## **Obituary**



Dr. Sudhanshu Kumar Jain (1926-2021)

Dr. S. K. Jain, F.N.A., a renowned botanist with global recognition popularly known as the Father of Indian Ethnobotany, peacefully passed away at his residence in Lucknow in the wee hours on 20th April, 2021 due to COVID-19 infection at the age of 95 years. He was born on 30th June, 1926 at Amroha town in Uttar Pradesh, India. He belonged to a farmer's family in Seohara, Bijnor. Dr. Jain graduated in 1943 and topped in post-graduation during 1946 from Allahabad University, Prayagraj. He got an opportunity to work with Prof. M.B. Raizada for postgraduation training in plant taxonomy. He also worked at Mycology Division, Indian Agricultural Research Institute, Delhi (1946-47) for his postgraduate dissertation. Dr. Jain started his scientific career as an Assistant Professor at Meerut College, Meerut till 1949. At the age of 22, on 5th May, 1948, he was married to Mrs. Satya Jain, a Hindi scholar having keen intellect and literary taste.

Dr. Jain worked as a stipendiary trainee in plant taxonomy at Indian Botanic Garden, Kolkata and later at famous Forest Research Institute, Dehradun (now ICFRE) and received his training under the guidance of late Prof. M.B. Raizada from 1949-51. There he came in contact with Dr. N.L. Bor, a world renowned taxonomist on grasses. Dr. Jain served at CSIR-Publication & Information Directorate, New Delhi (now NISCAIR) as editorial staff (1951-53) and at CSIR-National Botanical Research Institute (NBRI), Lucknow as a Senior Scientific Assistant in the herbarium during 1953-1956.

Afterwards, he joined as a Systematic Botanist at Botanical Survey of India (BSI), Pune Regional Centre during 1956-1960. Then he served at BSI, Allahabad and Kolkata centres as Economic Botanist from 1960-1971. This post was recommended by late Dr. E.K. Janaki Ammal who prepared the revised mandate of Botanical Survey of India at CSIR-Central Drug Research Institute (CDRI), Lucknow. She assigned Dr. Jain the duties of Economic Botanist to carry out the research work on Economic Botany and Ethnobotany as well. During this period, Dr. Jain earned his Ph.D. from Pune University for his commendable work on 'Studies on the vegetation of arid, semiarid and some adjacent regions of western India' under the guidance of a renowned plant taxonomist Dr. H. Santapau, the then Director, Botanical Survey of India. Later on he served at BSI, Shillong and Kolkata from 1971 to 1977 as Deputy Director. Thereafter, Dr. Jain was transferred to BSI, Kolkata as Joint Director in 1977 where during 1978 he became the Director, BSI, Kolkata and served there till June, 1984. Dr. Jain had specialization in ethnobotany, medicinal plants, plant taxonomy (Floristics, Grasses and Orchids), phytogeography and conservation of endangered taxa. He described 24 taxa new to science. In recognition of his work, over 22 generic and specific epithets have been commemorated in his name. He was a hardcore field botanist and intensively explored all over India including Andaman & Nicobar Islands and consulted most of the major herbaria in India as well as in Australia, China,



France, Indonesia, Singapore, Thailand, UK, USA and USSR. Dr. Jain pioneered the Flora of India series in 1977. He documented under-exploited uses of about 2000 plant species, recognized endemic species of India and restricted collection and sale of orchids and also launched a research project on "Endangered and Endemic species in India covering National Parks and Wildlife Sanctuaries. His understanding in ecology of habitats led in conservation of One-horned Rhinoceros by transferring its pair from Assam to Dudhwa National Park in Uttar Pradesh and later served for making policies to provide similar alternate habitats to rare flora and fauna.

Dr. Jain was a good administrator and a disciplined personality. He was also the mastermind as coordinator of the "All India Coordinated Research Project on Ethnobiology (AICRPE)" as a multi-institutional research project sponsored by Ministry of Environment, Forests, New Delhi in 1982. He accomplished several valuable research projects funded by CSIR, DST, MoE, INSA, ICFRE, Earthwatch, US Fish & Wildlife Service, Rain Forest Alliance, USA and Vavilov-Frankel Fellowship, Italy. Dr. Jain left his mark on many institutions and professional associations as he contributed his knowledge as an active member of many expert committees, selection boards, task forces including The Man and the Biosphere Program (MAB), World Hunger Program and CITES. He was the mastermind behind the publication of the 1st volume of The Indian Plant Red Data Book at BSI, Kolkata in 1984.

After superannuation from BSI in June, 1984, Dr. Jain joined as Pitamber Pant Fellow of MoEnF, New Delhi at CSIR-National Botanical Research Institute, Lucknow for a period of three years from 1984-86. He was awarded as Emeritus Scientist by CSIR for his project on *Comparative and Deductive Studies in Ethnobotany* in 1986. The outcome of this research project was his famous book 'Dictionary of Indian Folk Medicine and Ethnobotany' (1991). This valuable publication was presented as evidence in US courts which helped to win India the famous Turmeric Patent. Due to his immense contribution in establishing an epicenter of Ethnobotanical studies in South-East Asia, Dr. S.K. Jain's name today figures prominently amongst the internationally acclaimed top ethnobotanists.

Dr. Jain was the founder President of the **Society of Ethnobotanists (SEB)** in 1980 and in order to promote and enrich the field of ethnobotany, he took initiative for the publication of an international journal *Ethnobotany* in 1989. For encouraging young ethnobotanists, he initially launched three medal awards in SEB during 1992. He was a mastermind in the organisation of over 15 training courses from 1986 - 2004 at various places in universities as well as institutions to inculcate and promote ethnobotany. In 1994, Dr. Jain successfully organised 4th International Congress on Ethnobiology at CSIR-National Botanical Research

Institute, Lucknow in which more than 300 delegates, including 82 foreign delegates, participated.

On 14th August, 1995, Dr. Jain laid the foundation of the 'Institute of Ethnobiology (IOE)' at Lucknow as the first honorary director of IOE. This institute was later on shifted to Jiwaji University in 2002. This Institute possesses immense information about Dr. Jain's career, his field visits, research projects, research articles, books, annual conferences/symposia/training correspondences with scientists/institutes, pocket diaries, visiting/greeting cards, photographs, projection slides, video cassettes, line drawings, medals and mementoes and many more things to know deeply about him. IOE was rechristened as SK Jain Institute of Ethnobiology commemorating his significant contributions in this area in 2012. Dr. Jain established ethnobotany in India, mentored and guided over a dozen students in ethnobotany, plant taxonomy and conservation. Sustained efforts of Dr. Jain helped various universities to include ethnobotany in curricula for the graduation, post-graduation, M. Phil as well as D.Phil. programmes. Through his persuasion, Botany Division of CSIR-Central Drug Research Institute (CDRI), Lucknow was renamed as Ethnobotany Division as CDRI was the place in which the word 'Ethnobotany' was written in an official file in India for the first time. For the promotion of plant taxonomy, he laid the foundation of Association for Plant Taxonomy (APT) in 1998 and took initiative for the publication of APT journal 'Phytotaxonomy' in 2000. He also initiated organization of Botanical archives at CSIR-NBRI, Lucknow and always emphasized on the importance of preservation of scientific archives. He also served as INSA Honorary Scientist to work on the project of Scholastic Genealogy.

During over seven decades of research career, he published more than 380 research papers and popular articles (including 182 publications in Ethnobotany alone) in national and international journals and magazines, authored/edited over 52 books and guided 14 students for their Ph.D. degrees of various universities. Dr. Jain delivered invited lectures at various R&D organizations and universities including Harvard University. As a result of his sustained efforts, ethnobotany is now regarded as a thrust area of research by many funding agencies such as, AYUSH, CSIR, DBT, DST, ICFRE, ICMR and MoEnF as a database under natural drug discovery and the herbal drug development programmes. Dr. Jain never 'retired' in real sense. In fact, he handled many projects after his retirement and half of his publications came out only after 1984. He continued to promote ethnobotany throughout his life. His recent ideas about studies on urban ethnobotany have been very timely initiative which will be certainly carried forward by his disciples.

During his lifetime, Dr. Jain received countless prestigious honours and fellowships of national and international acclaim which include fellowship of Indian National Science Academy (INSA), New Delhi (1982); Linnaean Society of London (FLS); Prof. P. Maheshwari Memorial Medal, Indian Botanical Society (IBS), 1982; JW Harshberger Medal, SEB (1992); SB Saksena Memorial Gold Medal from INSA (1996); Dr. H. Santapau Medal from Association of Plant Taxonomy (2002); William Carey Medal from Agri-Horticultural Society of West Bengal (2006) and three Lifetime Achievement Awards from IOE (2013), IBS (2018) and BSI (2020). He was the first Asian to receive the Distinguished Economic Botanists Award, USA in 1999.

To describe about some major qualities of Dr. Jain is his humility in admitting what he did not know, correcting his own views and ever willingness to learn. These are commendable qualities which should be learnt by scholars who are dedicated to their works. He always helped his students to progress in their careers through not only his invaluable suggestions but also providing financial assistance to some of the needy ones. His mentorship qualities have always been admired by his students as he used to inspire students with his personal examples and also encouraged them to read/know something other than

Botany in a day. He bestowed his students with many opportunities leading to the path of success. He used to treat everyone with respect, dignity and fairness even in the absence of the person. His commitment to work never affected his devotion to family and friends and this balancing must be learnt by budding researchers. Dr. Jain, a person with great wisdom, was a source of novel thoughts and inspiration. He had a sharp memory and remembered most of the things and was a living encyclopaedia till he breathed his last. His sad demise is indeed a great loss to botanical fraternity. He left an extraordinary legacy to many and will be remembered for several centuries coming ahead.

Dr. S.K. Jain is survived by his wife Mrs. Satya Jain, three sons Sunil Kumar, Arun Kumar and Yogesh Kumar and six grandchildren.

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