

THE JOURNAL OF AGRICULTURAL SCIENCE

EDITED BY

G. D. H. BELL, B.SC., PH.D., Plant Breeding Institute, Cambridge

R. E. EVANS, M.SC., PH.D., School of Agriculture, Cambridge

SIR JOHN HAMMOND, C.B.E., M.A., D.SC., F.R.S., School of Agriculture,
Cambridge

SIR BERNARD KEEN, D.SC., F.R.S., 72 Eaton Square, London, S.W. 1

SIR E. JOHN RUSSELL, D.SC., F.R.S. Campsfield Wood, Woodstock, Oxon.

E. W. RUSSELL, C.M.G., M.A., PH.D., F.INST.P., East African Agriculture and
Forestry Research Organisation, P.O. Box 21, Kikuyu, Kenya

F. YATES, SC.D., F.R.S., Rothamsted Experimental Station, Harpenden



CAMBRIDGE UNIVERSITY PRESS

BENTLEY HOUSE, 200 EUSTON ROAD, LONDON, N.W. 1

AMERICAN BRANCH: 32 EAST 57TH STREET, NEW YORK 22, N.Y.

Price 25s. net

(U.S.A. \$4.25)

MICHROME STAINS

and Reagents for Biology

Adenosine	Laktoseal
Aqamount	Lipid Crimson
Brilliant Cresyl Blue	Pyronin
Bromelain	Sudan Black
Celloidin	Matamount
Cresyl Fast Violet	Trypsin
Janus Green	Urease, etc.

TRIFALGIC ACID for electrophoresis, etc. (Ref. Bodman, J. (1960), *Ivor Smith's Chromat. and Electrophor. Tech.*, vol. 2 (Heinemann).)

Now ready:

ENCYCLOPAEDIA OF MICROSCOPIC

STAINS by Edward Gurr, 500 pages

Royal 8vo, price 95/-

"Methods of Analytical Histology & Histochemistry"

by Edward Gurr; 335 pages (Roy. 8vo) 70/-, postage 2/6.

EDWARD GURR, LTD.

42 UPPER RICHMOND RD. WEST,
LONDON, S.W. 14

Telephone: Prospect 8051 & 7606

UNIFORM HIGH QUALITY, RELIABILITY.
IMMEDIATE DELIVERY.

CROP SCIENCE

Crop breeders, plant geneticists and physiologists, and workers in related areas will find *Crop Science* a source of valuable articles in the more technical aspects of agronomy. This new, bimonthly journal alternates with *Agronomy Journal*, and carries reports of research in the genetics, physiology, ecology, breeding and management of field crops, turf-grasses, pastures and ranges, and in seed technology. It is published by the Crop Science Society of America.

\$12.00 per year in U.S. and Canada.

\$13.00 per year elsewhere.

American Society of Agronomy
2702 Monroe Street
Madison 5, Wisconsin, U.S.A.

*It's time to analyze your
methods of animal husbandry
—but not before you read*

Animal Husbandry Heresies

By ALLAN FRASER

*Do You Practice What
They Preach?*

This controversial new book shows that the recognized methods of animal husbandry are not necessarily those generally followed on farms—even though stockmen *think* they are!

Now—learn the facts as a noted authority in animal and dairy husbandry guides the reader through the maze of orthodox agricultural science. You will discover exactly what part inheritance factors, environment (with both a chemist's and a biologist's approach to feeding), and the historical background of husbandry play in today's practices.

You will learn how accurate livestock pedigrees, and livestock shows have *over-dominated* farms methods, and you will see how some breeders have unwittingly adopted *ridiculous fads* and permitted economic concerns in the field of "protective foods" to overshadow even the most basic, sensible practices.

Stockmen will be especially interested to read that the importance of breeding has been greatly exaggerated, and they will want to consider the extent to which so-called "acquired characteristics" really are inherited.

Here at last is the one book that exposes the myths of animal husbandry and provides the vital answers to your questions. It further offers a challenging proposal for the future—one that you will want to think about carefully and discuss with the experts. Order your copy today!

\$6.00

You can expedite shipment by enclosing remittance.

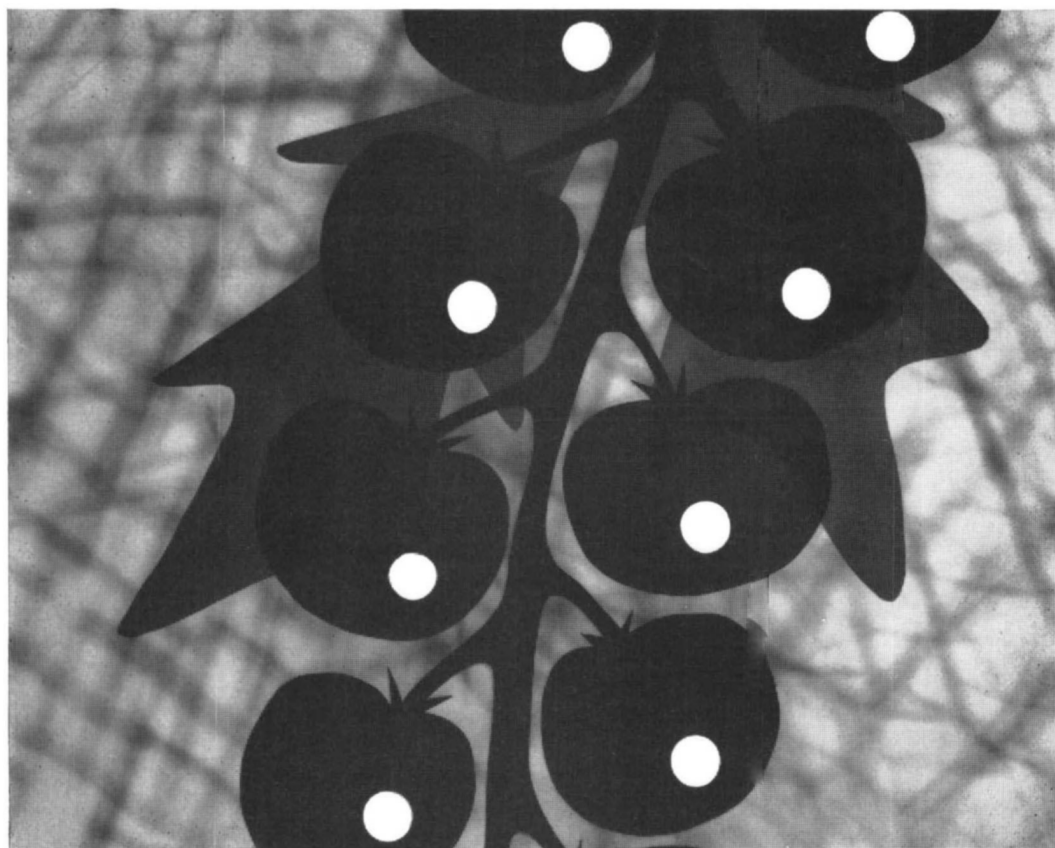
Philosophical Library

Publishers

15 East 40th Street, New York 16, N.Y.

Tomato [tōmā'to (Eng), tōmēi'to (US)]: from Sp. *tomate* adapted from Mexican *tomatl*. *Lycopersicum esculentum* (family *Solanaceae*). 1. A native of S. America, introduced to Europe in early 16th c. and to USA in early 19th c. 2. Botanically a fruit but popularly considered as a vegetable. Excellent source of vit. A & C. 3. Often affected by nematode infestation causing stunted, wilted plants, inferior yields and loss of profits. 4. Crop should be protected from such damage by thorough treatment of the soil with D-D before planting. 5. Against this and other pests, Shell pesticides (*cf.* aldrin, dieldrin, endrin, Phosdrin and Nemagon) offer sure protection.

D-D



For further information consult your Shell Company

In agriculture and industry

Shell Chemicals





A MODERN MILL FOR GRINDING GRAIN

The Casella grain mill is an efficient machine for grinding grain for quick accurate analysis and moisture determination. Because it shears, as it powders, the Casella mill reduces grain to an even powder without a vitiating temperature rise, and in the case of high moisture content, without forming a clogging paste. Cleaning between sampling is a quick and easy process. *Write for detailed leaflet 853/JAS*



LABORATORY GRAIN MILL

C. F. CASELLA & CO. LIMITED,
Dept. J.A.S., Regent House, Fitzroy Square, W. 1
Telephone Euston 3944/5/6/7

*Members of the Scientific Instrument Manufacturers' Association
of Great Britain and the British Scientific Instrument
Research Association*

ANIMAL PRODUCTION

JOURNAL OF THE BRITISH SOCIETY OF ANIMAL PRODUCTION

Contents of Volume 3, Part 1, February 1961

- MAHADEVAN, P. and MARPLES, H. J. S. An analysis of the Entebbe herd of Nganda cattle in Uganda.
FRASER, J. D. A comparison of whole milk with buttermilk in the rearing of calves for veal. 1. Rearing and growth.
BARTON, R. A. and KIRTON, A. H. A comparison of whole milk with buttermilk in the rearing of calves for veal. 2. Slaughter and carcass composition data.
SHORTHOSE, W. R. and LAMMING, G. E. The effect of testosterone and oestradiol on growth rate and carcass quality of fattening hoggets.
PRESTON, T. R., CHARLESON, E. B., MACLEOD, N. A., ROSEN, G. D. and VERNON, J. The effect of hydroxyzine on growth, endocrine, and carcass characteristics of lambs.
BLAXTER, K. L., WAINMAN, F. W. and WILSON, R. S. The regulation of food intake by sheep.
OWEN, J. B. and INGLETON, J. W. A method of collecting faeces from ewes.
HALE, R. W. Heritabilities and genetic correlations of egg production and other characters in a White Wyandotte flock.
WATSON, J. H. The influence of contemporaneity, genetic variation and herd differences on milk yield and fat percentage.
LODGE, G. A. and McPHERSON, R. M. Level of feeding during early life and the subsequent reproductive performance of sows.
BELLIS, D. B. Supplementation of bacon pig rations by aureomycin and copper sulphate.

This journal is a continuation and expansion of *The Proceedings of the British Society of Animal Production* (1944-58) and appears three times per year in February, June, and October. The annual subscription is 45s. (\$7.50 in U.S.A. and Canada), single parts 17s. 6d. (\$2.75 in U.S.A. and Canada) net. Orders and subscriptions should be sent to:

OLIVER AND BOYD LTD.

Tweeddale Court, 14 High Street, Edinburgh, 1.