



DR KRISHNA RAJARAM SURANGE

KRISHNA RAJARAM SURANGE : A BIOGRAPHICAL SKETCH

Krishna Rajaram Surange was born on Maha Sivaratri day, February 7, 1920 at Ujjain. He was the second son of his parents Shri Rajaram Dhondo Pant Surange and Srimati Sitabai Surange. Shri R. D. P. Surange was Commissioner of Customs and Excise first in Ujjain and later in Gwalior where the young K. R. Surange completed the High School Course in 1937 from the Victoria Collegiate High School and two years later passed the Intermediate examination from the Victoria College. K. R. Surange moved to Lucknow for further studies and in 1941 obtained the B.Sc. degree in Botany with Biology and Chemistry from the Lucknow University. He continued his studies in the same department and was awarded the Master's Degree in Botany in 1943.

Fired by the desire to work for a doctorate under his *Guru*, Professor Birbal Sahni, F.R.S., he opened his research 'innings' and produced a maiden thesis on "Morphology of Living and Fossil Cyathaceae" and was awarded the Degree in 1947. A year earlier, K. R. Surange married Kumari Sushila Joshi. The second important exposure to palaeobotanical researches was in 1949 at the Cambridge Botany School with Professor H. Hamshaw Thomas, F.R.S., on the subject: "Morphology of *Bryopteris* and *Stauropteris* which earned him a second Ph.D. in 1949. Little did the young talented K. R. Surange realize then that he had a unique role to play in shaping the destiny of a research institute to be founded by Professor Sahni solely for palaeobotanical studies. He had hardly returned from Cambridge when Professor Sahni appointed him Reader in the newly formed institute in 1949. Tragic events followed and Professor Sahni died in 1949 within a week of laying the foundation stone of the institute of his dream. Dr Surange became Assistant Director of the Birbal Sahni Institute of Palaeobotany in 1952, Officer-in-Charge in 1953 and Director in 1959

and held this position till May, 1980. Dr Surange remained Head of the Palaeozoic Department from 1953 to 1975 and during this period guided eleven students in their Ph.D. programmes.

Dr Surange is widely travelled and has established links for the Institute with many leading palaeobotanical centres abroad. At home Dr Surange has received many honours and awards. Notably, Fellowship of the Indian National Science Academy, Indian Academy of Sciences and the Palaeobotanical Society of India. He was awarded the Birbal Sahni Medal of the Indian Botanical Society for 1979. His international connections may be listed as: Membership of the Executive Committee of the World Organization of Palaeobotany, Membership of the International Committee for Palaeobotanical Nomenclature and Chairmanship of the Working Group in Palaeobotany and Palynology of the IUGS Sub-Commission on Gondwana Stratigraphy. Dr Surange was a Vice-President of the XII International Botanical Congress, Leningrad, 1975. From an Editorial point of view, Dr Surange's main contribution was in the nurturing of "The Palaeobotanist", an international journal published by the Birbal Sahni Institute of Palaeobotany. It was his sustained effort and unstinted sparing of his time that has made this journal occupy a pride of place among contemporary botanical research literature.

Going back to the dim beginnings of the Birbal Sahni Institute it was not an easy task for anyone to pick up courage with both hands and organize an institute if only one puts himself in the position of Dr Surange, at that point of time in 1949. The creator of the idea of a unique institute, solely for the study of the sub-discipline of palaeobotany, suddenly passed away. It was a kind of intellectual vacuum, as it were, in which Dr Surange was called upon to operate, with few seasoned palaeobotanists at hand to guide the destinies of such an

institute. Nothing was formulated, no guidelines drawn; Surange and his small band of palaeobotanists had only heard from the Professor what plans he had in his mind. Undaunted, Dr Surange plunged into the task of bridging the gap by implementing the many academic plans that were verbally passed on, from time to time, by a fertile and mature mind. While his immediate task was not to fight for funds and put the Institute's brick and mortar together, his main concern was to have the research programmes under way. Not that he spared himself in the task of building the Institute; he gave of his best in that direction as well. Nevertheless, I would like to state here that a significant role was played by Srimati Savitri Sahni, wife of the late Professor, in establishing the campus and in unstintingly putting ceaseless efforts in gathering a band of palaeobotanists to aid the scientific projects that lay ahead. Despite the fact that two internationally known palaeobotanists were brought in to administer the institute's research programmes: Professor T. M. Harris, F.R.S. and Professor O. Höeg, it must be said that the bulwork was provided by Dr Surange for three decades by his singular devotion to the cause of palaeobotany. To deny him this place of honour, in carving out a premier position for the Institute among national and international scientific organizations, is to close one's eyes to hard facts about the birth and growth of the Birbal Sahni Institute of Palaeobotany at Lucknow.

I would like to emphasize once again that the turning point in the new born institute was in the 1950s. From a systematic descriptive era, where the emphasis was on Mesozoic and Cenozoic floras, the research programmes absorbed in its fold, problems of palaeopalynology, palynostratigraphy and oil palynology. New fossiliferous areas were explored and biostratigraphical and biopetrological concepts introduced in their studies. Giant strides were made exploiting all aspects of the key genus *Glossopteris*. That species of this genus could be used for age determination and correlation has been put on firm ground by Dr Surange in a recent monograph: "Revision of the Indian Species of *Glossopteris*" by Shaila Chandra and K. R. Surange. This has not only enhanced the prestige of the Institute but has also added to the

scientific stature of this tireless researcher. In short, Dr Surange has remained a fundamental palaeobotanist with faith pinned on the need for morphological and anatomical approaches in classical palaeobotany. Nevertheless, Dr Surange has been wise in not denying the advantages of working in other disciplines such as coal palynology, oil palynology, geochronology and study of the Pre-Cambrians. In recent years Dr Surange has strengthened geological aspects of palaeobotanical studies and, on the applied side, the scientists of the institute have been trying to identify dependable markers in oil prospecting.

I would like to bring here some general considerations in botanical education and research *vis-a-vis* the role of a specialist institute like the Birbal Sahni Institute of Palaeobotany. Indian University departments of higher learning in botany and other botanical research institutes are in the cross roads in curricular management and research programming. Fashion subjects have invaded the field and study of classical botany, starting with anatomy and morphology, have receded into the background. This is happening in other countries too. But in this decade of uncertainty Dr Surange has not wavered. In fact, he has stood steadfast by the classical approach in imparting knowledge in the formative years of a career botanist. This once again emphasizes the fact that creative work is not the monopoly of those that want unlimited growth of sophisticated instruments which in some quarters is considered the hallmark of excellence. Indeed, it is very much in the realm of those who have, with singleness of purpose and devotion, shown that this country's potential resources in the palaeobotanical field can give enough materials for many years of intensive research capable of satisfying the creative interests of generations of botanists. The opening up of this treasure house in the bowels of the earth is enough in a scientist's life time. The Institute and its scientists under Dr K. R. Surange's leadership have, in my view, made their impact by emphasizing the importance of palaeobotany in botanical teaching in the country.

Dr Surange has many qualities that drew him close to friends and scientific colleagues. Essentially he is a modest, self effacing scientist with unquestioned loyalty to the

cause of palaeobotany and the Institute he has served with distinction. I have been privileged to have known him more intimately during the past ten years than many others. I found in him sincerity of purpose, fairness in his judgement of colleagues and impartiality in administration. Most important of all, he responded well in formulating newer research programmes in the institute and freely sought advice from members of scientific programming committees of the institute who met frequently to take stock of ongoing work. In essence, Dr Surange is much more than the usual professional scientist; he combines human qualities with

scientific pragmatism. I can state with full knowledge that he never allowed onerous administrative duties to encroach upon his research time.

Critics there have been, and will be, but for those who have closely followed the great strides the Institute has taken, it would become obvious that, while many scientists gave of their best, over the years, the credit for inculcating motivation, team spirit and clear-cut scientific planning should go in a large measure to the person we are honouring with this Festschrift: Dr K. R. Surange.

T. S. SADASIVAN

A LIST OF PUBLICATIONS OF DR K. R. SURANGE

1948

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1958

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Surange, K. R. Studies in the Glossopteris Flora of India-9. A male fructification bearing monoete spores from the Lower Gondwana of India. *Palaeobotanist*, **6** (1): 47-48.

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1962

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1975

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1976

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1979

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