## Obituary

## Dr Jaswant Singh Antal (June 1, 1947 - February 7, 1999)



Cheering smile came to an abrupt end on February 07, 1999 when Dr Jaswant Singh Antal, Scientist E and Joint Editor "*The Palaeobotanist*" met a fatal accident. He was driving back home on a weekend with his family only to become a victim of a head on collision. Antals made a sudden exit.

Born in the capital of undivided India on 01.06.1947, Dr Antal had his early education at Meerut and Muzaffarnagar, western Uttar Pradesh and completed his B.Sc. & M.Sc. from the Meerut University (presently known as Choudhury Charan Singh University). He began his career as a Junior Scientific Assistant in the Publications Section, Defence Scientific Information and Documentation Centre, Ministry of Defence, Delhi during July 1973. He joined the Birbal Sahni Institute of Palaeobotany in the year 1975 and successfully handled Publication Unit till he breathed his last.

The work pressure to keep time schedule of the publication activities was enough to distract any one from the mundane activities. Dr Antal succeeded in unifying his might to ease the work load and kept publication activities on run. His untiring efforts to timely bring out the Journal The Palaeobotanist issues, Annual Report, News Letter, Brochure, Symposia proceedings and other official documents were unparallel. He kept himself aware of state of the art Publication novelties. He was quick to adopt to advancement in printing technology, quality changes and efficiently handled traditional treddle printing to offset printing. He worked with verve and his meticulous approach always paid dividends by meeting time schedule. He was a careful proof reader, an intelligent technical editor and above all a good human being. During the latter part of his career he actively contributed to Tertiary palaeobotany, particularly Floristics of Siwalik Hills. He was awarded Ph.D. Degree in 1991. He was elected Fellow of The Palaeobotanical Society, Lucknow in the year 1997. His traverses in the foothills of Himalayas probably gave him a new insight and initiated a spiritual outlook. His penchant for gardening, social work, humour and zest for life was contagious. Above all publication work was a penance to him. The void created in his sudden death is difficult to be filled. Survived by two daughters, a son, Antals are remembered as fine individuals.

> Editors *The Palaeobotanist*

## Professor D.D. Nautiyal (July 13, 1934 - February 1, 1999)



Professor D.D. Nautiyal breathed his last on Monday, February 1, 1999. As was his usual practice, he worked till late on the previous night and reached home quite late. On Monday morning he got up early, as usual, but soon complained of breathing discomfort and pain. Even though he was provided immediate medical attention, it was too late. In death as in life, Professor Nautiyal perhaps did not want to cause inconvenience to anyone and therefore, departed peacefully.

I first came into contact with Professor Nautiyal when I was a student of B.Sc. at Allahabad University and he a recently appointed lecturer. Later he taught me in M.Sc. and when I joined research with Professor D.D. Pant, he, being Professor Pant's first student was always there to help and advice us.

After completing his B.Sc. from DAV College, Dehradun, Professor Nautiyal joined Allahabad University for the M.Sc. and D. Phil. Degrees which he received in 1957 and 1961 respectively. He joined the staff of Allahabad University as lecturer in Botany in 1961 and rose to the position of Professor and Head of the Department in 1988. He retired in 1994 but continued his interest in research and was Principal Investigator of several projects. During his long years of painstaking research he published several papers in national and international refereed journals and made significant contributions to morphology, anatomy and palaeobotany. His papers on cuticular structure of Cycads, lower Gondwana fossils and pollination biology are now classics and are extensively quoted. His work has helped develop new concepts. He has also described several new genera and species and a possible new group of plants - The Buriadiales. He supervised students for their M.Sc. and D. Phil. Theses and eleven students obtained D. Phil. Degree under his guidance. Professor Nautiyal was invited and participated in several National and International Conferences and presented his work which was always well received. He also organized national and international seminars in the Botany Department of Allahabad University during his tenure as Head. Professor Nautiyal was a fellow of several national and international learned Societies and member of several Advisory Committees.

More than his scientific contributions Professor Nautiyal would be missed for his human qualities of sincerity, devotion, helpfulness and generosity. He was one of those rare persons who would see only the positive qualities in his acquaintances and friends but never their faults or shortcomings. He was never heard criticizing or finding fault in others.

Professor Nautiyal was soft spoken and shy and was alway helpful to anyone who approached him. He was also very hospitable and it was not possible for any of his friends to visit Allahabad and not be invited to his place for a most sumptuous meal which he sometimes cooked himself. He was equally helpful to his students. There was no one who approached him and went back without being helped. He was highly respected by anyone who came in contact with him. In his death we have not only lost a good teacher and researcher but also a very fine human being. Personally, I have lost an elder brother, a senior friend, a well wisher and a human being I was privileged to know.

8<sup>th</sup> June, 1999

Parveen Farooqui Head, Human Resource Department of Science & Technology New Delhi 110 016, INDIA

There are people who are well known for their knowledge and contributions and also those who are acknowledged as being fine human beings. Professor Devendra Datt Nautiyal was one of those rare people who will be remembered as both. He will be known not only for his original research contributions to classical palaeobotany and its propagation through its teaching and management but also as a gentleman whose quiet but warm nature endeared him to one and all.

Professor Nautiyal passed away consequent to a massive heart attack on the morning of February 1 at about 4 a.m. A doctor was called and he was rushed to the hospital but in vain. Professor Nautiyal had been in Lucknow in the previous week and, as if with some pre-monition, this time made special efforts to go and meet people, some of whom were his friends from the university days, whom he had not seen for quite some time.

He was born in Girgaon (Garhwal, U.P.) on July 13, 1934 and had his early education in Garhwal (U.P.). For higher education, he joined Allahabad University. Afterwards he took up research there on CSIR fellowship, obtained D.Phil in 1961 and joined the faculty at the University to later head the Botany Department till superannuating in 1994.

He belonged to the famous Professor Pant's school at Allahabad and was acknowledged as an authority in classical palaeobotany but had many a contribution to the botany of the living plants also. He had been a permanent associate of Professor Pant. His early work with Professor Pant on the cuticular structures of detached seeds and sporangia of the Glossopteris flora from the fossiliferous shales in Raniganj Coalfield is widely quoted. During the sixties and also later, his work was focused on Gondwana fossils. The success in obtaining fair sized fragments of cuticles from the leaf-sheaths and stems from *Raniganjia (Actinopteris) bengalensis* (Feistmantel) was a result of availability of a large number of samples to experiment on and evolving appropriate experimental procedures. It led to merger of several genera into one (*Raniganjia bengalensis*) as they were identical in details and the differences described were actually due to the difference in compression i.e. horizontal or oblique. His work also resulted in detailed information on the structure of leaves particularly leaf-attached or associated fructification such as on *Buriadia heterophylla* as well as shoot and cone of *Lebachia piniformis*. This provided the much required basic information forming an important step towards what ultimately led to the final word on a debate and established that Zimina's leaves are not true representative of *Glossopteris*. Based on the basis of detailed study of cones and solitary seeds among leaves, establishing the difference between the female reproductive parts of *Walchia* as well as other northern conifers and the *Walchia*-like genera from Gondwana land was another important contribution. All this work, done with Professor Pant, places him on a high pedestal particularly in classical palaeobotany. He was also well known for his contributions to palynology, other branches of palaeobotany and also botany.

He has over 100 contributions to prestigious journals and conferences and guided 15 doctoral candidates. He was a fellow of the National Academy of Sciences and on the Research Advisory Council of the Birbal Sahni Institute of Palaeobotany (BSIP). A familiar figure at BSIP as an expert member of so many committees over decades, he shared a warm rapport with the BSIP people.

A gentleman to the core, he is fondly remembered by innumerable people many of whom have an anecdote or two to tell evincing his truly humane and gentlemanly nature. Having been at a university and also associated with a number of other universities and organisations like National Academy of Sciences, Palaeobotanical Society and Society of Indian Plant Taxonomy during his distinguished career, he interacted with and impressed innumerable students, teachers and scientists. As Treasurer and later as *Pradhan Mantri* of the '*Vigyan Parishad*', he also contributed to science popularisation.

He was very affectionate by nature. Once when he came to Lucknow, he took me to task as I had been to Allahabad but being on a very short visit had not met him. So he affectionately chided me 'Don't think I don't get to know. You came to Allahabad but did not visit us'. Later, (he was not officially much connected with the institute now any more), I made it a point to visit them whenever I went to Allahabad and found him a very warm and hospitable person.

An authority on palaeobotany and botany, with his extremely simple ways, affable nature and great concern for his students, he was an unforgettable person. He is survived by his wife, a daughter and a son in his immediate family. We join them and his two brothers in this moment of grief and pray may his soul rest in peace.

1<sup>st</sup> March, 1999

C.M. Nautiyal Birbal Sahni Institute of Palaeobotany 53 University Road Lucknow - 226 007 INDIA OBITUARY

Dr P.D. Dogra (September 14, 1931 - February 23, 1999)



Dr Prem Dutt Dogra was born on 14<sup>th</sup> September 1931 and got his early education at Simla in a Himalayan State - Himachal Pradesh. He obtained his B.Sc. (Hons. Sch.), M.Sc. (Honours), and Ph.D. in Botany in 1954, 1956 and 1962, respectively from Punjab University. Dr Dogra also had a distinct Honour of Skog. Licentiat Forest Genetics (Ph.D.) and Skog. Dr (Doctor of Forestry, Forest Genetics) equivalent to D.Sc. in 1967 from Institute of Forest Genetics, Royal College of Forestry, Stockholm, Sweden.

Dr Dogra started his career in 1961 as Lecturer in Botany at Punjab University, Chandigarh. He joined National Botanical Research Institute (CSIR), Lucknow in 1962 and retired as Deputy-Director and Head of Biomass Division in 1991. He extensively worked on Gymnosperms, particularly on morphology and reproductive biology of conifers and its applications in forestry and forest genetics. He has studied the distribution, natural variation, species diversity, wild gene resources, reproductive biology and evolutionary trends in embryology of 11 genera and 24 species of conifers of India. Seven broad provenances of *Pinus wallichiana* have been described by him from the Himalayas and reproductive barriers are shown to be effective between populations. In a collaborative work (with H.B. Hriebel) provenance trial of 25 provenances of *P. wallichiana* showed that 16 provenances from Kashmir had a high level of winter hardiness. Pollen sources from monsoon zone of western Himalayas produced vigorous hybrids between *P. wallichiana* and *P. strobus*. He has studied 80 outstanding broad-leaved forest tree species for gene resources.

Dr Dogra was elected Fellow of National Academy of Sciences, New Delhi 1984-85 on the basis of work done on reproductive biology and natural variability in Indian soft woods. He had especial interest on conifers especially their reproductive biology, breeding methodology and variation and evolution. Dr Dogra was awarded Gold Ring of Royal College of Forestry Stockholm for work on application of conifer embryology to seed testing and tree breeding with x-ray radiography. He was member of FAO panel of experts on forest gene resources, working party of IUFRO on seed problems, Royal College of Forestry, Sweden, International Committee on breeding of white pines of IUFRO Wooster, Ohio, USA and member of various committees on forestry research of Department of Environment, Planning Commission on Scientific Advisory Committee to the Cabinet, Govt. of India, New Delhi.

Dr Dogra had special affinity towards music and loved nature particularly in forests and wilderness. With all these scientific, literary and art pleasures his smile rested on 23<sup>rd</sup> February, 1999 at Calcutta.

19th May, 1999

Dr B.P. Singh Emeritus Scientist National Botanical Research Institute Lucknow 226 002 INDIA

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