

## Krishna Rajaram Surange (1920–2010)

Pre-partition India during the early part of the 20th century produced some famous botanists who took a world view of their subject in its various avatars. Professionally, they were equally at ease with basic and applied aspects as well as living and extant taxa. Krishna Rajaram Surange was one of those rare persons who combined his academic interests with considerable administrative skills and was also a lover of the arts. He was born on 7 February 1920 in Ujjain, Madhya Pradesh to Rajaram Dhontopant Surange and Sita Bai, as the second child amongst five brothers and sisters. His father was in the service of a princely state and soon moved to Gwalior. Young Surange studied at Victoria College, Gwalior and passed his Intermediate in 1939. At an early age Surange had to take care of his family due to a tragedy. He decided to move to Lucknow to complete his undergraduate studies. While he was a student at Lucknow University, Surange came in contact with Birbal Sahni, then Professor and Head of the Botany Department, and was soon impressed not only by Sahni's personality but also with the subject that he taught. In 1943, Surange passed his MSc in Botany from Lucknow University with a first division. Within a year, he had published a paper in *Nature*<sup>1</sup> and later completed his PhD under the guidance of Sahni in 1947. This work is of great significance even today as it documents the presence of South American plants in the Deccan Intertrappean volcano-sedimentary sequences during a brief interval of the late Cretaceous and early Palaeocene, at a time when India was a northwardly drifting island subcontinent.

In 1946, Surange married Shushila Joshi and shortly afterwards, joined the Cambridge School of Botany under Henry H. Thomas, completing his second PhD in 1949. This work is a seminal contribution to palaeobotany and finds place in many textbooks as it sheds light on rooting and seed reproductive systems in the early evolution of land plants<sup>2</sup>. Due to his keen interest in Palaeozoic plants, on his return to India Surange was one of the pioneers working on the Lower Gondwana genus, *Glossopteris*<sup>3</sup>. His work on this enigmatic taxon has helped add invaluable knowledge. His monograph on *Indian Fossil Pteridophytes* published by the Council of Industrial and Scientific Research (CSIR) is still considered a

monumental piece of work<sup>4</sup>. Together with his student Shaila Chandra, he published what is probably the most complete account of the Indian species of *Glossopteris*<sup>5</sup>.



Surange was first appointed Reader in the fledgling Palaeobotany Institute in 1949 and after the sudden and unexpected demise of Birbal Sahni, he was appointed Assistant Director in the Birbal Sahni Institute of Palaeobotany (BSIP) at Lucknow in 1952. He served the Institute in various capacities, and was the Director from 1959 to 1980. It would be no exaggeration to state that under his leadership BSIP attained great acclaim as one of the few research centres of palaeobotany in the world, mainly because of his own personal initiatives and the band of dedicated research workers that he had nurtured to constantly strive for excellence. He was a Fellow of all the three Indian science academies as well as a Founder Member of the Palaeobotanical Society, which has played a key role in the establishment of the Institute itself. The framework of the Institute that exists today owes its existence to Surange, as does the establishment of a world-class museum and repository where scientists from all over the world can examine material published by the scientists at BSIP.

In 1980, Surange became the Director of Agarkar Research Institute, Pune. He put all his energy and experience into his new assignment for five years and again succeeded in making the Institute an international centre of learning and

research in many scientific disciplines. His own involvement in scientific issues at the international level is attested by the fact that Surange was an active member of the working Group of the International Union of the Geological Science Sub-commission on Gondwana Stratigraphy and visited various centres of palaeobotanical research in the UK, France, Belgium, Germany and Sweden during 1947–1948, and in USA during 1952. His other notable international recognitions are: Member of the Executive Committee of the World Organization of Palaeobotany; Member of the International Committee for Palaeobotanical Nomenclature; Vice-President of the IX International Botanical Congress at Montreal, Canada 1959; Vice-President of the XII International Botanical Congress, Leningrad, 1975; Member of the Executive Committee of the World Organization of Palaeobotany from 1954 to 1960 and Birbal Sahni Medal of the Indian Botanical Society in 1979.

Surange was a friendly person who enjoyed gardening, photography and music. His love for painting ripened at the age of 65 years and he continued with this passion till the very end. He breathed his last on 6 January 2010, a great loss to the scientific community, and his family, friends and colleagues.

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5. Chandra, S. and Surange, K. R., *Revision of the Indian Species of Glossopteris*. Birbal Sahni Institute of Palaeobotany, Lucknow, Monograph No. 2, 1979, pp. 1–301.

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