

### FOSSIL WOOD OF *DRACONTOMELUM* FROM THE TERTIARY OF WEST BENGAL, INDIA

In the present note, a new fossil wood resembling the modern genus *Dracontomelum* BL of the family Anacardiaceae is recorded here from the Tertiary beds of Labpur, Birbhum District, West Bengal. The fossil wood is represented by a small piece of petrified secondary xylem measuring 5 cm in length and 3 cm in diameter. The preservation is fairly good and shows the following characters: *Wood* diffuse porous (Fig. 1). *Growth rings* absent. *Vessels* visible to



FIGS. 1-3. *Dracontomelumoxylon mangiferumoides* gen. et sp. nov. Fig. 1. Cross-section showing vessel distribution and parenchyma pattern,  $\times 40$ , Fig. 2. Tangential longitudinal section showing the xylem rays,  $\times 100$ , Fig. 3. Intervessel pits,  $\times 500$ .

the naked eye, small to large in size, 5-6 per mm, evenly distributed, solitary or in short radial multiples of 2-4, round to oval in shape, t.d. 99-233  $\mu$ , r.d. 133-432  $\mu$ ; vessel members 333-1065  $\mu$  in length, with abruptly tailed ends; perforations simple; intervessel pits large,

alternate, circular to Oval with lenticular aperture, 7-10  $\mu$  in diameter (Fig. 3); vessels often filled with tyloses. *Parenchyma* distinct only under hand lens as thin sheaths around the vessels; predominantly paratracheal, vasicentric, 2-4 cells thick. *Xylem rays* moderately fine to broad, 1-4 (mostly 2-3) seriate (Fig. 2); long 6-45 cells in height; 200  $\mu$ -1 mm in length; 26-66  $\mu$  in breadth, ray tissue heterocellular with 1-3 upright cells at one or both the ends. *Fibres* polygonal, thick walled, 7-14  $\mu$  in diameter, septate, libriform; interfibre pits minute simple.

The diagnostic anatomical features exhibited by the fossil wood are the diffuse porousness, large to medium sized solitary or radial multiple vessels, scanty vasicentric paratracheal parenchyma, the heterocellular 1-4 seriate, long rays and the septate libriform fibres.

These features indicate its affinities with the members of Anacardiaceae which have septate fibres. The present fossil wood is closely allied to the modern genus *Dracontomelum mangiferum* BL1, 2. (F.R.I. slide No. B 6045). It also shows some resemblance to the mature secondary xylem of *Canarium* Linn. However, *Canarium* differs from the fossil wood in having short xylem rays, semi-libriform fibres and other features. As the fossil wood resembles the modern genus *Dracontomelum* in all anatomical details, it is assigned to a new form genus *Dracontomelumoxylon* gen nov and specifically named as *Dracontomelumoxylon mangiferumoides* sp. nov. The record of fossil wood of *Dracontomelum* is not hitherto known from India and abroad.

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