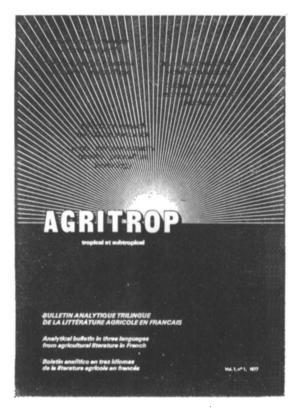
AGRITROP



New journal in English

Agricultural research Agricultural production

Crops. Animal husbandry. Forestry. Fish culture. Technology

FROM AGRICULTURAL LITERATURE IN FRENCH

Generalities, Water, Air, Soil Grazing

Agricultural engineering Plant pathology
General botany Animal pathology

General zoology Insect pests
Genetics. Breeding Weeds

Ecology. Biology Products storage
Biochemistry. Nutrition Tropical timber

Cultural techniques Technology and Chemistry

Timber harvesting Commercial development of products

Animal husbandry Economics

Copy and subscription: G.E.R.D.A.T. — 42, rue Scheffer — 75016 Paris — France Distribution and announcements: G.E.D.I.T.E.C. — 18, rue de Varenne 75007 Paris — France

Continued from back page	DAGE
FRAPE, D. L., WAYMAN, B. J. and TUCK, MARY G. The utilization of phosphorus and nitrogen in wheat offal by growing pigs	PAGE 133
GERARD, B. M. and HAY, R. K. M. The effect on earthworms of ploughing, tined cultivation, direct drilling and nitrogen in a barley monoculture system	147
Bunting, E. S. The relationship between mean temperature and accumulated temperature totals for maize in the central lowlands of England	157
HARPER, F. and FERGUSON, R. C. The effects of bitumen mulch and sowing date on the establishment and yield of oil-seed sunflower (Helianthus annuus L.)	171
McMeniman, N. P. and Armstrong, D. G. The flow of amino acids into the small intestine of cattle when fed heated and unheated beans (Vicia faba)	181
NAIR, K. P. P., PATEL, U. K., SINGH, R. P. and KAUSHIK, M. K. Evaluation of legume inter- cropping in conservation of fertilizer nitrogen in maize culture	189
GUIRGIS, R. A. Birthcoat fibre type arrays of lambs and some adult fleece traits	195
STERN, W. R. and Kirby, E. J. M. Primordium initiation at the shoot apex in four contrasting varieties of spring wheat in response to sowing date	203
Menke, K. H., Raab, L., Salewski, A., Steingass, H., Fritz, D. and Schneider, W. The estimation of the digestibility and metabolizable energy content of ruminant feedingstuffs from the gas production when they are incubated with rumen liquor in vitro	217
GRAY, D., STECKEL, JOYCE R. A. and WARD, J. A. The effects of fluid sowing pre-germinated seeds and transplanting on emergence, growth and yield of outdoor bush tomatoes .	223
LATIF, M. G. A. and OWEN, E. Comparison of Texel- and Suffolk-sired lambs out of Finnish Landrace × Dorset Horn ewes under grazing conditions	235
SHORT NOTES	
SUMNER, R. M. W., PETER, D. W. and BOARD, P. G. Effect of a duodenal infusion of methionine on erythrocyte reduced glutathione of sheep	241
KHAN, M. S., SASIDHARAN, T. O. and GHOSH, P. K. Glomerular filtration rate and blood and urinary urea concentrations in Barmer goats of the Rajasthan desert	247
Mehta, S. N., Gangwar, P. C., Srivastava, R. K. and Dhingra, D. P. Effect of cooling on reproductive behaviour in buffaloes (<i>Bos-bubalis</i>)	249
REID, I. M., COLLINS, R. A., BAIRD, G. D., ROBERTS, C. J. and SYMONDS, H. W. Lipid production rates and the pathogenesis of fatty liver in fasted cows	253

THE JOURNAL OF AGRICULTURAL SCIENCE

CONTENTS

Vol. 93 Part 1 August 1979

	PAGE
SWATLAND, H. J. Development of shape in turkey carcasses	1
MURTHY, K. K. and SINGH, M. Photosynthesis, chlorophyll content and ribulose diphosphate carboxylase activity in relation to yield in wheat genotypes	7
GARWOOD, E. A., TYSON, K. C. and SINCLAIR, J. Use of water by six grass species. 1. Drymatter yields and response to irrigation	13
GARWOOD, E. A. and SINCLAIR, J. Use of water by six grass species. 2. Root distribution and use of soil water	25
SOLIMAN, H. S., ØRSKOV, E. R. and MACKIE, I. Utilization of fish protein hydrolysates in milk substitutes for lambs	37
RAI, R. and SINGH, S. N. Response of strains of <i>Rhizobium</i> on nodulation, grain yield, protein and amino acids content of chick pea (<i>Cicer arietinum</i> Linn.)	47
PEARCE, S. C. and GILLIVER, B. Graphical assessment of intercropping methods	51
Brain, P. J. and Whittington, W. J. The control of swede powdery mildew	59
MICHAŁOWSKI, T. Effect of feeding frequency on the diurnal changes in microbial protein, volatile fatty acids and ammonia contents of the rumen of sheep	67
King, J. M. Game domestication for animal production in Kenya: field studies of the bodywater turnover of game and livestock	71
DIGBY, P. G. N. Modified joint regression analysis for incomplete variety × environment data	81
ALESSI, J., POWER, J. F. and SIBBITT, L. D. Yield, quality and nitrogen fertilizer recovery of standard and semi-dwarf spring wheat as affected by sowing date and fertilizer rate	87
Stobo, I. J. F., Roy, J. H. B. and Ganderton, P. The effect of changes in concentrations of dry matter, and of fat protein in milk substitute diets for veal calves	95
TOYNBEE-CLARKE, GILLIAN. Influence of stem apex on crosses between subspecies of Vicia faba L	111
Parsa, A. A., Wallace, A. and Martin, J. P. Enhancement of iron availability by some organic materials	115
ALLEN, E. J. Effects of cutting seed tubers on number of stems and tubers and tuber yields of several potato varieties	121
INNES, N. L. and WALKEY, D. G. A. Gene for resistance to bean common mosaic virus in cvs Seafarer and Aurora of <i>Phaseolus vulgaris</i>	129

Continued on inside back cover

© Cambridge University Press 1979

SUBSCRIPTIONS. Two volumes of three parts are published annually. The subscription price of volumes 92 and 93, 1979, is £27.00 net (U.S.A. and Canada US \$66.50) per volume (post free); single parts are available at £11.00 net (U.S.A. and Canada US \$27.50) plus postage. Orders or enquiries may be sent to any bookseller or subscription agent, or to Cambridge University Press, P.O. Box 110, Cambridge CB2 3RL (U.S.A. and Canada, Cambridge University Press, 32 East 57th Street, New York, N.Y. 10022, U.S.A.).

Printed in Great Britain at the University Press, Cambridge