

INDEX

PAGE	PAGE
<i>Agrobacterium</i> isolates, identification and nomenclature of	Baker, E. P., Sanghi, A. K., McIntosh, R. A., and Luig, N. H.—
Allen, R. N., Hayward, A. C., Halliday, W. J., and Fulcher, Jean—	Cytogenetical studies in wheat. III. Studies of a gene conditioning resistance to stem rust strains with unusual genes for avirulence
Bacterial blight of <i>Vicia sativa</i> : aetiology of the disease and identification of the pathogen	369
Angel, Teresa, Austin, Barbara, and Catcheside, D. G.—	Ballard, L. A. T.—
Regulation of recombination at the <i>his-3</i> locus in <i>Neurospora crassa</i>	See Hagon, M. W.
<i>Aphelenchus avenae</i> , ecological differences between four Australian isolates of	Banana fruit, acceleration and delay of ripening in, by gibberellic acid
<i>Aphelenchus avenae</i> , growth and development of	1229
Apple extract, cytokinins from	Banana fruit, internal distribution of exogenous auxins and accelerated ripening of
Apple tree, polar and lateral transport of water in	597
Apricot trees, host reactions involved in the recovery of, from <i>Verticillium</i> wilt	Banana fruits, ripening, permeability, sugar accumulation, and respiration rate in
Artichoke tubers, effect of cycloheximide on cell division in partially synchronized cells of	411
Aschberger, P. A.—	289
<i>See</i> Hope, A. B.	Barley leaves, infection by <i>Rhynchosporium secalis</i>
Aspinall, D., and Husain, I.—	231
The inhibition of flowering by water stress	Barrs, H. D., Freeman, B., Blackwell, J., and Ceccato, R. D.—
Atherton, J. G.—	Comparisons of leaf water potential and xylem water potential in tomato plants
<i>See</i> Bowyer, J. W.	1027
<i>Atriplex halimus</i> L., growth of and inter-relations between growth and photosynthesis of	Basit, A. A., and Francki, R. I. B.—
<i>Atriplex</i> leaf tissue, ion absorption in. III	Some properties of rose mosaic virus from South Australia
Austin, Barbara—	115
<i>See</i> Angel, Teresa	1047
Avian hypophyseal stimulation and spermatogenesis	Basit, A. A., Francki, R. I. B., and Kerr, A.—
Ayesu-Offei, E. N., and Clare, B. G.—	The simultaneous transmission of a plant-pathogenic bacterium and a virus from rose by grafting and mechanical inoculation
Processes in the infection of barley leaves by <i>Rhynchosporium secalis</i>	925
<i>Azotobacter vinelandii</i> , nitrogen fixation and the acetylene-reduction assay in	Bassett, J. M.—
Back, Joan F.—	Metabolic effects of catecholamines in sheep
<i>See</i> Smith, M. B.	115
Bain, Joan M., and Hall, Janice M.—	Beane, W. L.—
The effect of dietary cyclopropene fatty acids on the structure of new-laid and stored hens' eggs: an optical and electron microscope study	1229
<i>See</i> Van Krey, H. P.	1221
Beard, J. M., and Thompson, E. O. P.—	Beard, J. M., and Thompson, E. O. P.—
Studies on marsupial proteins. III. <i>N</i> -Bromosuccinimide cleavage of the α -chain of kangaroo haemoglobin and the amino acid sequence of the <i>N</i> -terminal fragment	717
Behncken, G. M.—	Beef heart mitochondria, studies on inhibition of electron-transport systems of, by α -lipoic acid
Some properties of a virus from <i>Galingo-soga parviflora</i>	1015
Beetroot mitochondria, studies on inhibition of electron-transport systems of, by α -lipoic acid	1221
Behncken, G. M.—	821
Some properties of a virus from <i>Galingo-soga parviflora</i>	657
Behncken, G. M.—	821
Some properties of a virus from <i>Galingo-soga parviflora</i>	497

PAGE		PAGE
Bend, J. R., Holder, G. M., Protos, Eva, and Ryan, A. J.—	Broad beans, effect of cycloheximide on cell division in partially synchronized cells of	573
The metabolism of carbaryl in the cattle tick <i>Boophilus microplus</i> (Canestrini)	Bromfield, S. M.— <i>See</i> Cosgrove, D. J.	361 339
Bergersen, F. J.—	Bruce, M. I.— <i>See</i> Zwar, J. A.	1015 289
The quantitative relationship between nitrogen fixation and the acetylene- reduction assay	Brush-tailed possum, development of epidermis of	1241
Billitzer, A. W., and Jarrett, I. G.—	Brush-tailed possum, development of hair follicles in..	1067
The effect of feeding and salivation on acid-base status in carotid and jugular blood in sheep	Brush-tailed possum, melanocyte population in the skin during develop- ment of	915 697
Black, J. D. F.— <i>See</i> West, D. W.	Brush-tailed possum, rate of passage of food in	231 515
Blackwell, J.— <i>See</i> Barrs, H. D.	Brush-tailed possum, serum amylase polymorphism in populations of ..	485 235
<i>Boophilus microplus</i> , absorption and metabolism of [¹⁴ C]DDT in DDT- resistant and susceptible strains of ..	Bull semen, effect of amylase, catalase, and a decapacitating preparation on fertility of	219 961
<i>Boophilus microplus</i> , effects of infesta- tions by, on blood composition of Shorthorn × Hereford cattle	681	
<i>Boophilus microplus</i> , metabolism of carbaryl in	Carr, D. J.— <i>See</i> O'Brien, T. P.	361 275
Bottrill, D. E., and Wiskich, J. T.— Studies on reported α -lipoic acid inhibitions	Carter, M. V.— <i>See</i> Francki, R. I. B.	821 713
Bovine skeletal muscle, nucleic acid and nitrogen concentration of, during emaciation and repletion	Catcheside, D. E. A.— Control of recombination within the <i>nitrate-2</i> locus of <i>Neurospora crassa</i> : an unlinked dominant gene which reduces prototroph yields	511 855
Bowyer, J. W., and Atherton, J. G.— Observations on the relationship be- tween <i>Mycoplasma</i> -like bodies and host cells of legume little leaf-diseased plants	Catcheside, D. G.— <i>See</i> Angel, Teresa	115 1229
Bradbury, J. H., Chapman, G. V., King, N. L. R., and O'Shea, J. M.— Keratin fibres. III. Amino acid analyses of histological components..	Cattle coats, analysis of growth processes in	637 201
Bradbury, J. H., and Leeder, J. D.— Keratin fibres. IV. Structure of cuticle	Cattle tick, absorption and metabolism of [¹⁴ C]DDT in DDT-resistant and susceptible strains of	843 219
Brady, C. J., O'Connell, P. B. H., Smydzuk, J., and Wade, N. L.— Permeability, sugar accumulation, and respiration rate in ripening banana fruits	Cattle tick, effects of infestations by, on the blood composition of Shorthorn × Hereford cattle	1143 681
<i>Brassica oleracea</i> , transpiration and waxy bloom in	Cattle tick, metabolism of carbaryl in Cauliflower bud mitochondria, studies on inhibition of electron-transport system of, by α -lipoic acid	27 361 821
Broad, Andrea, Gillespie, J. M., and Reis, P. J.—	Ceccato, R. D.— <i>See</i> Barrs, H. D.	149 485
The influence of sulphur-containing amino acids on the biosynthesis of high-sulphur wool proteins	Chambers, S. C.— Nuclear distribution in vegetative cells of <i>Ophiobolus graminis</i> and other cereal root pathogens..	1105
	Pathogenic variation in <i>Ophiobolus</i> <i>graminis</i>	1099

PAGE		PAGE	
Chapman, G. V.—		<i>Drosophila melanogaster</i> , phenogenetics of a super-suppressor in. I	645
<i>See</i> Bradbury, J. H.	637	Dunstone, R. L.—	
<i>Chara corallina</i> , effects of temperature on membrane permeability to ions in	1047	<i>See</i> Evans, L. T.	725, 743
<i>Chlorella vulgaris</i> , effects of the di-pyridyl diquat on the metabolism of. I, II	43, 265	Dwyer, Margaret R., Smydzuk, J., and Smillie, Robert M.—	
α-Chymotrypsin, study of promotion of the deacetylation reaction by	607	Synthesis, and breakdown of β-1,3-glucan in <i>Euglena gracilis</i> during growth and carbon depletion ..	1005
Citrus leaf slices, chloride influx into ..	953		
Clare, B. G.—		Edwards, D. G.—	
<i>See</i> Ayesu-Offei, E. N.	299	Phosphate absorption and long-distance transport in wheat seedlings ..	255
<i>See</i> Harrison, A. F.	1027	Eisen, E. J.—	
Clarris, B. J.—		<i>See</i> Hanrahan, J. P.	401
<i>See</i> Fraser, J. R. E.	1297	<i>Euglena gracilis</i> , action spectrum of photosynthesis in, at different stages of chloroplast development	33
Coconut milk, cytokinins from ..	289	<i>Euglena gracilis</i> , synthesis and breakdown of β-1,3-glucan in	1005
Cosgrove, D. J.—		<i>Eutypa armeniacae</i> , serological properties of mycelium and ascospores of	713
Inositol phosphate phosphatases of microbiological origin. Inositol phosphate intermediates in the dephosphorylation of the hexaphosphates of <i>myo</i> -inositol, <i>scyllo</i> -inositol, and <i>d-chiro</i> -inositol by a bacterial (<i>Pseudomonas</i> sp.) phytase	1207	Evans, A. A. F., and Fisher, J. M.—	
Cosgrove, D. J., Irving, G. C. J., and Bromfield, S. M.—		Ecological differences between four Australian isolates of <i>Aphelenchus avenae</i> Bastian	507
Inositol phosphate phosphatases of microbiological origin. The isolation of soil bacteria having inositol phosphate phosphatase activity	339	Evans, L. T., and Dunstone, R. L.—	
Cotton leaves, respiration of, during photosynthesis..	529	Some physiological aspects of evolution in wheat	725
Czuppon, A. B.—		Evans, L. T., Dunstone, R. L., Rawson, H. M., and Williams, R. F.—	
<i>See</i> Richardson, B. J.	617, 1305	The phloem of the wheat stem in relation to requirements for assimilate by the ear	743
Denna, D. W.—		Evans, L. T., and Rawson, H. M.—	
Transpiration and the waxy bloom in <i>Brassica oleracea</i> L.	27	Photosynthesis and respiration by the flag leaf and components of the ear during grain development in wheat	245
Downes, A. M., Reis, P. J., Sharry, L. F., and Tunks, D. A.—		Evans, L. T.—	
Metabolic fate of parenterally administered sulphur-containing amino acids in sheep and effects on growth and composition of wool	1077	<i>See also</i> Rawson, H. M.	753
Downes, R. W.—		Ewe, distribution of ciliated cells in the cervix of	1265
Effect of light intensity and leaf temperature on photosynthesis and transpiration in wheat and sorghum	775	Ewe, fertilization and survival of fertilized eggs in	1271, 1279
<i>Drosophila melanogaster</i> , effect of different chromosomes on four bristle number characters of	503	Ewe, glycogen, glycogen-metabolizing enzymes, and acid and alkaline phosphatases in the endometrium of	1289
<i>Drosophila melanogaster</i> , genes of large effect and shape of distribution of a quantitative character in	867	Ewe, transport of spermatozoa in	1271
		Ewe, uterine endometrial phosphomono-esterases in relation to implantation in	1089
		Findlay, G. P.—	
		Membrane electrical behaviour in <i>Nitellopsis obtusa</i>	1033

PAGE	PAGE
Findlay, G. P., Hope, A. B., and Williams, E. J.—	
Ionic relations of marine algae. II. <i>Griffithsia</i> : ionic fluxes .. .	323
Finnegan, D. J.— See Hope, R. M. .. .	235
Fisher, J. M.— Growth and development of <i>Aphelenchus avenae</i> Bastian .. .	411
See also Evans, A. A. F. .. .	507
Fowke, L. C.— See Pickett-Heaps, J. D. .. .	71, 93
Francki, R. I. B., and Carter, M. V.— The serological properties of <i>Eutypa armeniacae</i> mycelium and ascospores	713
Francki, R. I. B.— See also Basit, A. A. .. .	493, 1197
Frankham, R.— The effects of different chromosomes on four bristle number characters of <i>Drosophila melanogaster</i> .. .	503
Fraser, J. R. E., Clarris, B. J., and Kont, L. A.— The morphology and motility of human synovial cells and their pericellular gels: a time-lapse microcinematographic study .. .	1297
Freeman, B.— See Barrs, H. D. .. .	485
Fulcher, Jean— See Allen, R. N. .. .	597
Fungal cell wall composition, infrared spectra as indicators of .. .	345
Gale, J., Naaman, R., and Poljakoff-Mayber, A.— Growth of <i>Atriplex halimus</i> L. in sodium chloride salinated culture solutions as affected by the relative humidity of the air .. .	947
Gale, J., and Poljakoff-Mayber, A.— Interrelations between growth and photosynthesis of salt bush (<i>Atriplex halimus</i> L.) grown in saline media ..	937
<i>Galinsoga parviflora</i> , some properties of a virus from .. .	497
Gillespie, J. M.— See Broad, Andrea .. .	149
Gilmore, D. P.— The rate of passage of food in the brush-tailed possum, <i>Trichosurus vulpecula</i> .. .	515
Gilmore, Lynnor B.— See Turner, J. S. .. .	43
<i>Glycine</i> , development of stress effects in two species of .. .	537
Grasses, suberized layer in cell walls of bundle sheath of .. .	275
Gregory, Jeanette— See Rose, R. J. .. .	561
<i>Griffithsia</i> : ionic fluxes in .. .	323
<i>Griffithsia pulvinata</i> , effects of temperature on membrane permeability to ions in .. .	1047
Hagon, M. W., and Ballard, L. A. T.— Reversibility of strophioral permeability to water in seeds of subterranean clover (<i>Trifolium subterraneum</i> L.) .. .	519
Hall, Janice M.— See Bain, Joan M. .. .	657
Halliday, W. J.— See Allen, R. N. .. .	597
Hammond, K., and James, J. W.— Genes of large effect and the shape of the distribution of a quantitative character .. .	867
Hanrahan, J. P., and Eisen, E. J.— Effect of selection for 12-day litter weight on lactational performance in mice .. .	401
Harrison, A. F., and Clare, B. G.— Host reactions involved in the recovery of apricot trees from <i>Verticillium</i> wilt .. .	1027
Haydock, K. P.— See Wilson, J. R. .. .	537
Hayward, A. C.— See Allen, R. N. .. .	597
Hegarty, M. P., and Pound, A. W.— Indospicine, a hepatotoxic amino acid from <i>Indigofera spicata</i> : isolation, structure, and biological studies .. .	831
Henrikson, R. C., and Matoltsy, A. G.— Turtle epidermis: electron microscopic observations on a granular component of malpighian cells ..	241
Henrikson, R. C.— See also Lyne, A. G. .. .	1067
Hens' eggs, new-laid and stored, effect of dietary cyclopropene fatty acids on structure of .. .	657
Hird, F. J. R.— See Hoogenraad, N. J. .. .	793
Holder, G. M.— See Bend, J. R. .. .	361

PAGE		PAGE	
Hollis, D. E.—		Kangaroo, properties of red blood cell glucose-6-phosphate dehydrogenase from three species of .. .	1305
<i>See</i> Lyne, A. G.	1067	Keane, P. J., Kerr, A., and New, P. B.—	
Holt, L. A., and Milligan, B.—	165	Crown gall of stone fruit. II. Identification and nomenclature of <i>Agrobacterium</i> isolates	585
The esterification of wool	165	Keratin biosynthesis. I, II ..	127, 139
Hoogenraad, N. J., and Hird, F. J. R.—	793	Keratin fibres. III, IV .. .	637, 843
Electron-microscopic investigation of the flora of sheep alimentary tract ..	793	Keratins, reduced and carboxymethylated, molecular weights of .. .	809
Hope, A. B., and Aschberger, P. A.—	1047	Kerr, A.—	
Effects of temperature on membrane permeability to ions	1047	<i>See</i> Basit, A. A.	493
Hope, A. B.—	323	<i>See</i> Keane, P. J.	585
<i>See also</i> Findlay, G. P.	323	Kerr, R. W.—	
Hope, R. M., and Finnegan, D. J.—	235	Inheritance of DDT resistance in a laboratory colony of the housefly, <i>Musca domestica</i>	377
A serum amylase polymorphism in populations of the brush-tailed possum <i>Trichosurus vulpecula</i>	235	Killeen, I. D., and Moore, N. W.—	
Housefly, inheritance of DDT resistance in a laboratory colony of	377	Fertilization and survival of fertilized eggs in the ewe following surgical insemination at various times after the onset of oestrus	1279
Human synovial cells and their pericellular gels, morphology and motility of	1297	Transport of spermatozoa, and fertilization in the ewe following cervical and uterine insemination early and late in oestrus	1271
Husain, I.—	925	King, N. L. R.—	
<i>See</i> Aspinall, D.	925	<i>See</i> Bradbury, J. H.	637
<i>Hydrodictyon reticulatum</i> , ultrastructure and differentiation of. I	1173	Kirk, J. T. O., and Reade, J. A.—	
<i>Indigofera spicata</i> , isolation of a hepatotoxic amino acid from	831	The action spectrum of photosynthesis in <i>Euglena gracilis</i> at different stages of chloroplast development .. .	33
Irving, G. C. J.—	831	Klebsiella aerogenes, nitrogen fixation and the acetylene-reduction assay in Klein, S.—	1015
<i>See</i> Cosgrove, D. J.	831	<i>See</i> Nir, I.	489
James, J. W.—	867	Kont, L. A.—	
<i>See</i> Hammond, K.	867	<i>See</i> Fraser, J. R. E.	1297
Jarrett, I. G.—	915	Kraft, N., and Shortman, K.—	
<i>See</i> Billitzer, A. W.	915	The phylogeny of the ribonuclease-ribonuclease inhibitor system: its distribution in tissues and its response during leukaemogenesis and aging ..	175
Jeffrey, P. D.—	809	Kratzing, Jean E.—	
The molecular weights of two reduced and carboxymethylated keratins by disk gel electrophoresis and a comparison of two methods of analysing the results	809	The olfactory mucosa of the sheep ..	447
Jenner, C. F.—	1061	Lake, J. V., and Slatyer, R. O.—	
Relationship between levels of soluble carbohydrate and starch synthesis in detached ears of wheat	1061	Respiration of leaves during photosynthesis. III. Respiration rate and mesophyll resistance in turgid cotton leaves with stomatal control eliminated	529
Jersey, J. de—	991		
<i>See</i> Moore, Louise	991		
Johnston, P. G., Pennycook, Pamela R., and Rendel, J. M.—	607		
Selection for constancy of expression of the <i>Tabby</i> gene in the mouse ..	607		
Kangaroo, grey, <i>N</i> -bromosuccinimide cleavage of α -chain of, and amino acid sequence of <i>N</i> -terminal fragment of haemoglobin from	185		

PAGE		PAGE
Lambourne, L. J.—		Marchant, H. J., and Pickett-Heaps, J. D.—
<i>See</i> Robinson, D. W.	511	Ultrastructure and differentiation of <i>Hydrodictyon reticulatum</i> . I. Mitosis in the coenobium
Leaves, narrow, convective heat transfer from	309	1173
Lee, G. L. G.—		Marine algae, ionic relations of. II . .
The phenogenetics of a super-sup- pressor in <i>Drosophila melanogaster</i> . I. Phenotypic characterization and suppressor efficiency		323
Leeder, J. D.—		Marinos, N. G.—
<i>See</i> Bradbury, J. H.		<i>See</i> Linke, R. D.
Legume little leaf-diseased plants, host cells of, and <i>Mycoplasma</i> -like bodies, relationship between		1125
Lightfoot, R. J.—		Markus, Katalin—
<i>See</i> Restall, B. J.		<i>See</i> Stokes, D. M.
Linke, R. D., and Marinos, N. G.—		265
Effects of a pregermination pulse treatment with morphactin on <i>Pisum</i> <i>sativum</i>	843	Marsupial proteins, studies on. III . .
<i>Lolium temulentum</i> L., inhibition of flowering in, by water stress	115	185
Luig, N. H.—		Matoltzy, A. G.—
<i>See</i> Baker, E. P.	1265	<i>See</i> Henrikson, R. C.
Lüttge, U., and Osmond, C. B.—		241
Ion absorption in <i>Atriplex</i> leaf tissue. III. Site of metabolic control of light- dependent chloride secretion to epi- dermal bladders	925	McIntosh, R. A.—
Lyne, A. G.—		<i>See</i> Baker, E. P.
The development of hair follicles in the marsupial <i>Trichosurus vulpecula</i> . .	17	369
The melanocyte population in the skin during development of the marsupial <i>Trichosurus vulpecula</i>	1241	Mercer, F. V.—
Lyne, A. G., Henrikson, R. C., and Hollis, D. E.—		<i>See</i> Rose, R. J.
Development of the epidermis of the marsupial <i>Trichosurus vulpecula</i>	1067	561
Macmillan, K. L.—		Mice, lactational performance in
The effect of amylase, catalase, and a decapacitating preparation on fertility of bull semen diluted in ambient tem- perature extender	961	401
<i>Macropus robustus</i> , interpopulation differences in red blood cell enzyme levels of	617	Michell, A. J., and Scurfield, G.—
Maize seedlings, changes in fine structure of root cells from	489	An assessment of infrared spectra as indicators of fungal cell wall com- position
Mammalian tissues, distribution of ribonuclease-ribonuclease inhibitor system in	175	345
		Milligan, B.—
		<i>See</i> Holt, L. A.
		165
		Mills, S. C., Scott, T. W., Russell, G. R., and Smith, R. M.—
		Hydrogenation of C_{18} unsaturated fatty acids by pure cultures of a rumen micrococcus
		1109
		<i>Mimosa pudica</i> L., ultrastructure of specialized parenchyma cells in the leaf blades of
		63
		Monocotyledonous plants, tissue culture of
		473
		Moore, Louise, and de Jersey, J.—
		α -Chymotrypsin: a study of the promotion of the deacylation reaction
		607
		Moore, N. W.—
		Preliminary studies on <i>in vitro</i> culture of fertilized sheep ova
		721
		<i>See also</i> Killeen, I. D.
		1271, 1279
		Mouse embryo, pre-implantation, effects of ions on development of, <i>in vitro</i> . . .
		421
		Mouse embryos, metabolism of specif- ically labelled pyruvate by
		877
		Mouse, selection for constancy of ex- pression of the <i>Tabby</i> gene in
		1061
		Mullin, M.—
		Tissue culture of some monocotyle- donous plants
		473
		Mullins, M. G., and Osborne, Daphne J.—
		Effect of abscisic acid on growth cor- relation in <i>Vitis vinifera</i> L.
		479

PAGE	PAGE
Murdoch, R. N.—	O'Kelly, J. C., and Seifert, G. W.—
Glycogen, glycogen-metabolizing enzymes, and acid and alkaline phosphatases in the endometrium of the ewe during early pregnancy	The effects of tick (<i>Boophilus microplus</i>) infestations on the blood composition of Shorthorn \times Hereford cattle on high and low planes of nutrition
1289	681
Uterine endometrial phosphomono-esterases in relation to implantation in the ewe and rabbit doe	<i>Ophiobolus graminis</i> , nuclear distribution in vegetative cells of
1089	1105
Murdoch, R. N., and O'Shea, T.—	<i>Ophiobolus graminis</i> , pathogenic variation in
Metabolism of rabbit endometrium following the administration of human chorionic gonadotrophin, and during oestrus, pseudopregnancy, and pregnancy	Orwin, D. F. G.—
431	A polysaccharide-containing cell coat on keratinizing cells of the Romney wool follicle
<i>Musca domestica</i> , inheritance of DDT resistance in	623
<i>Mycoplasma</i> -like bodies and host cells of legume little leaf-diseased plants, relationship between	Osborne, Daphne J.—
377	See Mullins, M. G.
Naaman, R.—	O'Shea, J. M.—
See Gale, J.	See Bradbury, J. H.
<i>Neurospora crassa</i> , control of recombination within the <i>nitrate-2</i> locus of . .	637
<i>Neurospora crassa</i> , regulation of recombination at the <i>his-3</i> locus in . .	O'Shea, T., and Wales, R. G.—
New, P. B.—	Studies of the fixation of carbon dioxide by washed ram spermatozoa
See Keane, P. J.	889
Nir, I., Klein, S., and Poljakoff-Mayber, Alexandra—	O'Shea, T.—
Changes in fine structure of root cells from maize seedlings exposed to water stress	See also Murdoch, R. N.
585	431
<i>Nitellopsis obtusa</i> , membrane electrical behaviour in	Osmond, C. B.—
1229	See Lüttge, U.
O'Brien, T. P., and Carr, D. J.—	Ovalbumin, studies on. V
A suberized layer in the cell walls of the bundle sheath of grasses . .	1221
O'Brien, T. P., Zee, S. Y., and Swift, J. G.—	Paleg, L. G.—
The occurrence of transfer cells in the vascular tissues of the coleoptilar node of wheat	Sites of action of plant growth retardants on cholesterol biosynthesis by cell-free rat liver preparations .
275	1115
O'Brien, T. P.—	Pennycoek, Pamela R.—
See also Zee, S. Y.	See Johnston, P. G.
O'Connell, P. B. H.—	<i>Pharbitis nil</i> , inhibition of flowering in, by water stress
See Brady, C. J.	1061
<i>Oedogonium cardiacum</i> , Golgi bodies, wall structure, and wall formation in	925
<i>Oedogonium cardiacum</i> , nuclear division in	Pickett-Heaps, J. D., and Fowke, L. C.—
71	Cell division in <i>Oedogonium</i> . II.
<i>Oedogonium</i> , cell division in. II, III 71, 93	Nuclear division in <i>O. cardiacum</i> . .
	III. Golgi bodies, wall structure, and wall formation in <i>O. cardiacum</i> . .
	93
	Pickett-Heaps, J. D.—
	See also Marchant, H. J.
	1173
	<i>Pisum sativum</i> , effects of a pregermination pulse treatment with morphactin on
709	1125
	Plant growth retardants, sites of action of
	1115
	Poljakoff-Mayber, Alexandra—
	See Gale, J.
	937, 947
	See Nir, I.
	489
	Pound, A. W.—
	See Hegarty, M. P.
	831

	PAGE	PAGE
Protos, Eva—		
<i>See</i> Bend, J. R.	361	
<i>Pseudomonas</i> sp., inositol phosphate phosphatases of	1207	
Rabbit doe, uterine endometrial phosphomonoesterases in relation to implantation in	1089	
Rabbit endometrium, metabolism of . .	431	
Ram spermatozoa, effect of incubation conditions on the metabolic response of	1255	
Ram spermatozoa, survival of, following pellet freezing below -79°C . .	459	
Ram spermatozoa, washed, studies of fixation of carbon dioxide by . .	889	
Rawson, H. M.—		
Spikelet number, its control and relation to yield per ear in wheat . .	1	
<i>See also</i> Evans, L. T.	245, 743	
Rawson, H. M., and Evans, L. T.—		
The pattern of grain growth within the ear of wheat	753	
Reade, J. A.—		
<i>See</i> Kirk, J. T. O.	33	
Red clover, requirement for riboflavin for effective symbiosis on, by <i>Rhizobium trifolii</i>	1187	
Reis, P. J.—		
The influence of abomasal supplements of some amino acids and sulphur-containing compounds on wool growth rate	441	
The influence of dietary protein and methionine of the sulphur content and growth rate of wool in milk-fed lambs	193	
<i>See also</i> Broad, Andrea	149	
<i>See also</i> Downes, A. M.	1077	
Reis, P. J., and Tunks, D. A.—		
Changes in plasma amino acid patterns in sheep associated with supplements of casein and formaldehyde-treated casein	673	
Rendel, J. M.—		
<i>See</i> Johnston, P. G.	1061	
Restall, B. J.—		
Effect of incubation conditions on the metabolic response of ram spermatozoa in the presence of fluids from the genital tract of the ewe	1255	
Restall, B. J., and Lightfoot, R. J.—		
The distribution of ciliated cells in the cervix of the ewe	1265	
<i>Rhizobium trifolii</i> , requirement for riboflavin for effective symbiosis on clover by		1187
<i>Rhynchosporium secalis</i> , processes in the infection of barley leaves by . .		299
Ribonuclease—ribonuclease inhibitor system, phylogeny of		175
Richardson, B. J., and Czuppon, A. B.—		
Interpopulation differences in red blood cell enzyme levels of the wallaroo <i>Macropus robustus</i> (Marsupialia) Some properties of red blood cell glucose-6-phosphate dehydrogenase from three species of kangaroo . .		617
Robins, M. F.—		
<i>See</i> Wilson, J. R.		537
Robinson, D. W., and Lambourne, L. J.—		
The nucleic acid and nitrogen concentration of a bovine skeletal muscle during emaciation and repletion . .		511
Robinson, J. B., and Smith, F. A.—		
Chloride influx into citrus leaf slices		953
Rose mosaic virus from South Australia, some properties of		1197
Rose, R. J.—		
The effect of cycloheximide on cell division in partially synchronized plant cells		573
Rose, R. J., Gregory, Jeanette, and Mercer, F. V.—		
The effect of 5-fluorouracil on the growth and nucleolus of wheat coleoptiles		561
Rose, simultaneous transmission of plant-pathogenic bacterium and virus from		493
Rossiter, R. C.—		
Changes in the formononetin content of detached mature leaves of <i>Trifolium subterraneum</i>		469
Roulston, W. J.—		
<i>See</i> Schnitzerling, H. J.		219
Russell, G. R.—		
<i>See</i> Mills, S. C.		1109
Ryan, A. J.—		
<i>See</i> Bend, J. R.		361
Salamon, S.—		
The survival of ram spermatozoa following pellet freezing below -79°C		459
Sanghi, A. K.—		
<i>See</i> Baker, E. P.		369

PAGE		PAGE	
Schleger, A. V.— <i>See</i> Turner, H. G.	201	Smillie, Robert M.— <i>See</i> Dwyer, Margaret R.	1005
Schnitzerling, H. J., Roulston, W. J., and Schuntner, C. A.— The absorption and metabolism of [¹⁴ C]DDT in DDT-resistant and sus- ceptible strains of the cattle tick <i>Boophilus microplus</i>	219	Smith, F. A.— <i>See</i> Robinson, J. B.	953
Schuntner, C. A.— <i>See</i> Schnitzerling, H. J.	219	Smith, M. B., and Back, Joan F.— Studies on ovalbumin. V. The amino acid composition and some properties of chicken, duck, and turkey oval- bumins	1221
Schwinghamer, E. A.— Requirement for riboflavin for effect- ive symbiosis on clover by an auxo- trophic mutant strain of <i>Rhizobium</i> <i>trifolii</i>	1187	Smith, R. M.— <i>See</i> Mills, S. C.	1109
Scott, T. W.— <i>See</i> Mills, S. C.	1109	Smydzuk, J.— <i>See</i> Brady, C. J.	1143
Scurfield, G.— <i>See</i> Michell, A. J.	345	<i>See</i> Dwyer, Margaret R.	1005
Seifert, G. W.— <i>See</i> O'Kelly, J. C.	681	Soil bacteria having inositol phosphate phosphatase activity, isolation of . .	339
Sharry, L. F.— <i>See</i> Downes, A. M.	1077	Sorghum, effect of light intensity and leaf temperature on photosynthesis in	775
Sheep alimentary tract, electron-micro- scopic investigation of flora of . .	973	Soybean root nodules, nitrogen fixation and the acetylene-reduction assay in	1015
Sheep, changes in plasma amino acid patterns in	673	Stokes, D. M., Turner, J. S., and Markus, Katalin— The effects of dipyridyl diquat on the metabolism of <i>Chlorella vulgaris</i> . II. Effects of diquat in the light on chloro- phyll bleaching and plastid structure	265
Sheep, effect of feeding and salivation on acid-base status in carotid and jugular blood in	915	Stokes, D. M.— <i>See also</i> Turner, J. S.	43
Sheep, influence of dietary proteins and methionine on the sulphur content and growth rate of wool in	193	Stone fruit, crown gall of. II	585
Sheep, metabolic effects of catechola- mines in	903	Subterranean clover, requirement for riboflavin for effective symbiosis on, by <i>Rhizobium trifolii</i>	1187
Sheep, metabolic fate of parenterally administered sulphur-containing amino acids in	1077	Subterranean clover, reversibility of strophilar permeability to water in seeds of	519
Sheep, olfactory mucosa of	447	Swift, J. G.— <i>See</i> O'Brien, T. P.	709
Sheep ova, fertilized, preliminary studies on <i>in vitro</i> culture of	721	Thomas, D. A.— The regulation of stomatal aperture in tobacco leaf epidermal strips. I. The effect of ions	961
Sheep rumen, hydrogenation of C ₁₈ un- saturated fatty acids by pure cultures of a micrococcus from	1109	II. The effect of ouabain	981
Shortman, K.— <i>See</i> Kraft, N.	175	Thompson, E. O. P.— <i>See</i> Beard, J. M.	185
Siegel, P. B.— <i>See</i> Van Krey, H. P.	717	Thompson, W. K.— <i>See</i> West, D. W.	231
Sinclair, R.— Convective heat transfer from narrow leaves	309	Tobacco leaf epidermal strips, regulation of stomatal aperture in. I, II	961, 981
Slatyer, R. O.— <i>See</i> Lake, J. V.	529	Tomato plants, comparisons of leaf and xylem water potential in	485
		<i>Trichosurus vulpecula</i> , development of epidermis of	1067

PAGE		PAGE	
<i>Trichosurus vulpecula</i> , development of hair follicles in		<i>Vitis vinifera</i> L., effect of abscisic acid on growth correlation in	479
<i>Trichosurus vulpecula</i> , melanocyte population in the skin during development of	1241	Wade, N. L.— See Brady, C. J.	1143
<i>Trichosurus vulpecula</i> , rate of passage of food in	697	Wales, R. G.— Effects of ions on the development of the pre-implantation mouse embryo <i>in vitro</i>	421
<i>Trichosurus vulpecula</i> , serum amylase polymorphism in populations of ..	515	See also O'Shea, T.	889
<i>Trifolium subterraneum</i> , changes in formononetin content of detached mature leaves of	235	Wales, R. G., and Whittingham, D. G.— Metabolism of specifically labelled pyruvate by mouse embryos during culture from the two-cell stage to the blastocyst	877
<i>Trifolium subterraneum</i> , reversibility of strophiolar permeability to water in seeds of	519	Wallaroo, interpopulation differences in red blood cell enzyme levels of ..	617
Tunks, D. A.— See Downes, A. M.	1077	Wardlaw, I. F.— The early stages of grain development in wheat: response to light and temperature in a single variety	765
Turner, H. G., and Schleger, A. V.— An analysis of growth processes in cattle coats and their relations to coat type and body weight gain	673	West, D. W., Thompson, W. K., and Black, J. D. F.— Polar and lateral transport of water in an apple tree	231
Turner, J. S., Stokes, D. M., and Gilmore, Lynnor B.— The effects of the dipyridyl diquat on the metabolism of <i>Chlorella vulgaris</i> . I. Gas exchange in the light	201	Wheat coleoptiles, effect of 5-fluorouracil on growth and nucleolus of	561
Turner, J. S.— See also Stokes, D. M.	43	Wheat, cytogenetical studies in. III ..	369
Turtle epidermis, electron microscopic observations on a granular component of malpighian cells of	265	Wheat, early stages of grain development in	765
Van Krey, H. P., Siegel, P. B., and Beane, W. L.— Avian hypophyseal stimulation and spermatogenesis	241	Wheat, effect of light intensity and leaf temperature on photosynthesis and transpiration in	775
Van Steveninck, Margaret E.— See Van Steveninck, R. F. M.	717	Wheat, occurrence of transfer cells in vascular tissues of the coleoptilar node of	709
Van Steveninck, R. F. M., and Van Steveninck, Margaret E.— Ultrastructure of specialized parenchyma cells in the leaf blades of the sensitive plant <i>Mimosa pudica</i> L. . .	63	Wheat, ontogeny of the pigment strand in the caryopsis of	1153
Vendrell, M.— Acceleration and delay of ripening in banana fruit tissue by gibberellic acid Relationship between internal distribution of exogenous auxins and accelerated ripening of banana fruit ..	63	Wheat, pattern of grain growth within the ear of	753
<i>Verticillium</i> wilt, host reactions involved in the recovery of apricot trees from	553	Wheat, photosynthesis and respiration by flag leaf and components of the ear during grain development in ..	245
<i>Vicia sativa</i> , bacterial blight of	1133	Wheat, physiological aspects of evolution in	725
	1027	Wheat, relationship between levels of soluble carbohydrate and starch synthesis in detached ears of ..	991
	597	Wheat seedlings, phosphate absorption and long-distance transport in ..	255
		Wheat, spikelet number, control and relation to yield per ear in	1
		Wheat stem, phloem of, in relation to requirements for assimilate by the ear	743

PAGE		PAGE	
Wheat, tracheary element associated with "xylem discontinuity" in floral axis of	783	Wool follicle, Romney, a polysaccharide-containing cell coat on keratinizing cells of	623
White clover, requirement for riboflavin for effective symbiosis on, by <i>Rhizobium trifolii</i>	1187	Wool growth rate, influence of abomasal supplements of some amino acids and sulphur-containing compounds on ..	441
Whittingham, D. G.— See Wales, R. G. . . .	877	Wool, influence of dietary protein and methionine on the sulphur content and growth rate of	193
Wilkinson, B. R.— Keratin biosynthesis. I. Isolation and characterization of polysomes from wool roots	127	Wool proteins, high sulphur, influence of sulphur-containing amino acids on the biosynthesis of	149
II. Extraction and characterization of nucleic acids from wool roots ..	139	Wool roots, polysomes and nucleic acids from	127, 139
Williams, E. J.— See Findlay, G. P. . . .	323	<i>Xanthium strumarium</i> , inhibition of flowering in, by water stress ..	925
Williams, R. F.— See Evans, L. T. . . .	743	Zee, S. Y., and O'Brien, T. P.— A special type of tracheary element associated with "xylem discontinuity" in the floral axis of wheat ..	783
Wilson, J. R., Haydock, K. P., and Robins, M. F.— The development in time of stress effects in two species of <i>Glycine</i> differing in sensitivity to salt	537	Studies on the ontogeny of the pigment strand in the caryopsis of wheat	1153
Wiskich, J. T.— See Bottrill, D. E. . . .	821	Zee, S. Y.— See also O'Brien, T. P. . . .	709
Wool, effects on growth and composition of, of parenterally administered sulphur-containing amino acids	1077	Zwar, J. A., and Bruce, M. I.— Cytokinins from apple extract and coconut milk	289
Wool, esterification of	165		