PROGRAM

E. M. East

In making up the program for the Sixth International Congress of Genetics, a list of nearly 3000 biologists interested in genetics was compiled. From this list five different geneticists independently selected the names of about 1200 active workers to whom invitations were sent to present papers before the congress. The preponderance of Americans on the morning programs was due to the inability of invited Europeans to attend.

SUMMARY OF PROGRAM

Wednesday, August 24

Registration.
Inspection of exhibits.
Demonstration papers.
Tour of the campus, the experimental plots, and the city.
Opening plenary meeting of the congress.
Informal reception.

Thursday, August 25

General papers.
Inspection of exhibits.
Demonstration papers.
Tour of the campus, the experimental plots, and the city.
Trip to the plant-breeding experimental plots.
General evening program.

- Organ music by Frederick S. Andrews, Assistant University Organist.
- Address of welcome by Provost A. R. Mann.
- Response by Doctor Richard Goldschmidt.
- Address by the President, Doctor Thomas Hunt Morgan, on "The Rise of Genetics."

Friday, August 26

General papers.
Inspection of exhibits.

Demonstration papers.
Picnic at Taughannock Falls State Park.
Group conferences.

Saturday, August 27

General papers.
Sectional papers.
- General Genetics I.
- Cytology I.
- Animal Genetics I.
- Human Genetics.
- Methods and Technique.
- Genetics and Phytopathology.

Excursion to Watkins Glen State Park.
Inspection of exhibits.
Trip to Enfield Glen State Park.
Group conferences.

Sunday, August 28

Excursion to Niagara Falls.
Organ recital in Sage Chapel by David Hugh Jones, Organist Westminster Choir School, Princeton.

Monday, August 29

General papers.
Sectional papers.
- Cytology II.
- Animal Genetics II.
- Plant Genetics I.
- Chromosome structure and crossing over.
- Genetics of species hybrids.

Excursion to Watkins Glen State Park.
Inspection of exhibits.
Demonstration papers.
Trip to Enfield Glen State Park.
Trip to the sheep and swine barns.
Trip to the experimental plots of the Department of Floriculture and Ornamental Horticulture.
Group conferences.

Tuesday, August 30

General papers.
Sectional papers.

General Genetics II.
Cytology III.
Plant Genetics II.
Drosophila.
Problems relating to sex and fertility.
Genetics and Pathology.

Inspection of exhibits.
Trip to the plant-breeding experimental plots.
Trip to the experimental plots of the Department of Vegetable Crops.
Final plenary meeting of the congress.

Wednesday, August 31

[Program at the New York State Agricultural Experiment Station, Geneva, New York]

Papers on fruit and vegetable breeding.
Inspection of exhibits, and tours.

General Papers

Morning Sessions

Thursday, August 25

T. H. Morgan, Chairman; C. B. Bridges, Vice Chairman and Secretary.

1. Mendelism in man. C. B. Davenport, Carnegie Institution of Washington, Cold Spring Harbor.
2. Inheritance of educability. F. A. E. Crew, Institute of Animal Genetics, Edinburgh.
3. The use of mosaics in the study of the developmental effects of genes. A. H. Sturtevant, California Institute of Technology, Pasadena.

4. The present status of maize genetics. R. A. Emerson, Cornell University, Ithaca.

Friday, August 26

C. B. Davenport, Chairman; A. F. Shull, Vice Chairman and Secretary.

Special subject: Mutations.

1. On the potency of mutant genes and wild-type allelomorphs. O. L. Mohr, Anatomical Institute, The University, Oslo.
2. Mutations of the gene in different directions. N. Timoféeff-Ressovsky, Kaiser Wilhelm-Institut für Hirnforschung, Berlin-Buch.
3. The genetic nature of induced mutations in plants. L. J. Stadler, United States Department of Agriculture, University of Missouri, Columbia.
4. Further studies on the nature and causes of gene mutations. H. J. Muller, University of Texas, Austin.

Saturday, August 27

R. R. Gates, Chairman; L. W. Sharp, Vice Chairman and Secretary.

Special subject: The interrelations of cytology and genetics.

1. The interrelations of the genotype and the karyotype and their bearing upon some genetic problems. M. S. Navaschin, Timiriazeff Institute, Moscow.
2. The cytological basis for crossing over. Karl Sax, Arnold Arboretum, Harvard University, Jamaica Plain.
3. Neuere Ergebnisse über die Genetik und Zytologie des Crossing Over. C. Stern, Kaiser Wilhelm-Institut für Biologie, Berlin-Dahlem.
4. The nature of sex chromosomes. Ö. Winge, Royal Veterinary and Agricultural College, Copenhagen.

Monday, August 29

K. Bonnevie, Chairman; L. C. Dunn, Vice Chairman and Secretary.

Special subjects:

Genetics of species hybrids (first three addresses).

Contributions of genetics to the theory of organic evolution (last address).

1. The species problem in Datura. A. F. Blakeslee, Carnegie Institution of Washington, Cold Spring Harbor.
2. Konjugation der artfremden Chromosomen. Harry Federley, The University, Helsingfors.

3. Species hybridization as a means of form genesis. G. D. Karpetchenko, Botanical Institute, Leningrad.
4. Genetik der geographischen Variation. R. Goldschmidt, Kaiser Wilhelm-Institut für Biologie, Berlin-Dahlem.

Tuesday, August 30

R. Goldschmidt, Chairman; D. F. Jones, Vice Chairman and Secretary.

Special subject: Contributions of genetics to the theory of organic evolution.

1. The process of evolution in cultivated plants. N. Vavilov, Institute for Applied Botany, Leningrad.
2. The evolutionary modification of genetic phenomena. R. A. Fisher, Rothamsted Experimental Station, Harpenden.
3. Can evolution be explained in terms of at present known genetical causes? J. B. S. Haldane, John Innes Horticultural Institution, Merton.
4. The rôles of mutation, crossbreeding, inbreeding, and selection in evolution. S. Wright, University of Chicago, Chicago.

Sectional Papers

General Genetics I, Saturday, August 27

Julian Huxley, Chairman; E. C. MacDowell, Vice Chairman and Secretary.

1. The importance of the genus Partula for the problem of heredity and environment in nature. H. E. Crampton, Barnard College, New York.
2. Progress of genetics and selection in animal breeding, Union of Socialist Soviet Republics. A. S. Serebrovsky, Timiriazeff Institute, Moscow.
3. Dependence of the size of xenoplastically induced organs upon the size of the host. O. E. Schotté, Yale University, New Haven.
4. Genetics of evolution. C. C. Hurst, Trinity College, Cambridge.
5. The nature of the genes in relation to mutation and evolution. A. L. Hagedoorn, Soesterberg.
6. Investigations on the problem of causality of Mendelian results. V. Růzička, Charles University, Prague.

7. Concerning two modes of evolution in the horse. R. C. Robb, Syracuse University, Syracuse.
8. (a) General scheme concerning the mechanism of organic evolution from the standpoint of modern genetics. (b) Step allelomorphism and the theory of centers of the structure of the gene. N. P. Dubinin, Timiriazeff Institute, Moscow.
9. Anlage und Lebensraum in Tierzucht und Eugenik. H. Kræmer, Tierzuchtinstitut, Giessen.
10. Breeding habits of the Louisiana deer. W. H. Gates, Louisiana State University, Baton Rouge.
11. The genetics of modified endocrine secretion and associated form patterns among dog breeds. C. R. Stockard, Cornell University Medical College, New York.

Cytology I, Saturday, August 27

C. E. Allen, Chairman; R. E. Cleland, Vice Chairman and Secretary.

1. Variability of the karyotype. G. A. Lewitsky, Institute of Applied Botany, Leningrad.
2. Genetic and cytological correlation of chromosomal aberrations of *Drosophila melanogaster*. C. P. Oliver and E. W. Van Atta, Washington University, St. Louis.
3. Genetic analysis of synapsis and maturation in eggs of Habrobracon. P. W. Whiting and Kathryn A. Gilmore, University of Pittsburgh, Pittsburgh.
4. Change in dominance of genes lying in duplicating fragments of chromosomes. T. G. Dobzhansky and A. H. Sturtevant, California Institute of Technology, Pasadena.
5. Structural changes in the chromosomes of maize. R. A. Brink and D. C. Cooper, University of Wisconsin, Madison.
6. Cytological observations in *Zea mays* on the intimate association of non-homologous parts of chromosomes in the mid-prophase of meiosis and its relation to diakinesis configurations. Barbara McClintock, California Institute of Technology, Pasadena.
7. The association of non-homologous parts in a chromosomal interchange in maize. C. R. Burnham, California Institute of Technology, Pasadena.
8. Chromosome unbalance and the asynaptic condition as induced in *Nicotiana sylvestris* by X-radiation. T. H. Goodspeed, University of California, Berkeley.
9. Male biparentalism in Habrobracon. Anna R. Whiting and Magnhild M. Torvik, Pennsylvania College for Women, Pittsburgh.

10. Conservation of a morphological individuality of the chromosomes at the resting nucleus. S. de Toledo Piza, Jr., Escola Agricola Superior, Piracicaba.
11. Alle ed Autopoliploidisme negli studii di Genetica. C. Artom, R. Università di Pavia.

Animal Genetics I, Saturday, August 27

Carlo Jucci, Chairman; H. Nachtsheim, Vice Chairman and Secretary.

1. The effects of inbreeding and crossbreeding on swine. H. C. McPhee, Bureau of Animal Industry, Washington.
2. The amount and kind of inbreeding which has occurred in the development of breeds of livestock. J. L. Lush, Iowa State College, Ames.
3. The nature of growth factors in domestic breeds of cattle. P. W. Gregory, University of California, Davis.
4. Die genetischen Beziehungen zwischen Körperfarbe und Augenfarbe bei Säugern. H. Nachtsheim, Institut für Vererbungsforschung, Berlin-Dahlem.
5. Modifying factors in guinea pigs. H. L. Ibsen, Kansas State Agricultural College, Manhattan.
6. Mutations in a strain of captive gray Norway rats. Helen Dean King, Wistar Institute, Philadelphia.
7. "Leaden," a recent color mutation in the house mouse. J. M. Murray, Jackson Memorial Laboratory, Bar Harbor.
8. The inheritance of cataract and allied eye defects in the house mouse. A mutation involving eye lesions without the aid of X-rays or any other artificial means. Leonell C. Strong, Jackson Memorial Laboratory, Bar Harbor.
9. Genetic studies in hare-lip. A. M. Cloudman, Jackson Memorial Laboratory, Bar Harbor.
10. The flexed-tailed mouse. H. R. Hunt, Michigan Agricultural College, East Lansing.
11. The genetics of the ear of the house mouse, *Mus musculus*. H. W. Feldman, University of Michigan, Ann Arbor.

Human Genetics, Saturday, August 27

S. J. Holmes, Chairman; G. P. Frets, Vice Chairman and Secretary.

1. Mental and physical differences in identical twins. H. H. Newman, University of Chicago, Chicago.
2. Variabilitätsanalyse des menschlichen Körpers (nach Forschungen

an 800 Zwillingspaaren). O. von Verschuer, Kaiser Wilhelm-Institut für Anthropologie, Berlin-Dahlem.

3. Probleme der multiplen Allelie beim Menschen. Günther Just, Zoologisches Institut, Greifswald.
4. Über Geschlechtseinflüsse bei autosomal bedingten Augenmerkmalen des Menschen und über die Frage, ob es erblichveranlagte einseitige und bilateral-asymmetrische Augenmerkmale gibt. P. J. Waardenburg, Arnhem.
5. Differential sex mortality and its genetic basis. S. J. Holmes, University of California, Berkeley.
6. Chinese-Hawaiian crosses. H. L. Shapiro, American Museum of Natural History, New York.
7. The application of statistics to the problem of inheritance of cancer. Madge Macklin, University of Western Ontario, London.
8. Family investigations on the heredity of eye color in man. G. P. Frets, Maasoord-Poortugaal near Rotterdam.
9. Über idiodispositionelle entzündliche Erkrankungen der Nebenhöhlen der Nase und des Ohres. Hans Grüneberg, Die Universität, Bonn.
10. Erbgang der grossen Begabung,—gestützt auf Messungen von über 1000 Familien in zwei oder drei Generationen. J. A. Mjøen, Vinderen Laboratorium, Oslo.
11. Does the environment cause genetic change in man? B. Rosiński, Institut Antropologiczno-Etnologiczny, Lwów.
12. A study of twins. J. Sanders, Rotterdam.

Methods and Technique, Saturday, August 27

J. Clausen, Chairman; C. G. Bowers, Vice Chairman and Secretary.

1. Calculating linkage intensities from F_3 data. F. R. Immer, University of Minnesota, St. Paul.
2. On biological life tables. E. J. Gumbel, Die Universität, Heidelberg.
3. The relative growth function in its application to the individual and to the group. A. H. Hersh, Western Reserve University, Cleveland.
4. Experimental methods in taxonomy. J. W. Gregor, Scottish Plant Breeding Station, Corstorphine.
5. Character recombination as a genetic tool. Edgar Anderson, Arnold Arboretum, Jamaica Plain.
6. Principles for a joint attack on evolutionary problems. J. Clausen, Stanford University, Palo Alto.
7. Storage, shipment and artificial germination of Rhododendron pollen. C. G. Bowers, Maine, N. Y.

8. The technique of securing and hatching sexual eggs for use in studying biparental inheritance in Cladocera. Thelma R. Wood and A. M. Banta, Brown University, Providence.
9. Genetical engineering. H. D. Goodale, Hopedale Farm, Williamstown.

Genetics and Phytopathology, Saturday, August 27

René Vandendries, Chairman; H. K. Hayes, Vice Chairman and Secretary.

1. Problems in the genetics of phytopathogenic fungi. E. C. Stakman, University of Minnesota, St. Paul.
2. Die Bedeutung der genetischen Analyse für die theoretische Resistenzforschung. W. H. Fuchs, Die Universität, Halle (Saale).
3. Breeding crop plants resistant to insects. J. H. Parker, Kansas Agricultural Experiment Station, Manhattan.
4. Vererbungsstudien an anthraknoseresistenten Bohnen. F. Schreiber, Quedlinburg (Harz).
5. The manner of inheritance of smut reaction in maize. M. M. Hoover and R. J. Garber, University of West Virginia, Morgantown.
6. Reaction of a wheat cross to three physiologic forms of bunt. E. F. Gaines, State College of Washington, Pullman.
7. The inheritance of resistance to bunt (*Tilletia tritici*) in wheat hybrids. F. N. Briggs, University of California, Davis.
8. Inheritance of resistance to loose and covered smuts in hybrids between certain susceptible oat varieties and Black Mesdag. G. M. Reed, Brooklyn Botanic Garden, Brooklyn.
9. Über die Vererbung der Resistenz des Weizens gegen *Ustilago tritici*. T. Roemer, Die Universität, Halle (Saale).
10. The genetics of stem rust resistance in wheat. H. K. Hayes, University of Minnesota, St. Paul.
11. An apparently inseparable association of one type of rust resistance with a peculiar susceptibility to heat injury in wheat. E. S. McFadden, South Dakota Agricultural Experiment Station, Redfield.

Cytology II, Monday, August 29

G. A. Lewitsky, Chairman; C. W. Metz, Vice Chairman and Secretary.

1. The general bearings of recent research in Oenothera. R. R. Gates, King's College, London.
2. Cytological studies on the diploid offspring of a haploid *Oenothera franciscana*. J. A. Leliveld, Botanical Institute, Amsterdam.
3. The genetics and cytology of triploids and tetraploids from *Oeno-*

thera franciscana. B. M. Davis, University of Michigan, Ann Arbor.

4. The fulfillment of predictions as to chromosome configuration in hybrids of Oenothera, and its significance. R. E. Cleland, Goucher College, Baltimore.
5. Cytological and genetical features of monosomic derivatives in *Nicotiana Tabacum.* R. E. Clausen, University of California, Berkeley.
6. Polyploidy in Sphærocarpos. C. E. Allen, University of Wisconsin, Madison.
7. Chromosomes and phylogeny in Crepis. E. B. Babcock, University of California, Berkeley.
8. Comparative cytogenetic studies of tetraploid tomatoes from different origins. E. W. Lindstrom and E. W. Humphrey, Iowa State College, Ames.
9. Morphological and cytological characteristics of triploid pineapples. J. L. Collins, University of Hawaii, Honolulu.
10. Chromosome relations in somatic and meiotic divisions in violet species-hybrids. Alexander Gershoy, University of Vermont, Burlington.

Animal Genetics II, Monday, August 29

John Hammond, Chairman; P. W. Whiting, Vice Chairman and Secretary.

1. Melanic pigmentation of the mammary glands of black breeds and a red breed of pigs. Alan Deakin, Central Experimental Farm, Ottawa.
2. Genetics of silkworms. Carlo Jucci, R. Università di Sassari, Sassari.
3. An analysis of Mendelian phenotypes in the goldfish. H. B. Goodrich and Rowena Nichols, Wesleyan University, Middletown.
4. The inheritance of rate of growth in *Daphnia longispina.* A. M. Banta and Thelma R. Wood, Brown University, Providence.
5. Genetic studies on selective segregation of chromosomes in *Sciara coprophila* Lint. Helen Berenice Smith, Carnegie Institution of Washington, Baltimore.
6. A case of non-disjunction in the domestic fowl. F. A. E. Crew, Institute of Animal Genetics, Edinburgh.
7. An inhibitor of gold color in chickens. L. W. Taylor, University of California, Berkeley.
8. Autosomal characters independently inherited in the domestic fowl. D. C. Warren, Kansas State Agricultural College, Manhattan.

9. Inbreeding in White Leghorn fowls. N. F. Waters, Iowa State College, Ames.
10. Crossing, production, and exhibition of Rhode Island Reds. Frank A. Hays, Massachusetts Agricultural Experiment Station, Amherst.

Plant Genetics I, Monday, August 29

S. C. Harland, Chairman; O. E. White, Vice Chairman and Secretary.

1. La possibilité de transférer par croisement plusieurs caractères récessifs dans un même type de betterave. Ottavio Munerati, Stazione di Bieticoltura di Rovigo, Rovigo.
2. Linkage and the criteria of independence of genes in Oenothera. G. H. Shull, Princeton University, Princeton.
3. Recapitulation of seedling characters by nucellar buds developing in the embryo sac of Citrus. W. T. Swingle, Bureau of Plant Industry, Washington.
4. Fruit characteristics of autotetraploids in Citrus. H. B. Frost, Citrus Experiment Station, Riverside.
5. Variability and heredity in *Beta vulgaris* L. V. F. Savitzky, Ukrainisches Forschungsinstitut für die Zuckerindustrie, Kiew.
6. Chromosomal aberrations as a result of transgenation. E. J. Kharečko-Savitzkaya, Ukrainisches Forschungsinstitut für die Zuckerindustrie, Kiew.
7. The genetic basis of dimensional traits in Cucurbita fruits. E. W. Sinnott, Columbia University, New York.
8. Genetic interrelationships of some foliage, pod, and cotyledon factors in Pisum. O. E. White, University of Virginia, University.
9. The inheritance of some plant colors in *Brassica oleracea,* var. *capitata.* Roy Magruder and C. H. Myers, Bureau of Plant Industry, Washington, and Cornell University, Ithaca.

10. Pine and walnut breeding for timber production. Lloyd Austin, Institute of Forest Genetics, Placerville.
11. The occurrence and use of haploid plants in the tomato, with especial reference to the variety Marglobe. Gordon Morrison, Oakview Seed Breeding Station, Ferry-Morse Seed Company, Detroit.
12. Genetic association between qualitative and quantitative characters in the tomato. T. M. Currence, University of Minnesota, St. Paul.
13. Mutations in sweet potatoes. J. C. Miller.

Chromosome Structure and Crossing Over, Monday, August 29

C. D. Darlington, Chairman; J. Schultz, Vice Chairman and Secretary.

1. The general meiosis problem in the light of new facts, and its signification for the chromosome theory of heredity. M. V. Tschernoyarov, Botanical Garden, Kiew.
2. Observations bearing on the mechanism of meiosis and crossing over. C. L. Huskins, McGill University, Montreal.
3. Meiosis as a genetic character. J. W. Gowen, Rockefeller Institute for Medical Research, Princeton.
4. Chromosome structure in Drosophila. B. P. Kaufmann, University of Alabama, University.
5. A cytological map of the X chromosome of *Drosophila melanogaster*. T. S. Painter and H. J. Muller, University of Texas, Austin.
6. A theoretical and experimental analysis of crossing-over. A. Weinstein, Johns Hopkins University, Baltimore.
7. Genetic behavior of a closed X chromosome of *Drosophila melanogaster*. Lilian V. Morgan, California Institute of Technology, Pasadena.
8. Studies on the mechanism of crossing over in *Drosophila melanogaster*. I. Experiments with attached-X chromosomes. S. H. Emerson and G. W. Beadle, California Institute of Technology, Pasadena.
9. Studies on the mechanism of crossing over in *Drosophila melanogaster*. II. Experiments with certain translocations. G. W. Beadle and S. H. Emerson, California Institute of Technology, Pasadena.
10. Regional differences in crossing over as a function of the chromosome structure. C. A. Offermann and H. J. Muller, University of Texas, Austin.

Genetics of Species Hybrids, Monday, August 29

H. Federley, Chairman; R. E. Clausen, Vice Chairman and Secretary.

1. Genetics of interspecific crosses. A. Sapĕhin, Odessa.
2. Hybrid emergence in grouse locust color patterns. R. K. Nabours, Kansas State College, Manhattan.
3. Inheritance of weight in a mouse interspecific cross. C. V. Green, Jackson Memorial Laboratory, Bar Harbor.
4. Variation in fertility of dove hybrids in successive generations. L. J. Cole, University of Wisconsin, Madison.
5. On heritable individual differences in the biochemical composition of the red blood cells in dove hybrids. M. R. Irwin, University of Wisconsin, Madison.
6. Heredity in guinea fowls. Alessandro Ghigi, The University, Bologna.
7. The genetical study of natural populations of *Helix nemoralis* and *Helix hortensis*. C. Diver, London.
8. Studies on hybridization of fish species in nature. Carl L. Hubbs and Laura C. Hubbs, University of Michigan, Ann Arbor.
9. Genetic and cytological studies in hybrids of Zea × Tripsacum. P. C. Mangelsdorf and R. G. Reeves, Texas Agricultural Experiment Station, College Station.
10. A study of interspecific hybrids of Vicia. Irene Sveshnikova, Timiriazeff Academy, Moscow.
11. *Crepis nicaeënsis* × *Crepis setosa* and some of the derivatives. S. L. Emsweller, University of California, Davis.
12. Species hybrids in Pæonia. A. P. Saunders and G. L. Stebbins, Hamilton College, Clinton, and Colgate University, Hamilton.
13. Remote ancestral characters appearing in first-generation hybrids of Citrus and Poncirus. T. R. Robinson, Bureau of Plant Industry, Washington.

General Genetics II, Tuesday, August 30

G. H. Shull, Chairman; J. T. Buchholz, Vice Chairman and Secretary.

1. Inheritance of thyroid-size and thyroid-structure in six crosses of purebred dogs. E. M. Vicari, Cornell University Medical College, New York.
2. The inheritance of mental aptitudes in dogs. L. F. Whitney, New Haven.
3. Genetic aspects of a socially important primate behavior pattern. R. M. Yerkes, Yale University, New Haven.

4. Certain principles of physiological genetics. W. J. Crozier and G. Pincus, Harvard University, Cambridge.
5. Temperature modifications of pigmentation in different races of *Epilachna chrysomelina.* Hélène Timoféeff-Ressovsky, Kaiser Wilhelm-Institut für Hirnforschung, Berlin-Buch.
6. Temperature as a tool of research in phenogenetics: methods and results. C. R. Plunkett, New York University, New York.
7. Congenital protein hypersensitiveness. Bret Ratner, New York University Medical College, New York.
8. The occurrence of gene mutations in *Paramecium aurelia.* Daniel Raffel, Yale University, New Haven.

Cytology III, Tuesday, August 30

B. M. Davis, Chairman; Barbara McClintock, Vice Chairman and Secretary.

1. The morphology of the pollen grains of Petunia in relation to hybridity, polyploidy, and sterility. Margaret C. Ferguson, Wellesley College, Wellesley.
2. Incompatibility in cherries, plums, and apples. C. D. Darlington, M. B. Crane, and W. J. C. Lawrence, John Innes Horticultural Institution, Merton.
3. The relationship of chromosomal irregularities in megasporogenesis to the fertility and fruitfulness of varieties of *Malus malus.* F. S. Howlett, Ohio Agricultural Experiment Station, Wooster.
4. Cytological mechanism of segregation in the progeny of an allotetraploid Aquilegia. M. Skalińska, Free University of Poland, Varsovie.
5. Multiple association of chromosomes and an instance of fragments in Rosa. Eileen W. Erlanson, University of Michigan, Ann Arbor.
6. Variation and chromosome behavior in Fragaria. S. H. Yarnell, Texas Agricultural Experiment Station, College Station.
7. Chromosome elimination during cleavage in the eggs of *Sciara coprophila.* Anne M. DuBois, Carnegie Institution of Washington, Baltimore.
8. Male sterility of *Nicotiana rustica.* M. Christoff, University of Sofia, Sofia.
9. Cytogenetics of a Nicotiana and a Triticum triple hybrid. D. Kostoff, University of Sofia, Sofia.
10. Cytological aberrations in *Triticum vulgare.* LeRoy Powers, University of Minnesota, St. Paul.

11. Some cytological and genetical studies in the genus Melilotus. A. E. Clarke, University of California, Berkeley.

Plant Genetics II, Tuesday, August 30

M. Skalińska, Chairman; R. A. Brink, Vice Chairman and Secretary.

1. The transmission of genes affecting pollen-tube growth in Datura. J. T. Buchholz and A. F. Blakeslee, University of Illinois, Urbana, and Carnegie Institution of Washington, Cold Spring Harbor.
2. The production of mutations in American upland cotton (*Gossypium hirsutum*) by radiation. W. R. Horlacher and D. T. Killough, Texas Agricultural College, College Station.
3. (a) Über die Methodik der ökologischen Klassifizierung des Ausgangs-Materiels bei züchterischen Arbeiten. (b) Das Vorrücken des Weizens nach Norden. V. Pissarev, Institute of Applied Botany, Leningrad.
4. The interaction of specific genes determining sex in dicœcious maize. D. F. Jones, Connecticut Agricultural Experiment Station, New Haven.
5. Complete elimination of certain classes of gametes in *Zea mays*. W. R. Singleton, Connecticut Agricultural Experiment Station, New Haven.
6. Variability of sweet-corn hybrids as affected by genetic constitution. J. B. Park, Arthur Anderson, and M. T. Myers, Ohio State University, Columbus.
7. Inheritance in barley. D. W. Robertson, Colorado Agricultural College, Fort Collins.
8. Prevalence and origin of fatuoids in Fulghum oats. F. A. Coffman and J. W. Taylor, Bureau of Plant Industry, Washington.
9. Turkestan autogamous rye (*Secale turkestanicum* Bensin). B. M. Bensin, New York Botanical Garden, New York.
10. Genus Beta L. in the light of the new data of cytology and anatomy. V. Zossimovič, Genetics Laboratory, Ukrainian Research Institute for Sugar Industry, Kiew.
11. Mosaic segregation and chromosome behavior in Petunia. E. Malinowski, Institute of Genetics and Plant Breeding, College of Agriculture, Skierniewice.
12. Mosaic segregation in *Phaseolus vulgaris*. H. Bankowska, Institute of Genetics and Plant Breeding, College of Agriculture, Skierniewice.

Drosophila, Tuesday, August 30

A. H. Sturtevant, Chairman; S. Zarapkin, Vice Chairman and Secretary.

1. The mechanism of mosaic formation in Drosophila. J. T. Patterson, University of Texas, Austin.
2. Specific suppressors in *Drosophila melanogaster*. C. B. Bridges, California Institute of Technology, Pasadena.
3. The developmental system affected by the genes for eye color in *Drosophila melanogaster*. J. Schultz, California Institute of Technology, Pasadena.
4. A study of dominant mosaic eye-color mutants in *Drosophila melanogaster*. H. B. Glass, University of Texas, Austin.
5. The effect of long-continued subjection to constant temperatures in darkness upon inbred bar-eyed Drosophila. Charles Zeleny, University of Illinois, Urbana.
6. New evidence of the production of mutations by high temperature, with a critique of the concept of "directed mutations." H. H. Plough and P. T. Ives, Amherst College, Amherst.
7. The temperature-effective period for the lengthening of the vestigial wings of *Drosophila melanogaster*. M. H. Harnly, New York University, New York.
8. The development and minute structure of certain hereditary tumors in Drosophila. Mary B. Stark, New York Homeopathic Medical College, New York.
9. Changes in the instability of miniature-3 gene of *Drosophila virilis* during ontogeny. M. Demerec, Carnegie Institution of Washington, Cold Spring Harbor.
10. The analysis of body-stature in *Drosophila funebris*. S. Zarapkin, Kaiser Wilhelm-Institut für Hirnforschung, Berlin-Buch.
11. Sex-linked inheritance in *Drosophila hydei*. W. P. Spencer, Wooster.

Problems Relating to Sex and Fertility, Tuesday, August 30

Hans Nachtsheim, Chairman; Franz Schrader, Vice Chairman and Secretary.

1. Inheritance of sex in oysters. W. R. Coe, Yale University, New Haven.
2. Sex and intersex in pigeons. Oscar Riddle, Carnegie Institution of Washington, Cold Spring Harbor.
3. Genetics of sexual dimorphism in plumage. C. H. Danforth, Leland Stanford Jr. University, Stanford University.

4. The inheritance of fertility in the rabbit. John Hammond, School of Agriculture, Cambridge.
5. The effect of X-rays on the fertility of the male house mouse. G. D. Snell, University of Texas, Austin.
6. Genotypische und phänotypische Geschlechtsbestimmung bei Zahnkarpfen. Curt Kosswig, Die Universität, Münster i. W.
7. Intermediate aphids and the time-of-determination theory. A. F. Shull, University of Michigan, Ann Arbor.
8. Production of diploid binuclear oïdia, diploid binuclear chlamydospores, and haploid mononuclear oïdia, on the same diploid strain of *Pholiota aurivella* Batsch. René Vandendries, Rixensart.
9. The production of vestigial and sterile sex-organs through sex-reversal and neutral sexual states. J. H. Schaffner, Ohio State University, Columbus.
10. Studies of self- and cross-incompatibility in the petunia "Rosy Morn." A. B. Stout, New York Botanical Garden, New York.
11. Selbstfertilität bei diözischen Pflanzen mit besonderer Berücksichtigung von Versuchen an *Antennaria dioica*. Gerta von Ubisch, Die Universität, Heidelberg.

Genetics and Pathology, Tuesday, August 30

F. A. E. Crew, Chairman; L. C. Strong, Vice Chairman and Secretary.

1. Inheritance of resistance to disease in animals. Elmer Roberts, University of Illinois, Urbana.
2. A lethal factor in sheep. G. K. Constantinescu, The University, Bucharest.
3. Eight new mutations in the domestic fowl. F. B. Hutt, University of Minnesota, St. Paul.
4. Genetic selection for resistance to fowl typhoid in the chicken. W. V. Lambert, Iowa Agricultural Experiment Station, Ames.
5. Concerning the existence of genes with a specific effect upon one germ layer. Walter Landauer, Storrs Agricultural Experiment Station, Storrs.
6. The genetic basis of resistance to paratyphoid in mice. R. G. Schott, Rockefeller Institute for Medical Research, Princeton.
7. Hereditary anomalies in mice descending from stock raised (1921) by Little and Bagg. Kristine Bonnevie, Zoological Laboratory, Oslo.
8. The genetics of spontaneous cancer in mice. I. Cross between dilute browns and yellows. C. C. Little and B. W. McPheters, Jackson Memorial Laboratory, Bar Harbor.

9. Mouse leukemia. E. C. MacDowell, Carnegie Institution of Washington, Cold Spring Harbor.
10. Further studies on the inheritance of tumor susceptibility in mice. Clara J. Lynch, Rockefeller Institute for Medical Research, New York.
11. Heredity of cancer susceptibility in mice. N. Dobrovolskaia-Zavadskaia, Institute for Radium Research, Paris.
12. Genetic studies on the transplantation of tumors. IV. Linkage in tumor 19308A. J. J. Bittner, Jackson Memorial Laboratory, Bar Harbor.

Wednesday, August 31

Section of Fruit and Vegetable Breeding, at the
New York Agricultural Experiment Station, Geneva, New York

W. T. Macoun, Chairman; R. Wellington, Vice Chairman and Secretary.

1. Address of welcome. U. P. Hedrick.
2. Recent progress in the raising of blight-immune potatoes. R. N. Salaman, Barley, Herts.
3. Observations on the genetics of the potato: (a) Effects of inbreeding. (b) Interacting factors affecting tuber color. F. A. Krantz, University of Minnesota, St. Paul.
4. A survey of bud mutations among deciduous fruit varieties. J. T. Bregger, Washington State College, Pullman.
5. The importance of the parental genotype in the breeding of fruits. A. N. Wilcox, University of Minnesota, St. Paul.
6. Somatic segregation of an environmental character (hard shell) in pure lines of beans. W. O. Gloyer, New York Agricultural Experiment Station, Geneva.
7. The morphological expression of diœciousness in the grape. M. J. Dorsey, University of Illinois, Urbana.
8. The value of the European grape (*Vitis vinifera*) in breeding grapes for New York State. R. Wellington, New York Agricultural Experiment Station, Geneva.
9. The Northern Spy apple: a parent in breeding new varieties. W. T. Macoun, Central Experimental Farm, Ottawa.
10. Metaxenia and xenia in apples. B. R. Nebel, New York Agricultural Experiment Station, Geneva.
11. Metaxenia in the date palm, and its genetic implications. R. W. Nixon, Bureau of Plant Industry, Washington.
12. Raspberry and strawberry breeding at the New York Agricultural Experiment Station. G. L. Slate, New York Agricultural Experiment Station, Geneva.