

(1897-1973)

Gunnar Erdtman is a name almost synonymous with palynology. In fact these two names are so intimately related that the conception of one without the other is hardly conceivable. On 18 February 1973 the palynological world lost in Gunnar Erdtman one of its most distinguished and outstanding proponents.

Prof. Erdtman was born in Hjorted, a small village in the district of Smaaland, Sweden, on 28 November 1897. Interest in the study of pollen grains and spores was induced in him by the great masters like Gustaf Lagerheim and Lennart von Post. The principles of pollen analysis had a profound influence on young Erdtman who soon began a life-long specialization in palynology, a science with future potentialities, unknown at that time. His first paper in pollen analysis appeared in 1920 and in 1921 he obtained the degree of Doctor of Philosophy from the University of Stockholm based on a thesis entitled "Pollen analytische Untersuchungen von Torfmooren und marinen Sedimenten in Südwest-Schweden". In the following years he initiated research on this subject in Germany, Belgium, Great Britain, Canada and other countries. His approach stimulated British workers, particularly at Cambridge, to enter this promising and fruitful area of research.

For some years, as was usual in those days for a biologist working in a specialized field, Erdtman received little appreciation and encouragement. He was a high school teacher for many years and perhaps that was a boon, because he could devote his spare time in the studies of pollen statistics and pollen morphology. In 1933 he with his brother Holger Erdtman proposed and developed a new chemical technique, the acetolysis method, which is now widely used all over the world. He soon realised the potentiality of using pollen in plant taxonomy and developed interest in this line of Fritzsche, Fischer, von Mohl and Wodehouse. This led him on to fundamental studies of pollen morphology, structure of the pollen wall surface and stratification, and to a global survey to discover the astonishing diversity of pollen and its use in taxonomical affinity and classification, as well as matters relating to stratigraphic geology, palaeoecology vegetational history, archaeology, honey analysis, criminology and lastly to the ever mysterious world of ultramicrotomy and electron microscopy. He coined many new terms, it was almost a hobby for him to deal with linguistic matters while coining terms. According to him good terms aided in precise scientific description of spores and pollen grains.

Erdtman's life-long devotion to palynology resulted in the publication of several indispensable volumes like "Introduction to pollen analysis" (1943), "Pollen morphology and plant taxonomy-Angiosperms" (1952), which constituted the first comprehensive work in a series of altogether four volume (1957-71), a popular Swedish edition "Introduktion til palynologin", "Hand book of Palynology" (1969), and numerous scientific papers. The international journal of palynology, "Grana palynologica", was founded by Erdtman in 1954 and continued to be published under his editorship till 1970. One of his greatest achievements was the establishment of the "Palynological Laboratory" in Stöckholm-Solna in 1948 through the support of the Swedish Natural Science Research Council. Since the foundation of the Laboratory he was the Director until 1969. His name and fame attracted a number of well-known visiting scientists from all over

the world who spent shorter and longer periods in the laboratory working with him. In 1970 he initiated "World Pollen Flora" where detailed descriptions of pollen morphology of different plant families appear one by one. He had a basic concept of bringing out a series of volumes in the 'Flora' project in the same line as Engler's *Die natürlichen Pflanzen-familien*".

Prof. Erdtman was an exceedingly genial personality, a widely read, widely travelled man, tall and handsome, always with fine humour. He was a good artist and a good musician. During field excursions, while taking rest, he used to play flute, which gave us impetus to start exploration afresh.

In 1954 he got the status of Professor from the University of Stockholm and in 1964 the University of Stockholm and in 1964 the University of Munich conferred upon him the degree of D.Sc. (h. c.). The institution of "Gunnar Erdtman medal for palynology" by the Palynological Society of India is a sign of appreciation towards him by Indian Palynologists. In 1972 he was elected as an honorary Corresponding Member of the Botanical Society of America for his pioneering works in palynology. Many more national and international honours were bestowed upon him on many other occasions.

He visited India in 1956 as a visiting scientist at the Birbal Sahni Institute of Palaeobotany, Lucknow. Late Prof. Birbal Sahni was his personal friend, for that and for many other reasons he had a special feeling for India.

Gunnar Erdtman, perhaps more than any body else, set the course and development of modern palynology.

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