Ancient Introductions of Crops and Related Taxa into India and Export out of Indian Subcontinent: Some Facutal Data and Gaps in Our Knowledge

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Indian Sub-continent with its tremendous eco-geographical, climatic, pedological and floristic variations has been a wonderful field cum natural laboratory for testing various hypotheses regarding introduction of crop plants, their putative ancestors and related taxa of plants as well as animals since prehistoric times, at the hands of Man. This has been a land of innovation, absorption, amalgamation, improvements and donations (exportations) since antiquity. In cultural terms, Mahatma Gandhi, Pandit Jawaharlal Nehru and scholars from various fields have aptly described it as "Unity in Diversity".

The author tries to visualize the botanical evidences in the form of carbonized and phosphatised grains, husks, fruits, impressions, etc. From scores of archaeological sites to know the time and place of exploitation of botanical wild germ plasm resources along with brief reference to animal wealth. The paper reviews broad phases of initiation of plant domestication in the Indian sub-continent, introduction of foreign crops around *c.* 6000 B.P., *c.* 4000 B.P., *c.* 2000 B.P. and *c.* 400 B.P.; their adoption, assimilation, improvement and exportation of indigenous crops to other regions of the world in antiquity. The rich modern farming system of Indian sub-continent has evolved through historical and archaeological processes and the author tries to present factual palae-bio-geographical indicators for appreciating chronology, region of acceptance, improvements, reflections of cultivated species and wild food produces in historical texts and hints at harnessing of rich biodiversity of potentially useful agricultural plants. The author proposes that such integrated and fundamental studies will also be useful to science-policy makers for duly establishing intellectual property rights of the Indian people with reference to various indigenous arable, tree crops, tuber crops, etc. being exploited since times immemorial.

Plant Quarantine Issues for Germplasm Exchange and Scope for Networking in South Asia

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Plant quarantine plays an important role in preventing introduction of pests and their subsequent establishment along with the exchange of germplasm material in a new geographical area. It is motivated by the philosophy that it is better to endure some inconvenience and expense in an effort to exclude the exotic pests, rather than submit to losses involved following their entry and establishment.

The South Asian countries have a lot of commonalities with respect to agro-ecological conditions, cropping systems and crop spectra. Most of them have contiguous land borders without any natural barriers. The land races and wild relatives of many crops are distributed across national boundaries. Exchange of plant genetic resources (PGR) has contributed significantly towards crop improvement and increased crop production in the region. However, a number of pests have also moved across the countries along with planting material. For example, *Hemiliea vestatrix* causing coffee rust, bunchy