

INDEX

	PAGE
<i>Acheta commodus</i> (Walk.), Absorption and Subsequent Breakdown of Urea by Diapausing Eggs of	362
<i>Acheta commodus</i> (Walk.), Effect of Ammonia on the Rate of Termination of Diapause in Eggs of	538
<i>Achromobacter</i> Species, Conversion of Gentisic Acid to Maleylpyruvic Acid by	589
Adams, K. M.—	
<i>See</i> Sobey, W. R.	395
Anaphylaxis, Studies in	395
Ballard, L. A. T.—	
<i>See</i> Grant Lipp, A. E.	406
Barrs, H. D., and Weatherley, P. E.—	
A Re-examination of the Relative Turgidity Technique for Estimating Water Deficits in Leaves	413
Bean Roots, Bioelectric Fields of	83
Bean Roots, Bioelectric Oscillations of. II, III.	101, 115
Bean Yellow Mosaic Virus Transmission by <i>Myzus persicae</i>	468
Bieleski, R. L.—	
The Physiology of Sugar-cane. V. Kinetics of Sugar Accumulation	429
Big Bud Virus, Strawberry, Clover, and Pea as Hosts of	278
Blackshaw, A. W.—	
The Utilization of Glucose and Fructose by Mouse Testis in Phosphate-containing Media	207
Boardman, W.—	
The Hair Pattern Developed on Disorientated Skin Grafted in 1-day-old Rats	674
Brumby, P. J.—	
<i>See</i> Fielden, E. D.	213

	PAGE
Butler, G. W., and Glenday, A. C.—	
Iodine Content of Pasture Plants. II. Inheritance of Leaf Iodine Content of Perennial Ryegrass (<i>Lolium perenne</i> L.)	183
Butler, G. W.—	
<i>See also</i> Peterson, P. J.	126
Buttrose, M. S.—	
Physiology of Cereal Grain. III. Photosynthesis in the Wheat Ear during Grain Development	611
Cereal Grain, Physiology of. III.	611
<i>Chironomus intertinctus</i> , Interrelation of Inversion Systems in	666
Chitin, Studies on.	526
Chloroplasts, Grana-containing, Observations on the Structure of	599
Chloroplasts, Manganese as a Functional Component of	58
Choong, C. H., and Wales, R. G.—	
The Effect of Cold Shock on Spermatozoa	543
Christian, J. H. B.—	
Effects of Washing Treatments on the Composition of <i>Staphylococcus aureus</i>	324
Clarke, W. H.—	
<i>See</i> Downes, A. M.	713
Claxton, J. H.—	
The Spatial Relationships between Central Primary Skin Follicles during their Development in Sheep	700
Competition Experiments, Analysis of	509
Cruickshank, I. A. M.—	
Studies on Phytoalexins. IV. The Antimicrobial Spectrum of Pisatin	147
<i>Cucurbita pepo</i> , Cytophysiology of the Phloem of	459

- | | PAGE | | PAGE |
|---|------|--|------|
| <i>Dasycercus cristicauda</i> , Water | | Fielden, E. D., and Brumby, P. J.— | |
| Balance in | 683 | The Effect of Reduced Food | |
| Davis, P. S., and McPherson, | | Intake on the Response to | |
| G. G.— | | Induced Ovulation in Hypo- | |
| Some Effects of Heavy Water | | physectomized Mice | 213 |
| on the Growth of <i>Serratia mar-</i> | | Findlay, G. P.— | |
| <i>cescens</i> | 623 | Calcium Ions and the Action | |
| Dawson, T. J.— | | Potential in <i>Nitella</i> | 69 |
| See Evans, J. V. | 371 | Fraser, A. S., and Kindred, B. M.— | |
| Dougall, D. K.— | | Selection for an Invariant | |
| On the Fate of Tyrosine in | | Character, Vibrissa Number, in | |
| Tobacco Callus Tissue. II. The | | the House Mouse. III. Correlated | |
| Lack of Incorporation into Lignin | 619 | Responses | 188 |
| Downes, A. M., Lyne, A. G., and | | Fungal Cellulases. X | 769 |
| Clarke, W. H.— | | | |
| Radioautographic Studies of the | | Gillespie, J. M.— | |
| Incorporation of [³⁵ S]Cystine into | | The Isolation and Properties of | |
| Wool | 713 | some Soluble Proteins from Wool. | |
| Duloy, Margaret, Mercer, F. V., | | II. The Preferential Extraction | |
| and Rathgeber, Nele— | | of High-sulphur Proteins .. | 262 |
| Studies in Translocation. III. | | III. The Heterogeneity of the | |
| The Cytophysiology of the | | Low-sulphur Wool Protein | |
| Phloem of <i>Cucurbita pepo</i> .. | 459 | SCMKA2 | 564 |
| | | IV. The Isolation of the High- | |
| Enzyme Complexes, Ternary, Kine- | | sulphur Protein SCMKB1 .. | 572 |
| tics of | 233 | Gillespie, J. M., O'Donnell, I. J., | |
| Evans, J. V., and Dawson, T. J.— | | and Thompson, E. O. P.— | |
| Haemoglobin and Erythrocyte | | The Interaction between High- | |
| Potassium Types in Sheep and | | and Low-sulphur Proteins Ex- | |
| their Influence on Oxygen Dis- | | tracted from α -Keratin.. .. | 409 |
| sociation and Haemoglobin | | Glenday, A. C.— | |
| Denaturation | 371 | See Butler, G. W. | 183 |
| Evans, L. T.— | | Goddard, C. K.— | |
| Inflorescence Initiation in <i>Lolium</i> | | Function of the Penial Apparatus | |
| <i>temulentum</i> L. III. The Effect | | of <i>Helix aspersa</i> Müller.. .. | 218 |
| of Anaerobic Conditions during | | Grant Lipp, A. E., and Ballard, | |
| Photoperiodic Induction .. | 281 | L. A. T.— | |
| Day-length Control of Inflor- | | The Effect of Carbon Dioxide | |
| escence Initiation in the Grass | | Treatment of Seeds on Flowering | |
| <i>Rottboellia exaltata</i> L.f. .. | 291 | in Subterranean Clover.. .. | 406 |
| | | Greenway, H.— | |
| Ferguson, K. A.— | | Plant Response to Saline Sub- | |
| The Relation between the Res- | | strates. I. Growth and Ion | |
| ponses of Wool Growth and | | Uptake of Several Varieties of | |
| Body Weight to Changes in | | <i>Hordeum</i> during and after Sodium | |
| Feed Intake | 720 | Chloride Treatment | 16 |

- | | PAGE | | PAGE |
|--|------|--|------|
| II. Chloride, Sodium, and Potassium Uptake and Translocation in Young Plants of <i>Hordeum vulgare</i> during and after a Short Sodium Chloride Treatment .. | 39 | Jenkinson, I. S.— | |
| Griffing, B.— | | Bioelectric Oscillations of Bean Roots: Further Evidence for a Feedback Oscillator. II. Intracellular Plant Root Potentials.. | 101 |
| Consequences of Truncation Selection based on Combinations of Individual Performance and General Combining Ability .. | 333 | III. Excitation and Inhibition of Oscillations by Osmotic Pressure, Auxins, and Antiauxins.. | 115 |
| Prediction Formulae for General Combining Ability Selection Methods Utilizing One or Two Random-mating Populations.. | 650 | Jermyn, M. A.— | |
| Hackman, R. H.— | | The Kinetics of Ternary Enzyme Complexes | 233 |
| Studies on Chitin. V. The Action of Mineral Acids on Chitin .. | 526 | Acceptor Competition as a Means of Distinguishing between possible Enzymic Mechanisms using the β -Glucosidase of <i>Stachybotrys atra</i> | 248 |
| Harrap, B. S.— | | Fungal Cellulases. X. Further Purification of the β -Glucosidase of <i>Stachybotrys atra</i> | 769 |
| The Molecular Weight of a Purified High-sulphur Protein derived from Wool | 596 | Chromatography of Acidic Polysaccharides on DEAE-Cellulose | 787 |
| Hayman, B. I.— | | Kefford, N. P.— | |
| The Gametic Distribution in Mendelian Heredity | 166 | The Inactivity of 1-Docosanol in some Plant Growth Tests in relation to the Auxin of Maryland Mammoth Tobacco .. | 304 |
| <i>Helix aspersa</i> Müller, Function of the Penial Apparatus of.. | 218 | Kindred, B. M.— | |
| Helms, Katie— | | A Correlated Response Mediated through a Maternal Effect in the House Mouse | 352 |
| Strawberry, Clover, and Pea as Hosts of Big Bud Virus.. | 278 | See also Fraser, A. S. | 188 |
| Highkin, H. R.— | | Ladd, J. N.— | |
| See Robertson, R. N. | 1 | The Conversion of Gentisic Acid to Maleylpyruvic Acid by an <i>Achromobacter</i> Species | 589 |
| Hogan, T. W.— | | Lamond, D. R., and Southcott, W. H.— | |
| The Absorption and Subsequent Breakdown of Urea by Diapausing Eggs of <i>Acheta commodus</i> (Walk.) (Orthoptera: Gryllidae) | 362 | Bioassay of Oestrogen using Sheep | 379 |
| The Effect of Ammonia on the Rate of Termination of Diapause in Eggs of <i>Acheta commodus</i> (Walk.) (Orthoptera: Gryllidae) | 538 | Lee, B. T. O.— | |
| Horgan, D. J.— | | Studies concerning the Inheritance of Ascospore Length in <i>Neurospora crassa</i> . II. Selection Experiments with Wild-type Strains | 160 |
| See Masters, C. J. | 690 | | |
| Inglis, A. S.— | | | |
| See O'Donnell, I. J. | 732 | | |

- | | PAGE | | PAGE |
|--|------|--|------|
| <i>Lolium perenne</i> L., Inheritance of | | Morrison, P. R.— | |
| Leaf Iodine Content of. | 183 | Body Temperatures in some | |
| <i>Lolium temulentum</i> L., Inflorescence | | Australian Mammals. II. Pera- | |
| Initiation in | 281 | melidae | 386 |
| Lyne, A. G.— | | Mouse, House, Correlated Response | |
| <i>See</i> Downes, A. M. | 713 | Mediated through a Maternal | |
| | | Effect in | 352 |
| MacRitchie, F.— | | Mouse, House, Selection for Vibrissa | |
| <i>See</i> Reisner, A. H. | 592 | Number in | 188 |
| Mammals, Australian, Body Tem- | | Mouse, Testis, Utilization of Glu- | |
| peratures in. II. | 386 | cose and Fructose by | 207 |
| Martin, D. W.— | | Mulgara, Water Balance in | 683 |
| <i>See</i> Scott, B. I. H. | 83 | <i>Myzus persicae</i> , Bean Yellow | |
| Martin, J.— | | Mosaic Virus Transmission by | 468 |
| Interrelation of Inversion Sys- | | <i>Neurospora crassa</i> , Inheritance of | |
| tems in the Midge <i>Chironomus</i> | | Ascospore Length in. II | 160 |
| <i>intertextus</i> (Diptera: Nemato- | | Newsome, A. E.— | |
| cera). I. A Sex-linked Inversion | 666 | <i>See</i> Schmidt-Nielsen, K. | 683 |
| Masters, C. J., and Horgan, D. J.— | | <i>Nitella</i> , Calcium Ions and Action | |
| Glutamate Transaminase Acti- | | Potential in | 69 |
| vity in Sheep Tissues, and the | | O'Donnell, I. J., and Thompson, | |
| Response to Prolonged Protein | | E.O.P.— | |
| Depletion. | 690 | Studies on Oxidized Wool. VI. | |
| Matheson, N. K., and Wheatley, | | Interactions between High- and | |
| J. M.— | | Low-sulphur Wool Proteins and | |
| The Effect of some Extraction | | their Significance in the Puri- | |
| Solvents on the Chemical Struc- | | fication of Extracted Wool | |
| ture of the Starches from Tobacco | | Proteins | 740 |
| Leaf and Potato Tubers. | 312 | O'Donnell, I. J., Thompson, E. O. P., | |
| Starch Changes in Developing | | and Inglis, A. S.— | |
| and Senescing Tobacco Leaves | 445 | N-Acetyl Groups in Wool and | |
| McPherson, G. C.— | | Extracted Wool Proteins | 732 |
| <i>See</i> Davis, P. S. | 623 | O'Donnell, I. J.— | |
| Mendelian Heredity, Gametic Dis- | | <i>See also</i> Gillespie, J. M. | 409 |
| tribution in | 166 | <i>See also</i> Thompson, E. O. P. 552,757 | |
| Mercer, F. V.— | | <i>Paramecium</i> , Effect of Monomole- | |
| <i>See</i> Duloy, Margaret | 459 | cular Spreading on the Anti- | |
| Mice, Hypophysectomized, Effect | | genicity of the Soluble Surface | |
| of Reduced Food Intake on the | | Proteins of | 592 |
| Response to Induced Ovulation | | Pea Seeds, Effect of Environmental | |
| in | 213 | Conditions on Development of. | 1 |
| Midge, Interrelation of Inversion | | <i>Peronospora tabacina</i> Adam, Germi- | |
| Systems in | 666 | nation of Conidia of. I. | 483 |

- | PAGE | PAGE |
|--|---|
| Peterson, P. J., and Butler, G. W.—
Uptake and Assimilation of Selenite by Higher Plants 126 | Ryegrass, Perennial, Inheritance of Leaf Iodine Content of .. 183 |
| Phytoalexins, Studies on. IV .. 147 | Schmidt-Nielsen, K., and Newsome, A. E.—
Water Balance in the Mulgara (<i>Dasyercus cristicauda</i>), a Carnivorous Desert Marsupial .. 683 |
| Pisatin, Antimicrobial Spectrum of 147 | Scott, B. I. H., and Martin D. W.—
Bioelectric Fields of Bean Roots and their Relation to Salt Accumulation 83 |
| Plant Response to Saline Substrates. I, II 16,39 | Selenite, Uptake and Assimilation of, by Higher Plants 126 |
| Polysaccharides, Acidic, Chromatography of, on DEAE-Cellulose 787 | <i>Serratia marcescens</i> , some Effects of Heavy Water on the Growth of 623 |
| Possingham, J. V., and Spencer, D.—
Manganese as a Functional Component of Chloroplasts 58 | Sheep, Bioassay of Oestrogen using 379 |
| Potato Tubers, Effect of some Extraction Solvents on Chemical Structure of Starch from .. 312 | Sheep, Haemoglobin and Erythrocyte Potassium Types in .. 371 |
| Prediction Formulae for General Combining Ability Selection Methods Utilizing One or Two Random-mating Populations.. 650 | Sheep, Spatial Relationships between Central Primary Skin Follicles during their Development in 700 |
| Rathgeber, Nele—
See Duloy, Margaret 459 | Sheep Tissues, Glutamate Transaminase Activity in 683 |
| Rats, 1-day-old, Hair Pattern Developed on Disorientated Skin Grafted in 674 | Shepherd, C. J.—
Germination of Conidia of <i>Pero-
nospora tabacina</i> Adam. I. Germination <i>in vitro</i> 483 |
| Reisner, A.H., and MacRitchie, F.—
The Effect of Monomolecular Spreading on the Antigenicity of the Soluble Surface Proteins of <i>Paramecium</i> 592 | Smydzuk, J.—
See Robertson, R. N. 1 |
| Reisner, A. H.—
See also Sobey, W. R. 395 | Sobey, W. R., Reisner, A. H., and Adams, K. N.—
Studies in Anaphylaxis. V. The Antigenic Complexity of, and Cross-reactions between, Armour Bovine Plasma Albumin Fraction V and Armour Bovine Gamma-globulin Fraction II .. 395 |
| Relative Turgidity Technique for Estimating Water Deficits in Leaves 413 | Southcott, W. H.—
See Lamond, D. R. 379 |
| Robertson, R. N., Highkin, H. R., Smydzuk, J., and Went, F. W.—
The Effect of Environmental Conditions on the Development of Pea Seeds 1 | Soybean, Translocation of Labelled Assimilates in. II 629 |
| <i>Rottboellia exaltata</i> L.f., Day-length Control of Inflorescence Initiation in 291 | |

	PAGE		PAGE
Spencer, D., and Wildman, S. G.—		Tobacco Callus Tissue, Fate of	
Observations on the Structure		Tyrosine in. II	611
of Grana-containing Chloroplasts		Tobacco Leaf, Effect of some Ex-	
and a Proposed Model of Chloro-		traction Solvents on the Chemical	
plast Structure	599	Structure of Starches from . .	312
Spencer, D.—		Tobacco Leaves, Starch Changes	
<i>See also</i> Possingham, J. V. . .	58	in Developing and Senescing . .	445
Spermatozoa, Effect of Cold Shock		Tobacco, Maryland Mammoth,	
on	543	Inactivity of 1-Docosanol in	
<i>Stachybotrys atra</i> , β -Glucosidase of,		some Plant Growth Tests in	
Acceptor Competition in . .	248	relation to the Auxin of	304
<i>Stachybotrys atra</i> , Further Purifica-		Translocation, Studies in. III . .	459
tion of the β -Glucosidase of . .	769	Truncation Selection, Consequences	
<i>Staphylococcus aureus</i> , Effects of		of	333
Washing Treatments on the		Wales, R. G.—	
Composition of	324	<i>See</i> Choong, C. H.	543
Subterranean Clover, Effect of		Weatherley, P. E.—	
Carbon Dioxide Treatment of		<i>See</i> Barrs, H. D.	413
Seeds on Flowering in	406	Went, F. W.—	
Sugar-cane, Physiology of. V . .	429	<i>See</i> Robertson, R. N.	1
Swenson, K. G.—		Wheat Ear, Photosynthesis in,	
Bean Yellow Mosaic Virus Trans-		during Grain Development . .	611
mission by <i>Myzus persicae</i> . .	468	Wheatley, J. M.—	
Thompson, E. O. P., and O'Donnell,		<i>See</i> Matheson, N. K.	312, 445
I. J.—		Wildman, S. G.—	
Studies on Oxidized Wool. V.		<i>See</i> Spencer, D.	599
Comparison of Protein Fractions		Williams, E. J.—	
Extracted from Wool by Peptide		The Analysis of Competition	
Mapping of Enzymic Digests . .	552	Experiments	509
Studies on Reduced Wool. I.		Wool and Extracted Wool Proteins,	
The Extent of Reduction of		<i>N</i> -Acetyl Groups in	732
Wool with Increasing Concentra-		Wool Growth, Responses of, to	
tions of Thiol, and the Extrac-		Changes in Feed Intake	720
tion of Proteins from Reduced		Wool, Isolation and Properties of	
and Alkylated Wool	757	some Soluble Proteins from. II,	
Thompson, E. O. P.—		III, IV	262, 564, 572
<i>See also</i> Gillespie, J. M.	409	Wool, Oxidized, Studies on. V,	
<i>See also</i> O'Donnell, I. J. . . .	732, 740	VI	552, 740
Thrower, Stella L.—		Wool Proteins, High- and Low-	
Translocation of Labelled Assi-		sulphur, Studies on 564, 572, 596, 740	
milates in the Soybean. II. The		Wool, Radioautographic Studies of	
Pattern of Translocation in		the Incorporation of [³⁵ S]Cystine	
Intact and Defoliated Plants . .	629	into	713
		Wool, Reduced, Studies on. I . .	757