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FIRST INDIAN GEOPHYTOLOGICAL CONFERENCE

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THE Paleobotanical Society, organised the First Indian Geophytological Conference in Lucknow from 21st to 24th December, 1975. The complexion of the Conference was the combination of Geological Sciences, Biological Sciences (including Paleobiological Sciences) and Oil Sciences. Although the Conference had the title Geophytological Conference, it was more than paleobotanical in its deliberations. The Conference was held in 8 sessions.

Two sessions were devoted to plant morphology and taxonomy where twentythree papers were presented highlighting the importance of the pollen morphological studies of the tri-colporate, the ontogony of stomata of some members of Apocynaceae (Trivedi and Upadyaya), the oil-bodies in South Indian liverwort (Udar and Nath) and the genetic engineering for certain ornamentals (Raghuvanshi and others).

Two sessions were devoted to Paleobotany and Phylogeny where twenty papers were presented on the following subjects: (1) A new genus from the Deccan Intertrappean beds of Madhya Pradesh (B. S. Trivedi and others), (2) A new genus and species based on the study of wood material (K. S. Patil), (3) The new taxa, of *Chara*, *Agaricus* and *Nitellites*, from the Intertrappean beds of different regions (T. V. Sivarudrappa, T. K. Trivedi, S. B. Batia and A. R. Kulkarni), (4) New species *Ottocaria*, *Palmoxylon* and *Ptilophyllum* (Manju Banerjee, S. S. Berlinge, S. A. Paradkar, Sukdev and Zeba Banu). The papers dealing with fossil algae were presented by A. K. Pal and others on the assemblage of undoubted Permian age from Gathwal Himalaya. Only one paper dealing with the Pollen was presented by S. K. Bakshi and Urmila Deb. This paper covered the Cenozoic sequence of Assam and Bengal regions and the morphological evolutionary trends of two genera.

One session was devoted to stratigraphy at which thirteen papers were presented. The papers covered stratigraphic aspects of Algal Stromatolites of Vindhya of Western Rajasthan (G. Barman and K. K. Varma), spore-pollen assemblage from Iran and Kobra Coal Fields (D. C. Bharadwaj and others), Paleo-stratigraphic zonation of the coal bearing Horizon of Godavari (A. A. Mohiz and N. Ramana Rao), Palino-stratigraphy of the Mikir Formation (S. C. D. Sah and others), Paleontological demarcation of the Subathu and Dagshai sediments of Simla Hills (H. P. Singh and others) and Geologic range of Fossil Algae from the Mesozoic rocks of Trichinopoly District of Tamil Nadu, South India (S. Sambe Gowda). This paper dealt with the stratigraphic range of leading genera and also the genus *Corallina*. The fossil algae in this region could be used for paleoecological interpretations. The paper by M. N. Vishwanathaiah and others on the stratigraphic position of Badami group dealt with the acritarchs groupable into three distinct assemblages ranging in age from Ordovician to Silurian. The paper by D. C. Bharadwaj and A. Dwivedi dealt with the statistical approach to the circumscription of species in spore disperse.

The Conference was also concerned with the plant ecology and geography. These papers were concerned with geographical and ecological aspects of the living as well as the fossil plants. Paper by Ramanujam was concerned with the palynological approach in regard to the study of palaeoecology and palaeogeography of the plant kingdom represented by Warkalli deposits of Kerala. Paper by Thothathri dealt with phytogeographic studies of Andaman and Nicobar regions. Paper by Patnaik and Sharma concerned itself with preliminary studies of economically important plants of the Ganjam District in Orissa State.

Session VIII was devoted to sedimentology and biopetrology with eight papers. One paper

by Navale dealt with the Biopetrology of Kargali seam of the East Bokaro Coal Field in Bihar, the rest of the papers were concerned with the sedimentological studies of rocks of some regions in the Central and Northern parts of India. Paper by Basumallick and Sharma was concerned with the discovery of Glauconites from Eocene carbonates of Assam region. The paper by Arabindha Ghosh on the overgrowth in Albite and K-Feldspar, as found in the fresh-water Lameta beds, was of interest because of his reasoning that the marine conditions need not necessarily be ideal for Na⁺ and K⁺ metasomatism. A paper by A. R. Bhattacharya was concerned with Zircon and Tourmaline, from the Precambrian arenaceous rock units of distinct Lithostratigraphic units. He has shown that the shape and size of these two minerals can be used as distinct criteria for recognizing the differences in apparently similar-looking rock units.

Of the two symposia, one was concerned with the soil plant relationship and the other with the climatic vicissitudes in India during the Gondwana

times. In the former symposium there were as many as twentyfive papers, all dealing with the mineralogical influence on the growth of plants and their distribution pattern. The latter symposium had eight papers dealing with the climatic vicissitudes of the Gondwana Era in India. The discovery of lowest Gondwana beds, equivalents of Talchirs, consisting of unsorted boulders and khakhi shales in the Chingelpet District of Tamil Nadu, discovered by the workers of G.S.I. was not, unfortunately, a part of the review presented at the session by one of the workers of the G.S.I.

The Conference was inaugurated by Vice-Chancellor Kaul who dealt with the palaeogeographic distribution of plants of the South Asian and Australasian regions. The Presidential address by Prof. R. C. Mishra dealt with the application of geobiological techniques in the exploration for economically important mineral deposits. The author of this report hopes that the first geophytological conference would be a happy augury for many more in the years to come.

INTERNATIONAL SYMPOSIUM ON 'USE OF NON-HUMAN PRIMATES IN BIOMEDICAL RESEARCH'

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RECOGNIZING the importance of non-human primates in biomedical research to the overall welfare of mankind, the Indian National Science Academy sponsored an international symposium on the 'Use of non-human primates in biomedical research'. The objectives of the symposium were : (1) to evolve an international convention of non-human primates to avoid depletion of wild populations by the growing needs of research, (2) to direct efforts towards formulation of scientifically sound programmes of management and conservation of non-human primates as a valuable natural resource.

The symposium was held in New Delhi from November 3-8, 1975 and was attended by 120 leading biomedical scientists from 13 countries, representatives from the World Health Organization and from all research institutions and agencies in India. Forty-two papers were presented, dealing

with the use of non-human primates in areas of biomedical research directly relevant to human health and welfare, namely, reproductive biology, contraceptive technology, nutrition, neurobiology, surgery, infectious diseases, immunology, psychopharmacology, toxicology, pharmacology and the study of non-human primates in the wild and their conservations.

The discussions focussed attention on issues of vital importance, namely :

- (a) relevance of using non-human primate models in biomedical research and other biomedical endeavours.
- (b) Consideration of steps to be taken to conserve non-human primate populations which represent a valuable natural resource.
- (c) specific recommendations for judicious and restrained use of non-human primates in biomedical research.