

HALDANE AT 125



J. B. S. Haldane: an uncommon scientist

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After J. B. S. Haldane took residence in India in the mid-1950's he helped many of our state governments in improving agricultural productivity. He advised the Government of Kerala on methods of improving the productivity of coconut and overcoming the malady of the root wilt disease. He encouraged work which led to significant results of value in practical agriculture. For example, the concept of cooperation and competition among rice genotypes helped to identify the scientific basis of mixed cropping and suggested methods of fostering synergy among diverse genotypes.

Haldane in one of his lectures in 1950's pointed out that while mixed cropping like growing wheat/barley, chickpea and brassica together was a common practice among farmers in north India, agricultural research institutions were concentrating their work largely on monocropping. Thus there was a mismatch between field reality and research strategy. He also pointed out enormous opportunities available in India for undertaking research on quantitative traits controlled by many genes.

Haldane's presence in India helped to revitalize the science of quantitative genetics not only in plants and farm animals but also in human populations. Because of the considerable inbreeding prevailing in India among human communities, Haldane encouraged studies in the area of eugenics. His enthusiasm for scientific work was infectious and he gathered around him brilliant young geneticists like K. Dronamraju.

The last time I was with him was at the International Genetics Congress held in Holland in August 1963. The Congress was held at the beautiful seaside of Scheveningen near the Hague. Because of the wonderful weather and the attractive beach, most of the delegates were out enjoying both the weather and the beauty of the sea. However, when Haldane's public lecture was to take place at 4 pm on the

opening day of the Congress, nearly everyone came back to the plenary lecture hall like honeybees getting back to their hive! It was a brilliant lecture and Haldane kept the audience spell bound for over an hour.

Some personal reminiscences

I first met and heard Haldane at a seminar in Cambridge in 1952. After the seminar we sat together for a little while to discuss the status of science in India. He asked what I was doing and I explained that I am doing Ph.D. degree in genetics with particular reference to the origin of the potato. He then remarked that the Ph.D. is an invention of the British for colonial students. This explains why he himself never worked for a Ph.D. degree.

Soon after he came to live in India in the 1950s. I had the opportunity to interact with him on a few occasions. I think the first one related to the coconut root wilt problem in Kerala. The then Chief Minister E. M. S. Namboodiripad had requested Haldane to go into the problem of the root wilt and suggest a research programme. He then met T. A. Davies who had perfected the art of climbing the coconut tree to study the inflorescence. Haldane reported to the Chief Minister and praised Davies for mastering the art of climbing the coconut tree. He said that no other scientist had followed his footsteps. Davies is one of the favourite associates of Haldane in India.

In the 1950s I had a call from Haldane who wanted to visit the Indian Agriculture Research Institute and particularly see the genetic resources in brinjal (*Solanum melongena*). I felt very excited about his coming and my taking him around the farm. While in Solanum field he observed a wide range of variability in the brinjal family. The variability covered both qualitative and quantitative

character. He then told me that brinjal is an ideal plant for studies in quantitative genetics particularly with reference to fruit size.

I should also recall an interesting episode during the International Congress of Genetics held in Scheveningen in the Netherlands. A few of us who were either office bearers for the congress including the President or keynote speakers were told that Queen Juliana has invited us for dinner at her palace. We were all in one bus and finally reached the palace and there was an announcement that we can go to the guesthouse to change dress if necessary and make ourselves fit to be presented to the Queen. All of us went to different rooms in the guesthouse to have a wash. When we returned Haldane appeared in a *dhoti*, *kurta* and *angavastram* on the Tamil Nadu pattern. I was wearing a suit and he jokingly remarked 'Swaminathan you are not a true Indian since you have borrowed the western dress'. Professors and other European specialists in genetics observed disapprovingly Haldane in an Indian dress. However they could not say anything to him. Even Queen Juliana appeared surprised when Haldane went up

and greeted her. This is an example of his total indifference to western concept of dressing for a banquet and that too by the Queen.

One of my last meetings was in Bhubaneswar, where he had established a laboratory after leaving the Statistical Institute (ISI) in Kolkata. He was then suffering from Cancer. He gave me a copy of his poem 'Cancer is a funny thing'. He studied the impact of cancer on himself.

It is our good fortune that Haldane chose India for living during the last part of his life. His wife was well known for her unconventional behaviour. Hence she was not popular among Indian academicians. Though not popular, she was greatly respected for her scholarship and scientific capability.

We do not see anything like the Haldane era at this time. We can learn from his life and work and also from a very high standard of scholarship and scientific integrating for which he was famous.

Haldane's life was his message. He influenced others not only by his wisdom but also by the logic and rationality of his arguments. He was indeed a Scientists' Scientist.