

PLACENTATION IN BIGNONIACEAE AS ILLUSTRATED BY CATALPA,
MILLINGTONIA, KIGELIA, AND ECCREMOCARPUS

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The Bignoniaceae has a bicarpellary superior ovary with many ovules. Placentation has been reported as parietal in a unilocular ovary and as two axiles in each locule of a bilocular ovary.

The ovaries in Catalpa, Millingtonia, and Kigelia are bilocular. The placentation in Catalpa is subaxile (figure 1) and that in Millingtonia and Kigelia is subparietal (figure 2). Catalpa has a swollen sterile tissue in the center of the ovary and on both sides of it bifid parietal placenta occur in the antero-posterior positions. The arrangement of the ovules in Millingtonia and Kigelia is almost the same but the central tissue is very thin. The central, thin sterile structure in these two genera is comparable to the structure of the replum found in the Crucifer ovary (Brassicaceae) (figure 4). The ovary of Eccremocarpus is unilocular with two bifid parietal placenta (figure 3).

From the evidence cited above, the parietal placentation (as in Eccremocarpus) in the Bignoniaceae could be derived from subaxile placentation (as in Catalpa) through subparietal placentation by the dissolution of the central tissue found in Millingtonia and Kigelia.

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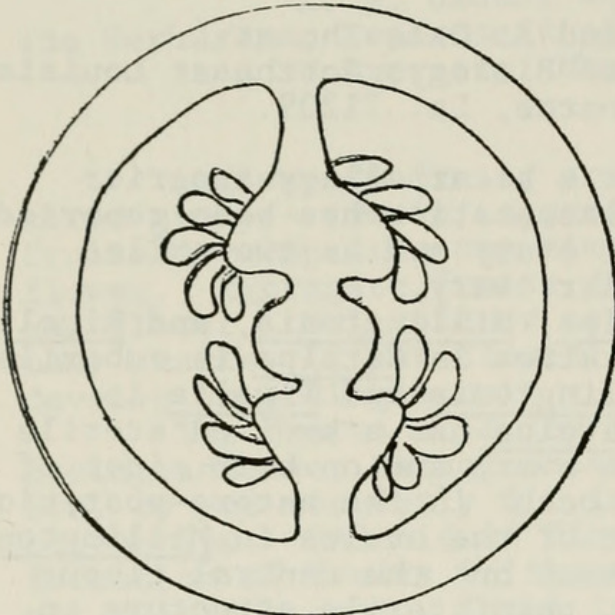


Figure 1

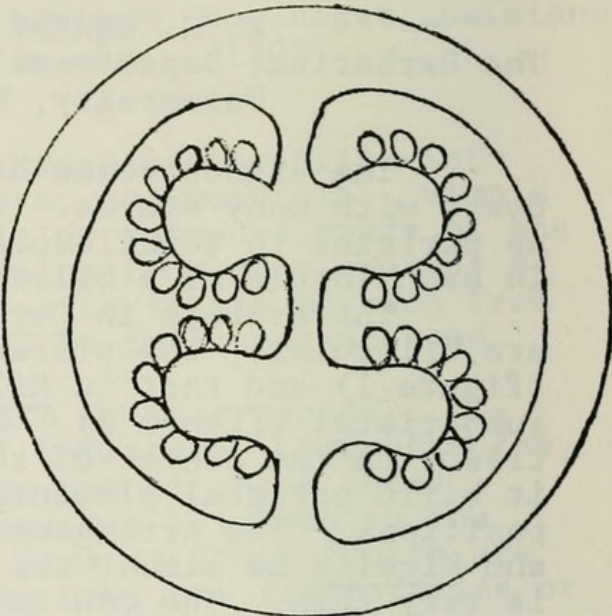


Figure 2

Figure 3

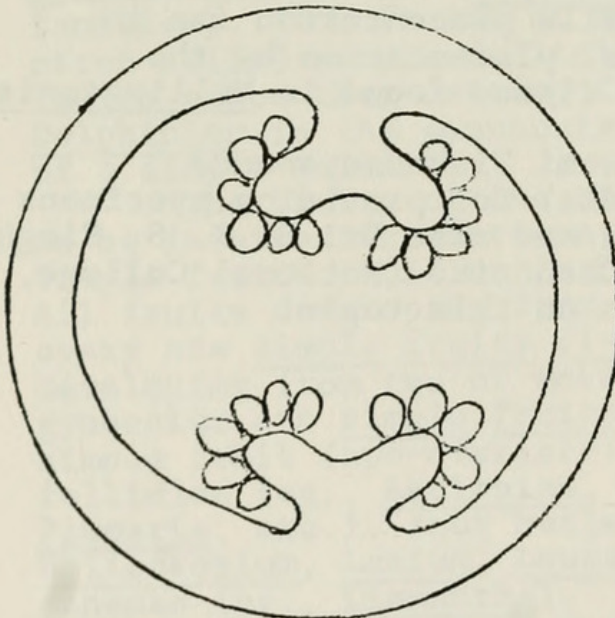
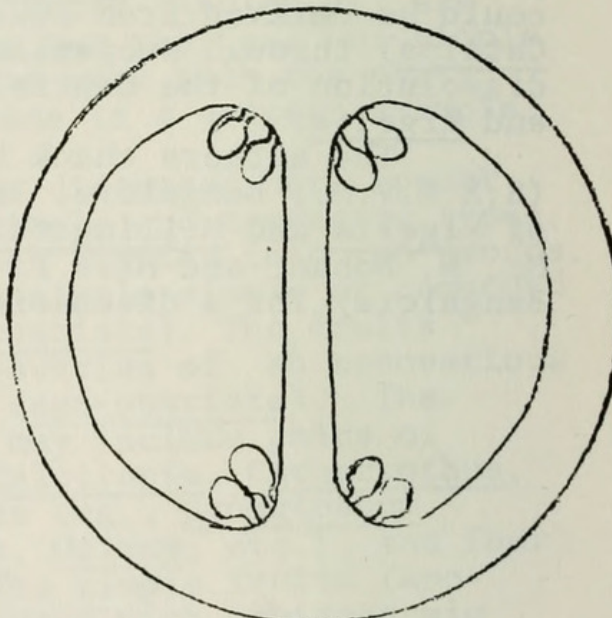


Figure 4





Gandhi, Kanchi N. and Thomas, Roy D . 1983. "Placentation in Bignoniaceae as illustrated by *Catalpa*, *Millingtonia*, *Kigelia*, and *Eccecmocarpus*." *Phytologia* 52(6), 377–378.

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