

ture of types, published 32 years later³ in 1968 hogs the limelight, probably because the original edition of 1936 is not easily available for consultation.

Among the climatic factors determining the tropical dry evergreen-type, Champion has missed a critical factor, viz. the regime, i.e., the season of occurrence of rainfall. Along the Coromandel and Circar coastal areas of Tamil Nadu, Andhra Pradesh and Orissa where this forest type prevails, the main rainy season lasts from October to December. These rains are brought by depressions and cyclones originating in the Bay of Bengal (popularly termed northeast or retreating monsoon). This pattern of rainfall results in a dissymmetry, hence dissymmetric regime. As opposed to this, over a major part of the Peninsula, rains occur from June to September/October, maintaining a symmetric pattern: this is termed as typical tropical regime under which deciduous forest is the rule, whereas the dissymmetric regime corresponds to the dry evergreen forest. A transect from the east coast (Puducherry–Marakkanam) towards the west coast passing through Chengam, Hosur, Bangalore, Chikkanahalli, Mysore, Hunsur to Murkal reveals the gradual changes from the dissymmetric-type (Puducherry) to the typical tropical-type (Murkal), with corresponding changes in the percentages of species having affinity to the dry evergreen-type or the deciduous forest⁴. This perhaps establishes the individuality of the dry evergreen-type rather than its derivation from the deciduous-type, the secondary stages of which are floristically distinct from the

dry evergreen-type. Palaeo–Palynological investigations in the plains of Coromandel could probably throw further light on this issue.

At this juncture, a word regarding the classification used by Gadgil and Meher-Homji⁵ would not be out of context. The only alternative to Champion's^{2,3} is the classification formulated by Gausson *et al.*⁶ for the vegetation maps of the Peninsula. Their system lays stress on the notion of 'plesioclimax', i.e. what could be the potential natural vegetation of an area without the interference of man for a century, under given climatic (amount of rainfall, regime, length of dry season, mean temperature of the coldest month) and soil conditions. Currently, 95% of the potential area under the dry evergreen-type is under cultivation, 4.5% under thickets (scrub-jungles) and barely 0.5% under scrub-woodlands⁷. This 5% group has been placed under *Albizia amara* plesioclimax community with several sub-communities and transitions⁸.

This concept of plesioclimax provides a more practical solution than the theoretical notion of climax vegetation. The latter changes with climate, and the pluvial (rainier) phases of the Quaternary may not provide a clue to the original climax vegetation of this millennium in which Ranjit Daniels *et al.*¹ are interested. For practical purpose, the plesioclimax is defined as the most developed formation, physiognomically and floristically, encountered in an ecological region.

The French Institute–ICAR maps of vegetation and environmental conditions^{6,9}

and the approach followed by Gadgil and Meher-Homji⁵ may provide guidelines for delineating the ecological zones on the lines of agroclimatic regions.

1. Ranjit Daniels, Ramachandran, V. S., Venkatesan, J., Ramakantha, V. and Puyravaud, J. P., *Curr. Sci.*, 2007, **92**, 586–588.
2. Champion, H. G., *Indian For. Rec.*, 1936, **1**, 1–236.
3. Champion, H. G. and Seth, S. K., *A Revised Survey of the Forest Types of India*, Manager, Government of India Publications, New Delhi, 1968.
4. Meher-Homji, V. M., *Phytocoenologia*, 1977, **4**, 206–217.
5. Gadgil, M. and Meher-Homji, V. M., *Proc. Indian Acad. Sci. (Anim. Sci./Plant Sci.)*, *Suppl.*, 1986, 165–180.
6. Gausson, H., Legris, P., Viart, M. and Meher-Homji, V. M., International map of vegetation and environmental conditions: Sheet Cape Comorin, ICAR, New Delhi and Inst. Fr. Pondichery Tr. Sect. Sci. Tech. 1961, Hors serie No. 1.
7. Meher-Homji, V. M., *Bioclimatology and Plant Geography of Peninsular India*, Scientific Publishers (India), Jodhpur, 2001.
8. Meher-Homji, V. M., *Phytocoenologia*, 1973, **1**, 114–129.
9. Pascal, J. P., Shyam Sunder, S. and Meher-Homji, V. M., Forest map of South India: Sheet Shimoga, Forest Department of Karnataka and French Institute, Puducherry, 1982.

V. M. MEHER-HOMJI

20 D, Sagar Sangeet,
58, Colaba Road,
Mumbai 400 005, India