

ROLE OF FOREST OFFICERS IN BOTANICAL EXPLORATION IN INDIA

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Forest Officers have made definite and laudable contributions in plant surveys. The Botany of Bihar and Orissa by H. H. Haines stands out as one of the outstanding Regional Floras in India. It is unique for its subtle and minute field observations in the field. The exhaustive Flora of Madras by Gamble is still irreplaceable. The latest contribution is by Dr. H. F. Mooney in the shape of Flora of Bailadilla hill and Supplement to Haines' Botany of Bihar and Orissa and Flora of Assam by U. N. Kanjilal and others. The Grasses of India and Pakistan by Dr. N. L. Bor will remain useful for many decades to come.

The Forest Research Institute, Dehra Dun, is maintaining a Herbarium from where much outstanding floristic work has been accomplished. One of the prodigious scientists of this Herbarium, Prof. M. B. Raizada is still active publishing Floras etc. after several years of official retirement.

For the last thirty years the contributions of Forest Officers have not been much in comparison with a similar span of time in the past. One of the reasons for this is that the work-load in the Forest Department has tremendously increased both in its volume and variety. But more than this is the present

trend in all departments to work independent of others.

The Botanical Survey of India has expanded several folds and their officers have been provided with facilities for field work. The number of botanical surveyors in the country is not increasing. Even in the Colleges and Universities the work on such exploration is comparatively less. The Botanical Survey of India has a responsibility to enthuse and encourage floristic work in the country. A thorough field study is only possible by co-operation of establishments like Universities, Colleges and Forest Departments.

The role of the Forest Department is also not clear to many. The Forest Officers may not be entirely with a background in Botany. They can be degree-holders of any of the natural sciences. The work in the department does not involve much of pure Botany. As long as a Forest Officer knows names of 25 economic trees, shrubs and herbs he can be proud of the botanical knowledge. A Forest Officer either harvests the produce for sale or plants trees for increasing production. In both the processes only economic species which are few in number are involved. The rest of the vegetation is 'rank growth' for him. However, there are some who are inquisitive to know as to what grows around

them and they take systematic botany as a hobby. If they get help and encouragement they continue to pursue it, but generally they leave it at one stage or other even after working for many years. I have been collecting plants for the last 30 years and trying to publish as much as my time permits. About 13 years ago I had met the then Director of Botanical Survey with concrete proposals for writing a Flora for Madhya Pradesh. However, it never materialised.

Thus in the analysis of the problem it is clear that a field worker is to be given every incentive in the exploration of plants, as without creating a voluntary force of field workers it will never be possible to have detailed survey of the vegetation in the country. I had advocated creation of local herbaria for public use in order to watch for intruding exotics like *Parthenium*.

In many areas the exploration programmes of the Botanical Survey of India could be done in consultation with the Forest Officers who have an intimate knowledge of the forests. Similarly BSI officers must visit Colleges and Universities and help them in the preparation of local Herbaria and flora.

The Forest Departments have Forester's

Training Schools and many of them have herbaria and curators. But these are not in good shape. They can be of much help in plant surveys. Actually a detailed scheme for development of such herbaria may be worked out. The State Government will always be happy if there is good response from the Botanical Survey which may also think of giving other helps like subsidies for equipment and Fellowship to good workers.

As far as I am concerned personally, I have been doing collection for the last thirty years, of plants from all types of localities from nearly all over the State of Madhya Pradesh. I had started a project to write the Flora of Madhya Pradesh but soon realising its magnitude started taking up the work by families. My work on Grasses, Ferns, Leguminosae and Ornamental trees is already published. Work on *Cyperaceae*, *Commelinaceae* and *Orchidaceae* has been published under joint authorship with Dr. J. K. Maheshwari of National Botanical Research Institute, Lucknow.

Through this seminar I shall still pursue the Botanical Survey of India to accept my proposals and take up immediately the work in compiling the Flora of Madhya Pradesh.