

THE JOURNAL OF
AGRICULTURAL SCIENCE

CAMBRIDGE UNIVERSITY PRESS
LONDON: FETTER LANE, E.C. 4



H. K. LEWIS & CO., LTD., 136, GOWER STREET, LONDON, W.C. 1
WHELDON & WESLEY, LTD., 2-4, ARTHUR STREET, NEW OXFORD
STREET, LONDON, W.C. 2
CHICAGO: THE UNIVERSITY OF CHICAGO PRESS
(Agent for the United States)
BOMBAY, CALCUTTA, MADRAS: MACMILLAN & CO., LTD.
TOKYO: THE MARUZEN-KABUSHIKI-KAISHA

All rights reserved

THE JOURNAL OF AGRICULTURAL SCIENCE

EDITED FOR THE PLANT BREEDING AND ANIMAL NUTRITION RESEARCH INSTITUTES AT CAMBRIDGE,
AND THE ROTHAMSTED RESEARCH INSTITUTES BY

PROFESSOR SIR R. H. BIFFEN, M.A., F.R.S., Cambridge
SIR A. D. HALL, K.C.B., M.A., LL.D., F.R.S., Ministry of Agriculture, London
B. A. KEEN, D.Sc., F.INST.P., Rothamsted Experimental Station, Harpenden
F. H. A. MARSHALL, Sc.D., F.R.S., Cambridge
SIR E. J. RUSSELL, D.Sc., F.R.S., Rothamsted Experimental Station, Harpenden
PROFESSOR T. B. WOOD, C.B.E., M.A., LL.D., F.I.C., F.R.S., Cambridge

IN CONSULTATION WITH

B. C. ASTON, Department of Agriculture, Wellington, New Zealand
DR C. A. BARBER, C.I.E., School of Agriculture, Cambridge
PROFESSOR B. T. P. BARKER, M.A., Agricultural and Horticultural Research Station, Long
Ashton, Bristol
J. R. CAMPBELL, B.Sc., Department of Agriculture, Dublin
I. B. POLE EVANS, Department of Agriculture, Pretoria, South Africa
F. B. GUTHRIE, Department of Agriculture, Sydney, N.S.W.
PROFESSOR J. HENDRICK, B.Sc., Marischal College, Aberdeen
SIR T. H. MIDDLETON, K.B.E., C.B., M.A., The Development Commission, London
DR FRANK T. SHUTT, F.I.C., Experimental Farms, Ottawa, Canada
SIR WILLIAM SOMERVILLE, M.A., D.Sc., Oxford
DR A. C. TRUE, Department of Agriculture, Washington, D.C., U.S.A.
SIR FRANCIS WATTS, K.C.M.G., Barbados
DR H. J. WHEELER, American Agricultural Chemical Co., Boston, Mass., U.S.A.

VOLUME XVI 1926

CAMBRIDGE
AT THE UNIVERSITY PRESS
1926

PRINTED IN GREAT BRITAIN

PART 2 (APRIL 1926)

	PAGE
TIPPETT, L. H. G. On the effect of sunshine on wheat yield at Rothamsted. (With two text-figures)	159
ENGLEDOW, F. L. A census of an acre of corn (by sampling). (With three text-figures)	166
WILLIAMS, RICE. Effect of dressings of basic slag on the lime status of soils	196
WOODMAN, HERBERT ERNEST, BLUNT, DENZIL LAYTON and STEWART, JAMES. Nutritive value of pasture. I. Seasonal variations in the productivity, botanical and chemical composition, and nutritive value of medium pasturage on a light sandy soil. (With five text-figures)	205
MACKENZIE, WINIFRED A. Note on a remarkable correlation between grain and straw, obtained at Rothamsted. (With one text-figure)	275
DAVIES, W. L. The proteins of green forage plants. I. The proteins of some leguminous plants	280
DAVIES, W. L. The proteins of green forage plants. II. The proteins of the mangold root. Comparison with the proteins of mangold seed	293
GOODWIN, W., MARTIN, H. and SALMON, E. S. The fungicidal properties of certain spray-fluids, IV	302
MCLEAN, W. Effect of leaf-roll disease in potatoes on the composition of the tuber and "mother tuber." (With one text-figure)	318
WOOD, T. B. and CAPSTICK, J. W. The maintenance requirement of the adult sheep	325

PART 3 (JULY 1926)

LINE, J. Aluminium and acid soils. (With two text-figures)	335
NICHOLS, J. E. Fertility in southdown sheep	365
DEIGHTON, THOMAS. A new calorimeter for use with young farm animals	376
BARTLETT, STEPHEN. Variations in the live weight of dairy cows	383
BARTLETT, STEPHEN. The effect of pregnancy on the live weight of dairy cows. (With five charts)	392
WOODMAN, HERBERT ERNEST and AMOS, ARTHUR. The ensilage of sugar beet tops	406
ROBERTS, E. J. Comparison of dairy shorthorn and Welsh black cattle as milk producers; and effect of time of calving on the yield of milk. (With two text-figures)	416