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A New Type of Staminal Vasculature in *Schisandra neglecta*

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The Stamens of *Schisandra neglecta* were collected from plants in Darjeeling during May, 1962 and fixed in F.A.A. They were washed, cleared in 5% KOH solution, dehydrated through alcolol-xylol series and mounted in Canada balsam. The stamens are differentiated into filament, connective and anthers. Anatomically, each stamen receives a single thick and sturdy vascular trace which is dichotomously branched and the branches are invariably directed towards the thecae coming up to the sides of the microsporangia (Fig. 1). The branching of the single trace may, however, also occur in the lower portion of the filament or at a higher level below the connective.

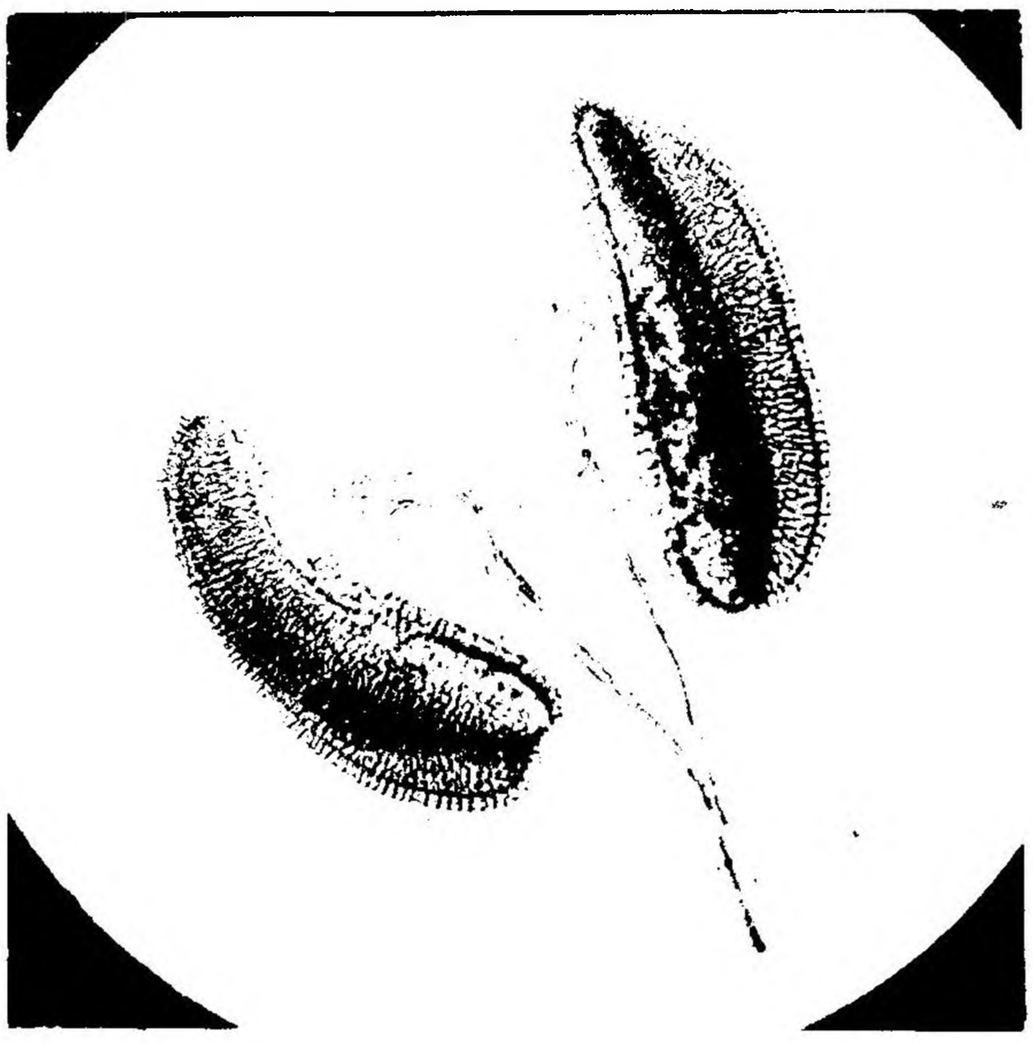

Fig. 1. Stamen of Schisandra neglecta, after clearing showing vascular supply. x 19.

Stamens in general may be uni-traced or multi-traced. According to available data 95% of the angiosperms conform to the first category. In these, the single vascular trace traverses the filament and may end at the base of the anther or may be prolonged into the connective terminating blindly near the apex. In multi-traced stamens, the stamens may have two to seven traces (Eames, 1961). However, in none of these instances, the mother traces and their branches, if any, come up to the sides of the thecae. Eames (1961) concluded "no vascular tips lead to or directly toward the individual sporangia". The single vascular trace with its branches towards and up to the sides of the thecae in the stamens of *Schisandra neglecta* is therefore a new type of staminal vasculature.

REFERENCE

EAMES A .J .1961. *Morphology of the Angiosperms*, McGraw-Hill, New York.