  
Mr. C. E. BAINES, India Office.  
Dr. ANDREW BALFOUR, C.B., C.M.G., Director, London School of Hygiene and Tropical Medicine.  
Major-General Sir DAVID BRUCE, K.C.B., F.R.S., Chairman of the Governing Body, Lister Institute.  
Dr. P. A. BUXTON, University Reader in Medical Entomology, London School of Hygiene and Tropical Medicine.  
Lieutenant-Colonel R. ECCLES SNOWDEN, Agent-General for Tasmania.  
Mr. J. C. F. FRYER, Director, Pathological Laboratory, Ministry of Agriculture and Fisheries.  
Sir SIDNEY F. HARMER, K.B.E., F.R.S.  
Dr. W. HORNER ANDREWS, M.R.C.V.S., Director, Veterinary Laboratory, Ministry of Agriculture and Fisheries.  
Dr. R. STEWART MACDOUGALL, Reader in Agricultural Entomology, Edinburgh University.  
Sir JOHN MCFADYEAN, late Principal, Royal Veterinary College, Camden Town.  
Sir DANIEL MORRIS, K.C.M.G., late Adviser to the Colonial Office in Tropical Agriculture.  
Mr. J. Murray, C.M.G., Foreign Office.  
Professor R. NEWSTEAD, F.R.S., Dutton Memorial Professor of Medical Entomology, Liverpool University.  
Professor G. H. F. NUTTALL, F.R.S., Quick Professor of Protozoology, Cambridge.  
Mr. A. C. C. PARKINSON, O.B.E., Dominions Office.  
Professor E. B. POULTON, F.R.S., Hope Professor of Zoology, Oxford.  
Lieutenant-Colonel Sir DAVID PRAIN, C.M.G., C.I.E., F.R.S.  
Dr. A. T. STANTON, Chief Medical Adviser to the Secretary of State for the Colonies.  
Mr. F. V. THEOBALD, South Eastern Agricultural College, Wye.  
Mr. C. WARBURTON, Zoologist to the Royal Agricultural Society of England.  
The Chief Entomologist in each of the Self-governing Dominions is *ex officio* a member of the Committee.

### Secretary.

Mr. G. F. SEEL (Colonial Office).

### Director.

Dr. GUY A. K. MARSHALL, C.M.G., F.R.S.

### Assistant Director.

Dr. S. A. NEAVE.

*Head Office.*—British Museum (Natural History), Cromwell Road, London, S.W.7.

*Publication Office.*—41, Queen's Gate, London, S.W.7.

# CONTENTS.

## ORIGINAL ARTICLES.

	PAGE
BALLARD, E. & EVANS, M. GWEN.	
<i>Dysdercus sidae</i> , Montr., in Queensland ( <i>illustrated</i> ) ... ..	405
BARNES, H. F.	
Wheat Blossom Midges (Cecidomyiidae, Diptera). Differences between <i>Contarinia tritici</i> (Kirby) and <i>Sitodiplosis mosellana</i> (Géhin) ( <i>illustrated</i> ) ... ..	285
BEATTIE, MARY V. F.	
Observations on the Thermal Death Points of the Blow-fly at different relative Humidities ( <i>illustrated</i> ) ... ..	397
BOX, H. E.	
The Introduction of Braconid Parasites of <i>Diatraea saccharalis</i> , Fabr., into certain of the West Indian Islands ( <i>illustrated</i> ) ...	365
BRÈTHES, J. Parasites and Hyperparasites of <i>Diatraea saccharalis</i> in Tucumán Sugar-cane ... ..	205
CONNAL, S. L. M. S.	
On the Variations occurring in <i>Aedes argenteus</i> , Poiret, in Lagos, Nigeria ( <i>illustrated</i> ) ... ..	5
COWLAND, J. W. & RUTTLEDGE, W.	
Notes on Cotton-stainers ( <i>Dysdercus</i> ) in the Sudan ( <i>illustrated</i> ) ...	159
CURRAN, C. H.	
Studies in African Tachinidae (Diptera) II ... ..	103
Three new Tachinidae attacking Injurious Insects in Queensland	165
Studies in African Tachinidae (Diptera) III ... ..	237
DAVIDSON, J.	
On some Aphids infesting Tulips ( <i>illustrated</i> ) ... ..	51
DAVIES, W. M.	
On the Economic Status and Bionomics of <i>Sminthurus viridis</i> , Lubb. (Collembola) ( <i>illustrated</i> ) ... ..	291
DEKHTIAREV, N. S.	
<i>Poeciloscytus cognatus</i> , Fieb. (Hemiptera, Miridae) as a serious Pest of Sugar-beets ( <i>illustrated</i> ) ... ..	1
<i>Sciaphobus squalidus</i> , Gyll. (Col., Curcul.), a Pest of Orchards in Ukraine ( <i>illustrated</i> ) ... ..	313
DUNN, L. H.	
Mosquito Breeding in "Test" Water-containers ... ..	17
Tree-holes and Mosquito Breeding in West Africa ... ..	139
Observations on the Oviposition of <i>Aedes aegypti</i> , Linn., in Relation to Distance from Habitations... ..	145
Further Observations on Mosquito Breeding in Tree-holes and Crab-holes ... ..	247
EDWARDS, F. W.	
Two new <i>Simulium</i> from Kashmir ... ..	169
Mosquito Notes. VII. ( <i>illustrated</i> ) ... ..	267
EDWARDS, F. W. & GIVEN, D. H. C.	
The early Stages of some Singapore Mosquitos ( <i>illustrated</i> ) ...	337
GAHAN, A. B.	
On some Chalcidoid Scale Parasites from Java ( <i>illustrated</i> ) ... ..	149
GOLDING, F. D.	
Notes on the Food-plants and Habits of some Southern Nigerian Insects ... ..	95
Notes on the Bionomics of Cotton Stainers ( <i>Dysdercus</i> ) in Nigeria...	319

HAMLIN-HARRIS, R.		
The Relation of certain Algae to Breeding Places of Mosquitos in Queensland	... ..	377
HARRIS, W. V.		
On a Lycaenid Butterfly attacking Pineapples in Trinidad, B.W.I		183
HOPKINS, G. H. E.		
Pests of Economic Plants in Samoa and other Island Groups ( <i>illustrated</i> )	... ..	23
INGRAM, A.		
Three new South African <i>Xenopsylla</i> (Siphonapt.) ( <i>illustrated</i> )	... ..	371
JOBLING, B.		
The Structure of the Head and Mouth Parts in <i>Culicoides pulicaris</i> , L. (Diptera, Nematocera) ( <i>illustrated</i> )	... ..	211
KIRKPATRICK, T. W.		
Notes on a Braconid Parasite of the Pink Bollworm ( <i>Platyedra gossypiella</i> , Saund.) in Kenya Colony	... ..	47
MARSHALL, G. A. K.		
New Injurious Curculionidae (Col.) ( <i>illustrated</i> )	... ..	257
MASSEE, A. M.		
On the Species of Gall Mites (Eriophyidae) found on the Genus <i>Ribes</i>		179
The Life-history of the Black Currant Gall Mite, <i>Eriophyes ribis</i> (Westw.) Nal. ( <i>illustrated</i> )	... ..	297
MILES, H. W.		
Investigations on the Control of the Khapra Beetle ( <i>Trogoderma granarium</i> , Everts) with Calcium Cyanide ( <i>illustrated</i> )	... ..	251
MYERS, J. G.		
Natural Enemies of the Pear Leaf-curling Midge, <i>Perrisia pyri</i> , Bouché (Dipt., Cecidom.) ( <i>illustrated</i> )	... ..	129
A Note on Australian Typhlocybinae Leafhoppers, with a Description of a new Species ( <i>illustrated</i> )	... ..	311
OGILVIE, L.		
Methods employed in Breeding <i>Opius humilis</i> , Silv., a Parasite of the Mediterranean Fruit-fly ( <i>Ceratitis capitata</i> , Wied.) ( <i>illustrated</i> )		289
RAMAKRISHNA AYYAR, T. V.		
The Parasitic Hymenoptera of Economic Importance noted from South India	... ..	73
RUSSELL, H.		
Notes on the Reaction of the Breeding Places of Anophelines in Macedonia ( <i>illustrated</i> )	... ..	155
SCOTT, H.		
Notes on the Distribution and Habits of Culicidae in Central Abyssinia ( <i>illustrated</i> )	... ..	83
TAYLOR, F. H.		
Two new Species of Australian Culicidae (Dipt.)	... ..	67
A Note on <i>Simulium bancrofti</i> , Taylor, with the Description of a new Species of <i>Simulium</i> (Dipt.)	... ..	70
THOMPSON, W. R.		
On the Effect of Methods of Mechanical Control on the Progress of Introduced Parasites of Insect Pests	... ..	13
THOMPSON, W. R. & PARKER, H. L.		
Host Selection in <i>Pyrausta nubilalis</i> , Hübn.	... ..	359
WATERSTON, J.		
On the Hedycryptine Genus <i>Oneilella</i> , Cam. (Hym., Ichneumonidae) ( <i>illustrated</i> )	... ..	189

	PAGE
WILKINSON, D. S.	
Eight new Species of Braconidae ( <i>illustrated</i> ) ... ..	33
On the Indo-Malayan Species of the Genus <i>Microgaster</i> (Hymenoptera, Braconidae) ( <i>illustrated</i> ) ... ..	171
On three Braconid Parasites of the Gelechiid Moth, <i>Platyedra erebodoxa</i> , MEYR. ( <i>illustrated</i> ) ... ..	391
WILLIAMS, C. B.	
A Chart-recording Weighing Machine for Bee keeping or other Research ( <i>illustrated</i> ) ... ..	63
WILLIAMSON, K. B.	
Mosquito Breeding and Malaria in relation to the Nitrogen Cycle ...	433
WOLCOTT, G. N.	
Haitian Cotton and the Pink Bollworm ... ..	79
WRIGHT, W. R.	
On the Effects of Exposure to raised Temperatures upon the Larvae of certain British Mosquitos ... ..	91

## MISCELLANEOUS.

Collections Received ... ..	101, 209, 335, 441
-----------------------------	--------------------

## ERRATA.

Page 31, line 40, for "IIte. Abt., i" read "IIte. Abt., l."
" 38, line 28, page 39, legends for figs. 4 & 5, page 40, line 18 & page 41,
" " line 7, for " <i>Opius agreutretae</i> " read " <i>Opius afreutretae</i> "
" 40, line 14, for " <i>Agreutreta discoidalis</i> " and " <i>Agreutreta bipunctata</i> "
" " read " <i>Afreutreta discoidalis</i> " and " <i>Afreutreta bipunctata</i> "
" 75, line 35, for " <i>Caryea</i> " read " <i>Careya</i> "
" 77, line 41, for " <i>Anomalococcus</i> " read " <i>Anomalococcus</i> "
" 78, line 3, for " <i>nyemitauras</i> " read " <i>nyemitaurus</i> "
" 78, line 22, for " <i>Asympieseilla</i> " and " <i>Gracillaria</i> " read " <i>Asympiesiella</i> " and " <i>Gracilaria</i> "
" 160, line 23, for " <i>anfructuosum</i> " read " <i>anfractuosum</i> "
" 179, 8 lines from end, for " <i>Oxpleurites</i> " read " <i>Oxypleurites</i> "
" 198, line 30 & page 201, line 15, for "R. Mayne" read "R. Mayné"
" 263, line 23, for " <b>Tanyrrhynchus</b> " read " <b>Tanyremnus</b> "
" 268, line 28, for "G. Frenchini" read "G. Franchini"
" 311, line 25, for p. 000" read "p. 363"
" 314, 3 lines from end, for " <i>Aelothrips</i> " read " <i>Aeolothrips</i> "
" 337, line 15, for " <i>xanihomalaena</i> " read " <i>xanthomelaena</i> "