

EXPERIMENTAL AGRICULTURE

Editor

PROFESSOR J. P. HUDSON

Book Review Editor

G. C. STEVENSON

Editorial Board

PROFESSOR E. W. RUSSELL (CHAIRMAN)

PROFESSOR D. K. BRITTON

SIR G. W. NYE

DR. E. E. CHEESMAN

D. RHIND

PROFESSOR SIR J. B. HUTCHINSON

DR. G. WATTS PADWICK

PROFESSOR J. D. IVINS

DR. C. C. WEBSTER



CAMBRIDGE UNIVERSITY PRESS

Bentley House, 200 Euston Road, London NW1 2DB

American Branch: 32 East 57th Street, New York, N.Y. 10022

Annual Subscription £9.50 net (U.S.A. \$32.00)

Single parts £3.50 net (U.S.A. \$11.00)

Expl Agric.

OVERSEAS ADVISORS

DR. J. A. ANDERSON (*Canada*)
DR. M. A. A. ANSARI (*Pakistan*)
DR. M. F. CHANDRARATNE (*Ceylon*)
DR. K. B. LAL (*F.A.O.*)

DR. J. MELVILLE (*Australia*)
DR. A. H. MOSEMAN (*United States*)
PROFESSOR M. A. NOUR (*Sudan*)
DR. B. P. PAL (*India*)

DR. S. J. DU PLESSIS (*South Africa*)

Experimental Agriculture publishes the results of research on crops, herbage and forage, with the main emphasis on field experiments carried out in the warmer climates of the world. It also includes accounts of new experimental techniques, discussions of specific problems met in countries where agricultural production is developing rapidly, review articles on new developments in scientific agriculture, and occasional papers on technical, economic and sociological aspects of farming systems. The journal is the successor to *The Empire Journal of Experimental Agriculture*.

Experimental Agriculture is published quarterly. Four parts form a volume.

Subscriptions may be sent to any bookseller or subscription agent or direct to Cambridge University Press, P.O. Box 92, London, NW1 2DB or in the U.S.A. and Canada to the American branch of the Press, 32 East 57th Street, New York, N.Y. 10022. The subscription price is £9.50 net (including postage) for an annual volume (\$32.00 in the U.S.A.), payable in advance; separate parts cost £3.50 net or \$11.00 each (plus postage). Second class postage paid at New York, N.Y.

Back Volumes. Inquiries for Vols. 1-32 of *The Empire Journal of Experimental Agriculture* should be addressed to Wm Dawson & Sons Ltd, Cannon House, Folkestone, Kent. Previously published parts of *Experimental Agriculture* are available from the London or New York offices of Cambridge University Press.

© Cambridge University Press 1973

Permissions. For permission to reproduce material from *Experimental Agriculture*, please apply to the London or New York office of Cambridge University Press.

ISI Tear Service, 325 Chestnut Street, Philadelphia, Pennsylvania 19106, U.S.A. is authorized to supply single copies of separate articles for private use only.

NOTES FOR CONTRIBUTORS

Contributions will be welcomed from scientists of all nationalities, particularly those working in tropical and sub-tropical countries where up-to-date techniques of agricultural experimentation are helping in the rapid development of more modern methods of farm production. Contributions, which must be written in English, should be sent to the **Editor, Professor J. P. Hudson, The Spinney, Wrington, Bristol BS18 7LB.**

Conditions of acceptance. Submission of a paper will be taken to imply that the material has not previously been published, and is not being considered for publication elsewhere. Papers published in *Experimental Agriculture* may not be reprinted or published in translation without permission from the Editor, given on behalf of the Editorial Board.

General lay-out. Before having their manuscripts typed contributors are asked to look carefully at the lay-out of other papers published in this journal, to ensure that their own papers, as submitted, conform as closely as possible to

the accepted pattern. This very much facilitates the work of the Editor and may often result in a paper being published earlier than if it requires a great deal of detailed editorial attention. Numerical data, which should only be included if they are essential to the argument, can be presented either in the form of tables or diagrams, but should never be shown in both ways. It is not the normal custom of the Journal to publish notes shorter than about 2000 words (4 pages) or longer than about 6000 words (12 pages including illustrations).

Typescripts. A top copy and one carbon copy of the script should be submitted, typed with double spacing, on one side of the paper only and with margins of about 1½ inches at the left-hand side and head of each sheet. Quarto size is preferred to foolscap.

Title. The development of automatic bibliographic methods, based on single-word indexing of the significant words in the title, makes it essential that the title of each paper should contain the maximum of relevant informa-

JOURNAL OF THE BRITISH GRASSLAND SOCIETY

This Journal is a medium for the publication of the results of research and practical experience in the realm of grassland husbandry and forage production.

EDITOR: A. G. G. HILL

Contents of Volume 27, No. 4, December 1972

A STUDY OF THE INTAKE OF DRINKING WATER BY DAIRY COWS AT GRASS. *M. E. Castle*

THE EFFECTS OF WHITE CLOVER AND APPLIED NITROGEN ON THE NITROGEN CONTENT OF VARIOUS GRASS/CLOVER MIXTURES. *D. M. B. Chestnutt*

THE UTILIZATION OF DRIED GRASS BY EARLY-WEANED LAMBS. *R. M. Tait.*

THE EFFECTS OF HARVEST DATE ON THE YIELD AND QUALITY OF SEED OF TETRAPLOID HYBRID RYEGRASS. *S. Williams.*

THE EFFECT OF WHITE CLOVER ON THE PRODUCTION OF YOUNG AND OLDER GRASSLAND COMPARED TO THAT OF NITROGEN FERTILIZER. *H. J. Kleter and J. A. Bakhuis*

THE EFFECT OF A RYEGRASS COMPANION GRASS AND THE VARIETY OF RED CLOVER ON THE PRODUCTIVITY OF RED-CLOVER SWARDS. *J. Frame, R. D. Harkess and I. V. Hunt*

HEADING DATES OF S24 PERENNIAL RYEGRASS AND SPRING TEMPERATURES. *Marjory G. Roy*

A NOTE ON THE SUITABILITY OF THE *IN VITRO* DIGESTIBILITY TECHNIQUE FOR VERY SMALL PLANT SAMPLES. *M. N. McLeod*

BOOK REVIEWS

Published quarterly. Annual subscription £6, or \$14.40, post free. Back numbers are available in complete volumes (except Vol. 12), at £4 per volume.

Orders to: The Secretary, British Grassland Society, Grassland Research Institute, Hurley, Maidenhead, Berkshire SL6 5LR

TROPICAL AGRICULTURE

THE JOURNAL OF THE FACULTY OF AGRICULTURE (IMPERIAL COLLEGE OF
TROPICAL AGRICULTURE) UNIVERSITY OF THE WEST INDIES

Volume 50, Number 1, January 1973

Studies on the nutritional quality of grasses and legumes in Uganda. I. Application of *in vitro* digestibility techniques to species and stage of growth effects

R. L. Reid, Amy J. Post, F. J. Olsen and J. S. Mugerwa

Use of coconut meal and molasses as supplements to grazing for dairy cows in Fiji

K. H. McIntyre

Evaluation of chemical ripeners for sugar-cane having constant nitrogen and water regimes.

I. Growth, quality and enzymic responses of nine potential ripeners

A. G. Alexander and R. Montalvo-Zapata

Laboratory evaluation of insecticides against *Aeneolamia varia saccharina* (Homoptera : Cercopidae) in Trinidad

D. E. Evans

Effect of saline water irrigation on N.Co.310 and H50-7209 cultivars of sugar-cane. II. Chemical composition of plants

M. M. Syed and S. A. El-Swaify

Effect of different levels of nitrate-nitrogen supply on early tuber growth of two sweet potato cultivars

L. A. Wilson

Response of pak-choi (*Brassica chinensis* L.) to added sulphur in some West Indian soils

I. Haque and D. Walmsley

Effects of lime and phosphorus on selected alluvial entisols from eastern Costa Rica. II. Forage plant responses

L. N. Lucas and W. G. Blue

Control of banana black leaf streak disease in Western Samoa

P. G. Long

Book Reviews

Annual subscription: £10.00 (\$26.00 in the U.S.A. and Canada) for four quarterly numbers

Published on behalf of the Faculty by

IPC SCIENCE AND TECHNOLOGY PRESS LIMITED

IPC House, 32 High Street, Guildford, Surrey, England