



XII INTERNATIONAL CONGRESS OF GENETICS

Congress News

Saturday, August 24, 1968

NO. 5

TODAY'S PROGRAM

9:30 a.m. -	General Sessions
2:00 p.m. - 5:00 p.m.	Small Symposia



MESSAGES TO THE CONGRESS

The XII International Congress of Genetics in Japan coincides with the brilliant development of this science in the country that admitted the delegates of 53 other countries. Science takes a bigger and bigger place in the human life. Genetics as a main biological science has to have a common language and be based on the development of the world science. The personal contact of scientists and the knowledge of their creative activity what is realized in their reports; the friendly connections - are important for the development of science. I hope that we all and many new young scientists will meet at the next XIII Congress of Genetics.

The capital of Japan, as well as the smart and active Japanese people makes very agreeable impression. Acquaintance with Japan will remain in our memories as a pearl, remembering the XII Congress of Genetics.

N. Dubinin, Academy of Sciences of the USSR

Having been a participant in the 1956 Symposia in Genetics in Tokyo and Kyoto, I knew that the present congress would be beautifully organized, and I have not been disappointed. I have never attended a congress where arrangements were more perfectly worked out, where the comfort and convenience of the participants were more carefully considered. While I highly approve of smaller international conferences dealing with individual specialities. I trust that general congress of genetics will not be given up, so that geneticists with an interest in more than one narrow field will be served. I recently heard a definition of genetics that may appeal to some. It is what a man believe in until his son begins to act like a fool.

D. Cleland, Indiana University

SCIENTIFIC

Notice to speakers who have finished their talks

Those who have not received their slides after talks are urgently requested to come to Session Management Office on the second floor as soon as possible.

CHANGES OF SESSION ROOMS

August 24, Saturday only

Session Rooms L, K, and L on the fourth floor will be moved again to the following rooms:

from: Room K	to: Room K and Room L (on TV)
Room L	Magnolia Hall on the second floor
Room M	Room N (see the yesterday's News)

PROGRAM CHANGES

August 24, Saturday morning

Canceled paper

Room I (Gen. 5-10)

9:30 R. A. PAI and M. S. SWAMINATHAN: Effect of radiation on crossing over.

Changes of chairmanship

Room H (Gen. 10-4)

R. KATO and J. WHANG-PENG will be Chairmen of this session in place of I. MOSARU and G. K. MANNA.

Room L (Gen. 14-4)

H. I. OKA will be Chairman in place of T. T. CHANG.

Addition

Room K (Gen. 6-4)

At the end of this session, G. M. REDDY's lecture should be added with the following title.

11:30 G. M. REDDY: "Amino acid and protein content studies of some Indian maize varieties".

August 26, Monday morning

Canceled papers

Room A (Gen. 4-5)

- 11:30 S. I. AHMED, M. B. BERLYN, M. E. CASE and N. H. GILES: Comparative studies of enzyme aggregates in the pre-chorismic acid part of the aromatic biosynthetic pathway in molds and bacteria.

Room B (Gen. 15-3)

- 11:15 J. PAVEL, K. PETERSON and M. MOOL: On the association of hen egg-white mucin globulins with the resistance of offspring in the perinatal period.

Room C (Gen. 5-4)

- 11:00 J. A. RAPOPORT: Mutagenic action of physiological amino acids' analogues and derivatives.

Room D (Gen. 12-4)

- 9:45 S. K. HYUN: Introgressive hybridization in red pine in the eastern part of Korean Peninsula.
10:00 V. S. KIRPICHNIKOV: Heterosis, inbreeding depression and homeostasis in Cyprinus carpio. L. populations.
10:30 H. E. KELLER and E. C. KELLER, Jr.: Xanthine dehydrogenase activity levels of a series of inbred lines and their F₁ hybrids in Drosophila melanogaster.

Room E (Gen. 3-5)

- 10:15 M. I. MOSEVITSKY: Study of the mechanism of lysogeny.

Room G (Gen. 13-1)

- 10:45 F. H. BACH: Assay of incompatibility at HL-A: The major histocompatibility locus in man.
11:15 E. M. MCDERMID: Iso-antigens of chicken lymphocytes.

Room J (Gen. 9-5)

- 10:15 A. SHARMA: Cytotaxonomy and evolution in aquatic monocotyledons.

Room K (Gen. 10-5)

- 10:30 B. KIAUTA and J. M. VAN BRINK: Sex chromosomes and sex determining mechanism in the order Odonata.

Room L (Gen. 14-5)

- 10:15 N. V. TZITSIN: Remote hybridization of cultivated plants with spontaneous ones.
11:30 M. SASAKI: The effect of cytoplasm-nucleus interaction on chlorophyll mutation frequencies induced by gamma-irradiation in rice.

Paper canceled or read by another speaker

Room D (Gen. 12-4)

- 10:15 F. A. LINTS: Respiration in wild, inbred and hybrid Drosophila melanogaster imagos.

Room M (Gen. 8-3)

9:45 A. K. SINHA: Somatic association of homologous chromosomes.
Changes of chairmanship

Room C (Gen. 5-4)

L. S. BROWNING will be a Chairman in place of J. A. RAPOPORT.

Room D (Gen. 12-4)

S. K. HYUN will not be Chairman of this session.

Room J (Gen. 9-5)

J. R. EDWARDSON canceled his chairmanship.

Room L (Gen. 14-5)

Y. C. LU will be a Chairman in place of N. V. TZITSIN.

OTHER CHANGES

Room L (Gen. 14-5)

The following paper by E. POCHARD will be read by R. A. MARIE.

11:15 E. POCHARD: Isolation of ten primary trisomics in the progeny of a haploid pepper plant (Capsicum annum L.).

D. E. ALEXANDER will read the following paper.

12:00 R. J. LAMBERT, D. E. ALEXANDER and J. W. DUBLEY: Relative performance of opaque-2 and normal maize hybrids.

August 26, Monday afternoon

Canceled papers

Room E (Gen. 2-4)

3:45 J. F. LECHNER and K. E. FUSCALDO: Genetic and biochemical studies of selected colonial mutants of Neurospora crassa.

Room H (Gen. 5-5)

2:00 A. KHISHIN and M. ZAWAHRI: The effects of yeast concentrations on the X-ray induced lethals in Drosophila melanogaster.

Room I (Gen. 5-11)

3:45 G. LINNERT: A pedigree analysis of lines producing multiple mutations after reversion of one locus in Antirrhinum majus.

Speaker Changed

Room G (Gen. 15-4)

In the following lecture J. H. F. v. ABEELEN will be the speaker instead of L. T. DOUGLAS.

3:00 L. T. DOUGLAS, J. H. F. v. ABEELEN and S. J. GEERTS: Acetylcholinesterase activity in corpora striata of mice selected for a behavioral character.

Sequence change

Room G (Gen. 15-4)

The sequence of the first and the second lectures will be exchanged. (Both lectures will be given by W. E. TROUT and W. D. KAPLAN).

Other change

Room G (Gen. 15-4)

The following paper by L. G. ANGELOFF will be read by W. F. GRANT.

4:15 L. G. ANGELOFF: Cancer Walker 256 carcino sarcoma an hereditary disease in hooded rats. I.

Title changed

Room C (Symp. 14)

The third speaker of this Symposium, R. H. RICHARDSON changed his title as follows:

"Migration and isozyme polymorphisms in natural populations of Drosophila".

The new abstract will be distributed at the entrance of the Session Room.

August 23, Friday morning

Room K (Gen. 10-3)

Additional announcements were made by E. ORTIZ on "Sex-linked polymorphism in natural populations of the beetle Phgtodecta variabilis", and by N. O. BIANCHI on "Polymorphism in a strain of wild Rattus rattus".

MEETING OF THE GENETICS SECTION OF IUBS

The meeting will be held on August 24, Saturday, 8:00 p.m. - 10:00 p.m. at Room H (Fukuju) on the third floor. The committee for Genetic Symbolization and Nomenclature will be also assembled. The details of the agenda will be announced separately.

SOCIAL EVENTS

Filmshow

The following films will be shown from 8:00 p.m. to 9:30 p.m. at Sunflower Hall on the second floor.

"Mount Fuji", "Life is born"

OTHER INFORMATION

Slide Copies of Scientific Exhibition

In response to the request of many participants, slide copies of the following exhibitions are available for sale. The price is ¥500 for 10 slides of each group.

- 1) Genetics, evolution and breeding in rice
- 2) Evolution, differentiation and breeding of the silkworm
- 3) Variation and distribution in breeds of the Zebu
- 4) Differentiation and breeding of Citrus and cultivated Brassica

Those who like to obtain them are suggested to apply at the entrance of Exhibition Room (Golden-Cup Room) on the third floor by Saturday, August 24. The slides will be delivered by Wednesday, August 28.

Morning-glory Exhibition

Large flowering strains of Japanese morning-glories are exhibited from August 23 to the end of the Congress in front of elevators on the second floor of the Tokyo Prince Hotel, through the courtesy of the "Tokyo Asagao Kenkyukai" (The Tokyo Hobby Association of Japanese Morning-glory Cultivation).

CONCURRENT MEETING

International Symposium on Genetic Effects of Space Environment

At Room N in the Tokyo Prince Hotel
On Sunday, August 25
10:00 a.m. - 17:00 p.m.

The symposium is open to all members of the XII International Congress of Genetics for attending the discussion on the genetic effects of space environment and related topics. Topics will be "Effects in Insects", "Effects in Cells", and "Effects in Plants". Detailed program and abstract are available at the Information Desk.

INVITED LECTURE

by Dr. M. S. SWAMINATHAN describes
A NEW APPROACH TO DIRECTED MUTAGENESIS

The artificial creation of new variation was made possible when the late Professor H. J. MULLER of the United States discovered 40 years ago that by treating living organisms with X-rays, mutations can be produced. It has, however, not been possible so far to make a few genes alone and not others to mutate in higher organisms. Until now, mutations could be induced mainly in a random manner in such organisms. In his invited lecture, Dr. M. S. SWAMINATHAN of India described a method of directing the mutational events induced in barley. The technique developed by Dr. SWAMINATHAN for getting specific mutations makes use of the fact that the genes located on chromosomes do not all replicate at the same time. The replication of DNA in chromosomes proceeds asynchronously over a few hours during the S phase. Hence, by administering the treatment with potent alkylating agents for short periods during different stages of DNA replication, different groups of genes may be made to change selectively. The technique involves steps for achieving Synchronisation of cell division, rapid diffusion of the mutagen and the removal of the mutagen after a brief period of treatment. In this way, Dr. SWAMINATHAN and SHARMA of the Indian Agricultural Research Institute obtained different kinds of mutations in barley. The time sequence in which different groups of genes in barley, wheat and rice are reproducing is now being worked out, using the spectrum of mutations induced by such treatments of fractions of S phase. Mutations for characters like response to fertilizer application, productiveness per day and protein quantity and quality have been isolated in the major cereals. Mutation breeding will soon become an invaluable method of crop improvement, in view of the rapidly changing needs of world agriculture and consequently to the new selection parameters introduced in plant breeding.

New Participants Registered on August 23

Full Members:

Furusho, J. A. (J.S.A.)
Hosokawa, S. (Japan)

Maki, M.

(Japan)