

PROFESSOR V. PURI, D. Sc., F. N. I.,
HONORARY SECRETARY



SCHOOL OF PLANT MORPHOLOGY,
MEERUT COLLEGE,
MEERUT, INDIA

Oct. 1, 1965.

Ref. IBS-10-65/2235

Dr. M.S. Swaminathan,
Head, Division of Botany,
Indian Agricultural Res. Institute,
NEW DELHI-12.

Dear Dr. Swaminathan,

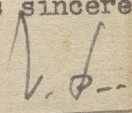
I have great pleasure in informing you that the Executive Council of the Indian Botanical Society has nominated you for the award of the Birbal Sahni Medal for the year 1965. I shall feel much obliged if you please be good enough to accept this token of our admiration for your excellent contributions to Cytogenetics in particular and Botany in general.

Further we would very much wish that you personally receive the Medal at the time of the Annual Meeting of the Indian Botanical Society to be held during the 53rd Session of the Indian Science Congress Association at Chandigarh in January 1966.

As you perhaps know it has become a convention now that the recipient of the medal delivers an address on a scientific subject of his choice. I am sure you will have one ready by then. This will be published in our journal.

With best regards,

Yours sincerely,



(V. Puri)

VP/mcg

Dr. M.S. Swaminathan,
Head.

Division of Botany,

d.o.no. PF./15142

Oct. 4, 1965

Dear Prof. Puri,

Thank you very much for your kind letter No. IBS-10-65/2235 dated October 1, 1965, informing me that I have been nominated for the award of the Birbal Sahni Medal for the year 1965. I am very grateful for this great honour done to me which I know, I am not worthy of. It would certainly be a rare privilege to me to receive this award which is associated with the name of the Doyen of Indian Botany. I can not find words to give adequate expression to my feelings of gratitude to you and the members of the Executive Council of the Society for this decision and I can only assure you that I shall strive my best to prove worthy of it.

I shall certainly come to Chandigarh to receive the award in person and also deliver a talk on the occasion. I shall think about the precise title for my talk and write to you about it soon.

With my best regards,

Yours sincerely,

M.S.
(M.S. Swaminathan.)

Prof. V. Puri,
Hony. Secretary,
School of Plant Morphology,
Meerut College,
Meerut.

Back to me
M.S.
4/10

The Hindu, Saturday, March 12, 1966.

OUR SCIENTISTS-1

An Outstanding Genetist

[This is the first in a series on young and outstanding scientists of India who have made notable contributions in their respective fields.]

At 40, Dr. Monkombu Sambasivan Swaminathan—who recently received the Birbal Sahni Medal of the Indian Botanical Society—already ranks among the topmost genetists of India with international recognition.

Dr. Swaminathan, who now heads the botany division of the Indian Agricultural Research Institute in New Delhi, has been engaged for over a decade in research in plant genetics. Many are the contributions which have won for him honours from national and international scientific bodies. But modest as he is, he wants to attribute the credit to his students and fellow workers in the Institute. The highest national honour received

by him so far is the Shanti Swarup Bhatnagar Memorial Award of 1961.



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International recognition came to him in August 1965 when at a world meet of genetists at Brno, the Czechoslovak Academy of Sciences honoured him with the Mendel Memorial Award—which has not been conferred before on any Indian or even an Asian genetist. The other awards received by him were the Indian Journal of Genetics Medal (1964) and Timiraezov Academy of Agricultural Medal (1965). He was also the first Indian to be selected Vice-Presi-

dent of the International Congress of Genetists (1963).

Dr. Swaminathan was born in Kumbakonam in 1925. His father was a medical practitioner. Dr. Swaminathan took to agricultural science. He specialised in genetics because he saw in it the means to increase farm output. His later findings proved him right and showed that great spurts in crop yields could be accomplished through genetic manipulations, in conjunction with changes in agronomic practices.

Among his contributions may be mentioned the "Swaminathan Artificial Stigma Method" for successfully crossing two Mexican tuberbearing potato species. All previous attempts to make this cross had failed and the technique recommended by Dr. Swaminathan was taken up for follow-up action by foreign genetists. Similarly he accomplished the crossing of two jute yielding species which is of great value in improving the yield of jute.

More recently his primary interest has been in experimental manipulation of genes to improve the yields of wheat and cotton. As part of his research he organised a radiation genetics school in the Indian Agricultural Research Institute for studying indirect effects of radiation of plants. This work has a great bearing on the evaluation of the wholesomeness of irradiated food and some of his findings have been recently confirmed by genetists of the Cornell University (U.S.A.).

While all these have secured for Dr. Swaminathan a place among the top men of science, his most significant contribution to Indian agriculture is the initiation of Dwarf Wheat Breeding programme, which offers promise of making the country surplus in wheat output within the next few years.

Dr. Swaminathan believes in the practical application of science to supply the basic needs of the country. An example of this is the Jawahar Jount seed village near the IARI. A creation of his, the whole village is a seed farm engaged in breeding high yielding varieties of wheat and jowar evolved through genetic manipulations.

Dr. Swaminathan is married and has three daughters. He has no particular hobby. Keeping himself up to date with the latest developments in the field of genetics and attending to the needs of his family take up whatever time left after research and teaching work at the Institute.—B.S.P.

(Next: Dr. A. P. Mitra)

Mexican Wheats

The Wheat Revolution in India is the result of well-planned plant breeding research strategy and co-ordinated work approach of highly experienced agricultural scientists and bold administrative and policy decisions. However, the single major factor which helped start the Wheat Revolution in Punjab was the introduction of high yielding, nitrogen responsive dwarf strains of wheat from Mexico. The simple fertilizer trials conducted in farmers' fields during 1959-61 had revealed that the tall varieties then cultivated in India do not respond well to nitrogen application. Hence, in 1962, the Indian Agricultural Research Institute, New Delhi sent a proposal to the Government of India that Dr. N.E. Borlaug of the International Maize and Wheat Research Centre, Mexico, may be invited to India and supply us with dwarf wheat material containing the "Norin" dwarfing genes in order to break the barrier to high yields in wheat. Dr. Borlaug accepted the invitation and visited the major wheat growing areas of India in March, 1963. This visit paved the way for our getting seeds of four commercial Mexican semi-dwarf wheats along with a few seeds of 613 different breeding lines. Seeds of this material was distributed by IARI in collaboration with the Rockefeller Foundation to the Punjab Agricultural University, Ludhiana, and to several other institutions. The performance of the Mexican varieties was very impressive even in the first year inspite of bad weather.

At that time, I was Director-General of the Intensive Agricultural Programme with the Ministry of Food and Agriculture of the Government of India, with the responsibi-

lity of organising production of food crops in irrigated districts. I then suggested that we should import more seeds of these varieties as soon as possible. In 1965, at the All-India Wheat Workshop held at Ludhiana a decision was taken to import 250 tonnes of seeds of the varieties Sonora 64 and Lerma Rojo. These seeds were distributed to farmers all over the country by IARI. Their performance was so impressive that at the Chief Ministers' Conference held at New Delhi in April, 1966, a decision to import 18,000 tonnes of seeds of Mexican varieties was taken. At that time, this was the biggest seed import made by any country from another. The seeds were purchased from Mexico by a team of experts led by the late Dr. S.M. Sikka which was specially sent to Mexico for this purpose. For this bold step, credit goes to Mr. C. Subramaniam, the then Minister for Food and Agriculture of the Government of India and the then dynamic Secretary of the Ministry, Mr. B. Sivaraman.
