

## VOLUME XIII

## INDEX OF SUBJECTS AND AUTHORS

*Only main topics are listed, and reference is given to the first page of each paper in which they are discussed*

- Abortive recombinants in  $I^+ \times I^+$  bacterial crosses, 113
- Acridines, genetic effect of, in *Pseudomonas aeruginosa*, 57
- Acriflavine resistant rII deletions in bacteriophage T4, 329
- Ascus development mutants in *Neurospora crassa*, 303
- Attached-X deletion, lethal effects of in *Drosophila melanogaster*, 325
- Bacteriophage T4, acriflavine resistant rII deletions, 329
- Baker, L. H., 105
- Basl, Mary, 303
- Beisson, Janine, 85
- Bell, A. E., 175
- Bevan, E. A., 71
- Braver, Gerald, 325
- Burnet, Barrie, 251
- Byrne, Barbara J., 197
- Chromosomal polymorphism in *Spalax leucodon*, 99
- Crow, James, F., 127
- Chrysanthemum*, nuclei acid content and chromosomal morphology of, 241
- Colson, C., 227
- Cost of natural selection, a vindication of Haldane's original theory despite complicating factors, 127
- Curnow, R. N., 105
- Curtis, C. F., 289
- Cytoplasmic factor in killer phenotype in *Saccharomyces cerevisiae*, 71
- Cytoplasmic respiratory deficiency induced by phenethyl alcohol in *Saccharomyces cerevisiae*, 107
- Cytogenetic study of *Spalax leucodon* in Moldavia, 99
- Dickinson, A. G., 213
- Dowrick, G. J., 241
- Drosophila melanogaster*  
gene-environment interactions of *eye gene*, 313
- gene-environment interactions of *eyeless*, 251
- lethal effects of attached-X deletion, 325
- nutritional conditional mutants, 281
- Duma, Doina, 99
- Edwards, Susan, 321
- El Bayoumi, A. S., 241
- Episomal state, demonstration of, with genes in *Staphylococcus aureus*, 267
- Escherichia coli*  
genetics of host-controlled restriction and modification, 227
- $I^+ \times I^+$  crosses and unstable products, 113
- Falconer, D. S., 25
- Fertility, and ovulation rate in mouse, 25
- Gene-environment interactions in *eyeless* and *eye gene* mutants of *Drosophila melanogaster*, 251, 313
- Genetic disturbance after species transfer of linkage group  $H_2Lc_2$  in *Gossypium*, 1
- Glossina austeni*, production of partially sterile mutants, 289
- Glover, S. W., 227
- Gossypium*, genetic disturbance of linkage group after species transfer, 1
- Hill, W. G., 143, 165
- Holloway, B. W., 57
- Host-controlled modification and restriction in *Escherichia coli*, 227
- Hunt, David, M., 251, 313
- I sex factors and chromosomal recombination in *Salmonella typhimurium*, 321
- Johnson, D. R., 275
- Johnston, Joan, 267
- Kappa, mu and the metagon in *Paramecium aurelia*, 197
- Killer character in *Saccharomyces cerevisiae*, 71

- Kimura, Motoo, 47, 127  
 Krzanowska, H., 17
- Land, R. B., 25
- Linkage  
 disequilibrium due to random genetic drift, 47  
*H<sub>2</sub>Lc<sub>2</sub>* in *Gossypium*, reduction of recombination after species transfer, 1  
 of thermosensitive mutants in *Paramecium aurelia*, 85
- Loutit, J. S., 91
- Mapping,  
 of distal markers in *Pseudomonas aeruginosa*, 91  
 of sites for host-controlled modification and restriction, 227
- Maroudas, N. G., 107
- Meikle, Veronica M. H., 213
- Metagon hypothesis in *Paramecium aurelia*, lack of compatibility with results, 197
- Meynell, G. G., 113, 327
- Mouse  
 brachyphalangy, an allele of extra-toes, 275  
 comparison of biological characters of scrapie agents 22A and ME7, 213  
 factor for spermatozoan abnormality on Y-chromosome, 17  
 ovulation rate in, 25
- Mutant  
 brachyphalangy, an allele of extra-toes in mouse, 275  
*eyeless* and *eye gene* and environmental interactions, in *Drosophila melanogaster*, 251, 313  
 production of partially sterile mutants of *Glossina austeni*, 289
- Nash, David, 281
- Natural selection, cost of, 127
- Neurospora crassa* mutants affecting ascus development, 303
- Nucleic acid content and chromosome morphology in *Chrysanthemum*, 241
- Nutritional conditional mutants of *Drosophila melanogaster*, 281
- Ohta, Tomoko, 47
- Ovulation rate in mouse, 25
- Paramecium aurelia*,  
 a linkage group in, 85  
 kappa, mu and the metagon, 197
- Parma, David H., 329
- Pike, Derek, J., 117
- Plasmids as episomes in *Staphylococcus aureus*, 267
- Polyploids, DNA content of natural and induced, in *Chrysanthemum*, 241
- Probability transition matrices,  
 and selection of finite populations, 143  
 versus continuous distribution as methods of predicting gene frequency shifts in selected finite populations, 117
- Pseudomonas aeruginosa*  
 genetic effect of acridines, 57  
 mapping of distal markers, 91
- Raicu, Petre, 99
- Random genetic drift, 47
- Recombination, reduction of values on species transfer, in *Gossypium*, 1
- Repeated selection in finite populations: a comparison of methods of detection, 117
- Richmond, M. H., 267
- Rosignol, Michele, 85
- Saccharomyces cerevisiae*  
 induction of cytoplasmic respiratory deficiency with phenethyl alcohol, 107  
 inheritance of killer character, 71
- Salmonella typhimurium*  
 I<sup>+</sup> × I<sup>+</sup> crosses and unstable products, 113  
 I sex factor and chromosomal recombination, 321
- Saunders, J. H., 1
- Scrapie, comparison of biological properties of 22A and ME7 in mouse, 213
- Selection  
 artificial in finite populations, 143  
 effect of repeated cycles in populations of finite size, 105  
 for larval growth under two levels of nutrition in *Tribolium castaneum*, 175  
 for natural and induced ovulation rates in mouse, 25  
 natural, and gene substitution, 127  
 rate of advance for non-additive loci, 165
- Sex factor of *Pseudomonas aeruginosa* and effect of acridines, 57
- Somers, J. M., 71
- Spalax leucodon*, cytogenetic studies of, 99
- Spermatozoan abnormality, a factor on Y-chromosomes in mouse, 17
- Srb, Adrian M., 303
- Stanisich, Vilma, 57
- Staphylococcus aureus*, reversible transition between episomal states, 267
- Superinfection immunity in I<sup>+</sup> × I<sup>+</sup> crosses in bacteria, 113

- Thermosensitive mutants in a linkage group      Wilkie, D., 107  
    in *Paramecium aurelia*, 85
- Thomson, James N. Jun., 325      Yamada, Yukio, 175
- Tribolium castaneum*, selection for larval      Y-chromosome factor for sperm abnormality  
    growth on two levels of nutrition, 175      in mouse, 17
- Vyse, E. R., 281