

# VOLUME IX

## 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.*

- Aegilops umbellulata*, additions of chromosomes of, to *T. aestivum*, 111
- Ahmed, K. A., 179
- Analysis of Cattanaach's *fd* translocation, 17
- Analysis of resistance to nystatin in *S. cerevisiae*, 179
- Aronovitch, J., 129
- Ascobolus immersus*, recombination in *Y* locus, 159
- Bacteriophages
- bar properties of T2 and T4 and glucosylation, 149
  - Lambda mutant growing on *E. coli* strain W, 129
  - Properties of  $W\phi$ , 135
- Basic patterns of leaf development in *Lolium*, 233
- Bateman, A. J., 375
- Beale, G. H., 369
- Bell, A. E., 309
- Ben-Gurion, R., 377
- Bennet, D., 211
- Broda, P., 35
- Butler, J., 383
- Casselton, L. A., 63
- Chapman, V., 259
- Chlamydomonas reinhardi*, influence of radiation on recombination, 123
- Clustering of related genes, an attempt to test for, 141
- Colicin and R-factor in *S. typhimurium* Hfr crosses, 283
- Colicins E2 and I in *rec*<sup>-</sup> mutant of *E. coli* K12, 377
- Conjugational transfer of colicin Ib in *S. typhimurium*, 359
- Coprinus lagopus*
- dilution of gene products in heterokaryons, 63
  - four new linkage groups, 331
- Crosses of T2 and T4, glucosylation of DNA, 149
- Dasgupta, S., 299
- Dawson, G. W. P., 269
- De Groot, B., 149
- Den Boer, M., 115
- Developmental genetics of leaf formation in *Lolium*, 233, 247
- Dilution of gene products in heterokaryons of *C. lagopus*, 63
- Drosophila*
- clustering of functionally related genes, 141
  - disruptive selection of chaetae number, 115
  - irradiation and selection, 221
- Dubnau, E., 283
- Dunn, L. C., 211
- Edwards, K. J. R., 233, 247
- Elston, R. C., 141
- Escherichia coli*
- formation of Hfr strains, 35
  - induction of *rec*<sup>-</sup> mutant of K12, 377
  - mutants of Lambda and strain W, 129
  - properties of bacteriophage  $W\phi$ , 135
- Evolutionary adjustment of spontaneous mutation rates, 23
- Feller, W., 1
- Flanagan, S. P., 99
- Fincham, J. R. S., 49
- Fitness and cost of natural selection, 1
- Gajewski, W., 159
- Gene action in mammalian x-chromosome, 343
- Genetic control of recombination and the incompatibility system of *S. commune*, 195
- Genetic load, 23
- Glassman, E., 141
- Glover, S. W., 129, 135
- Glucosylation of DNA in crosses of T2 and T4, 149
- Grewal, M. S., 299
- Grüneberg, H., 343

- Hardin, R. T., 309  
 Hfr formation in *E. coli*, 35  
 Hoogmoed, M. S., 115
- Incompatibility system and genetic control of recombination in *S. commune*, 195  
 Induction of rec<sup>-</sup> mutant of *E. coli* K12, 377  
 Inheritance of crossability with rye, in wheat, 259  
 Isaacson, J. H., 99
- Jones, L. P., 221
- Kerszman, G., 135  
 Kimber, G., 111  
 Kimura, M., 23  
 Kruszewska, A., 159
- Lawn, A. M., 359  
 Lawrence, C. W., 123  
 Lewis, D., 63  
 Linkage of genes for hairlessness in mouse, 99  
 Linkage of mutant 'extra-toes' in mouse, 383  
*Lolium*, developmental genetics of leaf formation, 233, 247  
 Lyon Hypothesis, 343  
 Lyon, M. F., 383
- Maintenance of kappa particles after loss of gene *K* in *P. aurelia*, 369  
 Metagon theory, 369  
 Meynell, G. G., 359  
 Mitotic crossing-over, a probable case in mouse, 375  
 Moore, D., 331  
 Morris, T., 383
- Mouse  
 analysis of *fd* translocation, 17  
 close linkage of genes for hairlessness, 99  
 limits to selection for body weight, 73, 87  
 occurrence and linkage of mutant 'extra-toes', 383  
 probable case of mitotic crossing-over, 375  
*small eyes*, 121
- McPhail, S., 369
- Mutation  
 adjustment of spontaneous rates, 23  
 'extra-toes' in mouse, 383  
 lambda and restricting host *E. coli* W, 129  
*Small eyes* in mouse, 121
- Neurospora crassa*  
 appendix to J. R. S. Fincham, 60  
 recombination in *am* gene, 49, 60  
 New linkage groups in *C. lagopus*, 331  
 Nystatin, genetic analysis of resistance in *S. cerevisiae*, 179
- Oocyte pachytene analysis of *fd* translocation, 17
- Paramecium aurelia*, maintenance of kappa particles, 369  
 Pateman, J. A., 60  
 Pili and colicin factor Ib in *S. typhimurium*, 359  
 Properties of bacteriophage Wφ, 135
- Radiation, influence on recombination, 123  
*Rana cyanophlictis*, skeletal polymorphism and genetic drift, 299
- Recombination  
*am* gene of *N. crassa*, 49  
 and incompatibility in *Schizophyllum*, 195  
 influence of radiation, 123  
 sex differences and linked genes, 211  
*Y* locus of *Ascobolus immersus*, 159  
 Reversion of *try A* auxotrophs in *S. typhimurium*, 269
- R-factors in *S. typhimurium*, 283  
 Riley, R., 259  
 Riyasaty, S., 269  
 Roberts, R. C., 73, 87, 121
- Saccharomyces cerevisiae*, resistance to nystatin, 179  
*Salmonella typhimurium*  
 colicin and R-Factors in Hfr crosses, 283  
 pili and colicin Ib, 359  
 reversions of *try A* auxotrophs, 269  
 Scharloo, W., 115  
*Schizophyllum commune*, control of recombination and incompatibility, 195  
 Searle, A. G., 383
- Selection  
 disruptive of chaetae number, 115  
 effects of X-rays on response, *D. melanogaster*, 211  
 fitness and cost of, 1  
 importance of disruptive, 119  
 mouse body weights, limits, 73, 87
- Sex differences in recombination of linked genes, 211
- Simchen, G., 195  
 Skeletal polymorphism and genetic drift in a Delhi frog, 299  
 Slizynski, B. M., 17  
*Small eyes*, a new dominant mutant in mouse, 121  
 Sternopleural chaetae number, 115  
 Stocker, B. A. D., 283
- Thoday, J. M., 119  
 Transfer race technique, 35  
*Tribolium*, two-way selection for body weight, 309

- Triticum aestivum* addition of *A. umbellulata* chromosomes, 111 Woods, R. A., 179
- Two-way selection for body weight in *Tribolium*, 309 X-autosome translocation, 343  
X-chromosome, gene action in mammals, 343  
X-rays, effect on response to selection in *D. melanogaster*, 221
- Wheat, inheritance of crossability with rye, 259