International Journal of Botany and Research (IJBR)
ISSN(P): 2277-4815; ISSN(E): 2319-4456
Vol. 4, Issue 2, Apr 2014, 19-32

WOOD ANATOMY OF SOME *FICUS* SPECIES OF MIZORAM, NE INDIA WITH REFERENCE TO THEIR IDENTIFICATION

M. SHARMA, C. L. SHARMA, M. LALMALSAWMA, M. K. SINGH & B. R. GOGOI

Department of Forestry, Wood Science and Forest Products Laboratory, NERIST, Arunachal Pradesh, India

ABSTRACT

The present investigation was made on 12 *Ficus* species to evaluate similarities and dissimilarities among species on the basis of anatomical features. The selected *Ficus* species had some similar features like diffuse porous wood, vessels solitary or in radial multiple of 2-3, simple perforation plate, intervessel pits alternate, vessel ray pits similar to intervessel pits in size and shape, banded parenchyma and heterocellular rays. While, some dissimilar characters like presence of both homocellular and heterocellular rays in *F. racemosa* and *F. rigida*, latex ducts in *F. geniculata*, *F. racemosa* and *F. rigida*, axial parenchyma lozenge aliform in *F. hispida* were observed. Rhomboidal crystals were absent in *F. benghalensis*, *F. geniculata*, *F. hispida* and *F. racemosa*. In addition to qualitative anatomical features, quantitative anatomical like fibre length, vessel length fibre diameter, fibre wall thickness, ray height and ray width showed significant differences among species. Fibre length was significantly and positively correlated to fibre diameter and vessel length, whereas wood density was significantly and negatively correlated to vessel length and vessel diameter.

KEYWORDS: *Ficus* Sps., Intervessel Pits, Tissue Proportion, LATEX ducts, Crystals