

PREM NARAIN SRIVASTAVA — AN APPRECIATION

1927-1955

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ON the afternoon of 16 February 1955, Prem Narain Srivastava, a most promising young palaeobotanist on the staff of the Birbal Sahni Institute of Palaeobotany, passed away under tragic circumstances at the premature age of 27. The jeep, in which he was returning after making a valuable collection of Lower Gondwana plants from the coalfields of Bihar and Bengal, suddenly overturned near Handia, a village on the Allahabad-Banaras Road. Whilst the other occupants fortunately escaped unhurt, fate had so ordained that young Srivastava received such severe head injuries that it brought his all too young life to an untimely end. He leaves behind an aged father, his young wife and a baby son.

Born at Lucknow on 10 October 1927, Prem Narain was the only son of Mr. Shyama Charan Srivastava, a retired Deputy Controller in the Northern Railway. It was here that practically the whole of his short span of life was spent. He obtained his early education at the Boys' Anglo-Bengali College and the Kanya Kubja College, Lucknow. In July 1943 he entered the University of Lucknow joining the Botany, Geology and Zoology classes. He distinguished himself by standing first in B.Sc. (Hons.). He then joined the postgraduate classes in Geology and secured a third position in the M.Sc. examination in the year 1949. Immediately after leaving the University he laboured hard for some time in preparing for the examination of the Indian Administrative Service but later abandoned it, fascinated as he was by the idea of a research career.

While at the University, the stimulating lectures of his great teacher, Professor Birbal Sahni, no doubt left a deep impression on his young mind, which was to grow later into a burning desire for original research in Palaeobotany. On joining the Birbal Sahni Institute of Palaeobotany in July 1949 as an Uttar Pradesh Scientific Research Committee Scholar, young Srivastava began his researches on the correlation of coal seams by means

of microfossils under the able guidance of Professor K. R. Surange. Besides this work he also took up the cuticular studies of the *Glossopteris* Flora of India as his Ph.D. thesis problem. It was only a month prior to the tragic day when he brought me, for my blessing, the completed extremely important piece of investigation before submitting it to the Lucknow University. As I turned over the pages, it filled me with pride to see the excellent work which he had produced, and when I congratulated him on his achievement, he in his usual shy and gentle manner expressed his happiness that his work had given me joy.

His first paper published jointly with Pratap Singh entitled "कोयला एवं नमक की खान की आयु और वनिस्पति पुरातत्व" came out in the October 1950 issue of the journal *Shiksha*. For two years (1950-52) he worked in the Institute as a Junior Research Assistant in the scheme on "The Measurement of Geological Time", sponsored by the Council of Scientific & Industrial Research. His important contribution during this period, together with Drs. R. V. Sitholey and C. P. Varma, was mainly on the Vindhyan formations. Their paper "Microfossils and the determination of the age of Sedimentary rocks" appeared in 1952 (*J. sci. industr. Res.*, Vol. 11A, No. 5, pp. 209-211). This short paper was followed by a larger and more detailed contribution, "Microfossils from the Upper Vindhyan, with a discussion on the age of the Vindhyan in the light of plant-fossil discoveries", published in the *Proceedings of the National Institute of Sciences of India* (1953, Vol. 19, No. 2, pp. 195-202). During the later part of the same year they published another paper entitled "Occurrence of vascular plants in the Cambrian rocks of India" (*J. sci. industr. Res.*, 1953, Vol. 12B, No. 12, pp. 645-647).

In 1952 the Council of Scientific & Industrial Research sponsored a new scheme, "Palaeobotanical investigations of Indian

Coals", at the Birbal Sahni Institute of Palaeobotany. On account of his ability as an extremely careful and methodical worker coupled with his experience that he had gained, Srivastava was appointed in it as Senior Research Assistant. Here, also, he distinguished himself and was subsequently taken on the staff of the Institute as a lecturer. Microbiological analysis of coal and their use in the correlation of coal seams has assumed great importance during the last few decades. Considerable work on coal palaeobotany and its stratigraphical value has been done in other parts of the world, while in India only a modest beginning has been made. Srivastava also was one of the few pioneers working on this branch of science in India. His contributions, together with Professor K. R. Surange and Prem Singh, are published in the form of two papers: (1) "Microfossil analysis of some Lower Gondwana coal seams of West Bokaro, Bihar", published in 1953 (*Bull. Nat. Inst. Sci. Ind.*, No. 2, pp. 111-127), and (2) "Megaspores from the Bokaro Coalfield (Lower Gondwanas) of Bihar", published in *The Palaeobotanist* (1953, Vol. 2, pp. 9-17). Another important paper entitled "On some Lower Gondwana megaspores and seeds from Mangardaha coal, West Bokaro, Bihar" has recently been published in *The Palaeobotanist* (1954, Vol. 3).

Plant impressions of the *Glossopteris* Flora of India and their cuticular studies claimed a major portion of Srivastava's interest, and a part of the detailed work done by him has recently been published. In a paper, "Studies in the *Glossopteris* flora of India — 1. Some new fossil plants from the Lower

Gondwanas of the Raniganj coalfield", published in *The Palaeobotanist* (1954, Vol. 3), he described a new species of *Actinopteris*; one species of *Sphenopteris*; a fertile frond of *Pecopteris*; a specimen of ?*Ctenis* and a cone probably belonging to *Schizoneura gondwanensis*. Previously he had recorded the presence of the Equisetalean cone from the Raniganj coalfields of India in a short note published in the *Current Science*, 1952, April, Vol. 21, p. 98. Since his joining the Institute Srivastava worked throughout under Professor K. R. Surange and to him he owes much of his research achievements. Being a sincere and tireless research worker, and in view of the brilliant investigations he was carrying out, young Srivastava would have developed into a palaeobotanist of a very high calibre. No wonder he achieved so much in such a short time.

Besides his scientific abilities Srivastava was a charming and lovable personality. His unassuming manners and affable nature won him the affection and respect of all those who came in contact with him. He was a person of few words, rather shy of temperament but extremely sincere in his purpose. His was a religious frame of mind, always so God-fearing and gentle. Above all, what impressed me most was his deep understanding of human nature. Remembrance of the high regard and respectful devotion in which he held me will always be carried by me in deep gratefulness.

His untimely death robs the palaeobotanical world, particularly the Birbal Sahni Institute of Palaeobotany, of one of its most promising and ardent workers, leaving behind a gap hard to fill.