

Continued from back cover

	PAGE
NEAL, HEATHER D. ST. C. and THORNLEY, J. H. M. The lactation curve in cattle: a mathematical model of the mammary gland . . . . .	389
SINGH, S. P. Summer legume intercrop effects on yield and nitrogen economy of wheat in the succeeding season . . . . .	401
PALTA, J. A. Evaluation of the hydraulic press for measurement of leaf water potentials in cassava . . . . .	407
NORTH, P. F. and BROWN, N. J. Some field instruments suitable for the automated measurement of thermal and hydraulic properties of soil . . . . .	411
FATUNLA, T. and BADARU, K. Inheritance of resistance to cow-pea weevil ( <i>Callosobruchus maculatus</i> , Fabr.) . . . . .	423
PATTERSON, H. D. and HUNTER, E. A. The efficiency of incomplete block designs in National List and Recommended List cereal variety trials . . . . .	427
TAYO, T. O. Growth, development and yield of pigeon pea ( <i>Cajanus cajan</i> (L.) Millsp.) in the low-land tropics. 4. Effects of sowing depth . . . . .	435
TAYO, T. O. Growth, development and yield of pigeon pea ( <i>Cajanus cajan</i> (L.) Millsp.) in the low-land tropics. 5. Effect of planting configuration . . . . .	441
HOLBROOK, J. R., BYRNE, W. R. and RIDGMAN, W. J. Assessment of results from wheat trials testing varieties and application of nitrogenous fertilizer . . . . .	447
BANGA, S. S. and LABANA, K. S. Production of $F_1$ hybrids using ethrel-induced male sterility in Indian mustard ( <i>Brassica juncea</i> (L.) Coss.) . . . . .	453
BILASPURI, G. S. and GURAYA, S. S. Histochemical localization of glycolytic enzymes, alcohol and secondary-alcohol dehydrogenases in the testes of buffaloes, goats and rams . . . . .	457
DE, R., YOGESWARA RAO, Y. and ALI, W. Grain and fodder legumes as preceding crops affecting the yield and N economy of rice . . . . .	463
SHARMA, S. N., RAY, S. B., PANDEY, S. L. and PRASAD, R. Effect of irrigation, pyrites and phosphobacteria on the efficiency of rock phosphate applied to lentils . . . . .	467
REID, I. M., ROWLANDS, G. J., DEW, A. M., COLLINS, R. A., ROBERTS, C. J. and MANSTON, R. The relationship between post-parturient fatty liver and blood composition in dairy cows . . . . .	473
HALL, D. G. M. and JONES, R. J. A. Soil moisture changes under grassland as measured by neutron probe in midland England . . . . .	481
SHORT NOTES	
GANESHAMURTHY, A. N. An estimate of the uptake of subsurface soil potassium by crops in two long-term experiments . . . . .	495
REID, I. M., DEW, SALLY M., COLLINS, R. A., DUCKER, M. J., BLOOMFIELD, GLENYS A. and MORANT, S. V. The relationship between fatty liver and fertility in dairy cows: a farm investigation . . . . .	499
MABON, R. M., NOBLE, R. C. and McEWAN JENKINSON, D. Bovine sebum composition during the first 6 weeks post partum . . . . .	503
LEMERLE, C. The effect of pasture type incubated and basal ration ingested on rate of digestion in nylon bags . . . . .	507
OBITUARY . . . . .	511

CONTENTS

Vol. 101 Part 2 October 1983

	PAGE
CHIGARU, P. R. N. and HOLNESS, D. H. Estimation of body water and fat in cattle using tritiated water space and live weight with particular reference to the influence of breed . . . . .	257
PELL, JENNIFER M., TOOLEY, JULIA, JEACOCK, MARJORIE K. and SHEPHERD, D. A. L. Glutamate and glutamine metabolism in tissues of developing lambs . . . . .	265
PELL, JENNIFER M., JEACOCK, MARJORIE K. and SHEPHERD, D. A. L. Glutamate and glutamine metabolism in the ovine placenta . . . . .	275
AYODELE, O. J. and AGBOOLA, A. A. Evaluation of phosphorus in savannah soils of western Nigeria under bush fallow systems . . . . .	283
DAUNCEY, M. J., INGRAM, D. L., WALTERS, D. E. and LEGGE, K. F. Evaluation of the effects of environmental temperature and nutrition on growth and development . . . . .	291
HABGOOD, R. M. and RAFIQUE UDDIN, M. Some effects of artificial variation in light interception, number of grains and husk constriction on the development of grain weight in normal and high-lysine barley . . . . .	301
PATEL, C. S. and MANDAL, A. K. Effect of moisture regimes and level of fertilizer application on yield and water requirement of jute ( <i>Corchorus olitorius</i> L. and <i>Corchorus capsularis</i> L.)	311
TRIPATHI, I. D. and SINGH, M. Triple test cross analysis in three barley populations under saline-alkali soil conditions . . . . .	317
NATH, K., RAJAGOPAL, S. and GARG, A. K. Water-washed neem ( <i>Azadirachta indica</i> juss) seed kernel cake as a cattle feed . . . . .	323
BAKER, C. K. and GALLAGHER, J. N. The development of winter wheat in the field. 1. Relation between apical development and plant morphology within and between seasons . . . . .	327
BAKER, C. K. and GALLAGHER, J. N. The development of winter wheat in the field. 2. The control of primordium initiation rate by temperature and photoperiod . . . . .	337
ROSE, S. P. and MICHIE, W. Estimation of abdominal fat in laying hens, turkeys and broilers using calipers . . . . .	345
DAUNCEY, M. J. and INGRAM, D. L. Evaluation of the effects of environmental temperature and nutrition on body composition . . . . .	351
GILLILAND, T. J., TINMAN, J. and CAMLIN, M. S. Allozymes of phosphoglucoisomerase (PGI) in cultivars of barley ( <i>Hordeum vulgare</i> L.) . . . . .	359
INNES, P. and BLACKWELL, R. D. Some effects of leaf posture on the yield and water economy of winter wheat . . . . .	367
RAI, R. and PRASAD, V. Studies on compatibility of nitrogen fixation by high-temperature-adapted <i>Rhizobium</i> strains and <i>Vigna radiata</i> genotypes at two moisture levels in calcareous soil . . . . .	377
HADJICHRISTODOULOU, A. Edge effects on yield, yield components and other traits in mechanized durum wheat and barley trials . . . . .	383

*Continued on inside back cover*

© Cambridge University Press 1983

**SUBSCRIPTIONS.** Two volumes of three parts are published annually. All orders must be accompanied by payment. The subscription price of volumes 100 and 101, 1983, is £48.00 net (U.S.A. and Canada US \$125.00) per volume (post free); single parts are available at £18.50 net (U.S.A. and Canada US \$49.00) plus postage. Orders or enquiries may be sent to any bookseller or subscription agent, or Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU (U.S.A. and Canada, Cambridge University Press, 32 East 57th Street, New York, N.Y. 10022, U.S.A.). Second class postage paid at New York, N.Y., and at additional mailing offices.

*Printed in Great Britain at the University Press, Cambridge*