

## Further Observations on *Ancistrocladus tectorius* (Ancistrocladaceae)

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In a previous paper (Keng 1967), the general habit, flower, fruit, seed and seedling of *Ancistrocladus tectorius* (Lour.) Merr. (Ancistrocladaceae) were described. No explanation was given to the nature of its hooked branches (see Fig. 1, b and c), from which the generic name is derived.

In a recent trip (September, 1968) to Batu Limbang, southern Johore, Malaya, the present writer observed that the sympodial cirrhate branches of *Ancistrocladus tectorius*, during that time of the year, often bear an enlarged tip on the lower segment or segments. A close examination reveals that each of these enlarged tips actually represents a reduced flower (see Plate 1, A and B), with purple perianth and aborted androecium and gynoecium. Some of these reduced flowers were fully unfolded, but were all closed and mostly dropped off after bringing back from the field.

A completely developed inflorescence of *Ancistrocladus* is a profusely branched dichasium (fig. 1 a). It is likely, therefore, that the sympodial cirrhate branches represents the modified peduncles and pedicels of a partially developed inflorescence. Further evidence is found in a rather unusual specimen collected by the present writer during a still recent (November, 1968) trip to Pulau Langkawi, Kedah, Malaya. In this specimen (Plate 1, C), the cirrhate branches are much excessively ramified, comparable closely to a fully developed inflorescence.

Another well-known example which possesses somewhat similar structure is *Artabotrys* (including *A. suaveolens* Bl. and other species) of the Annonaceae (Sinclair 1955). In *Artabotrys*, the flattened and hooked peduncles bear flowers on the outer surface of the curved hooks. Although Annonaceae and Ancistrocladaceae are both characterized by the possession of ruminant endosperm in their seeds, their flowers, however, are so vastly different. It is rather difficult to conceive that these two families are closely related. The more plausible alternative explanation would be that the modification of peduncles into hook-like structures in these two groups is a result of convergent evolution. (The presence of ruminant endosperm in the seed is, however, probably due to the maintenance of an ancient character).



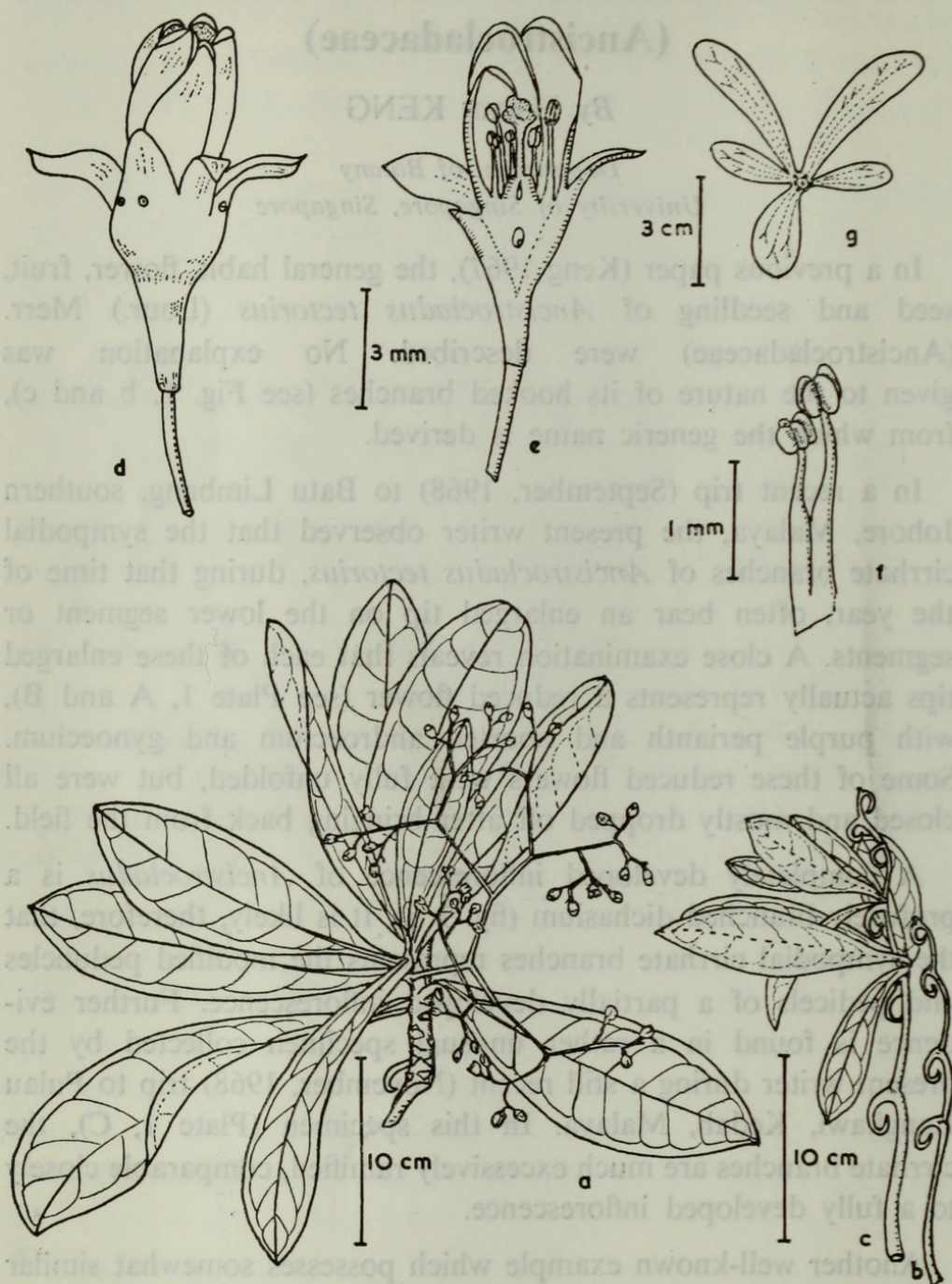


Figure 1. *Ancistrocladus tectorius* (Lour.) Merr.

a: spurred branches with dichasial inflorescence; b & c: sympodial cirrhatous branches; from the axils of hooks, the foliated spurred branches arise; d: flower, note the outer sepals with large glands; e: half-flower, showing the cone-shaped styler bases and the inferior ovary; f: two stamens of different length, the one opposite sepals is slightly longer; g: samaroid fruit, winged by persistent accrescent calyx.



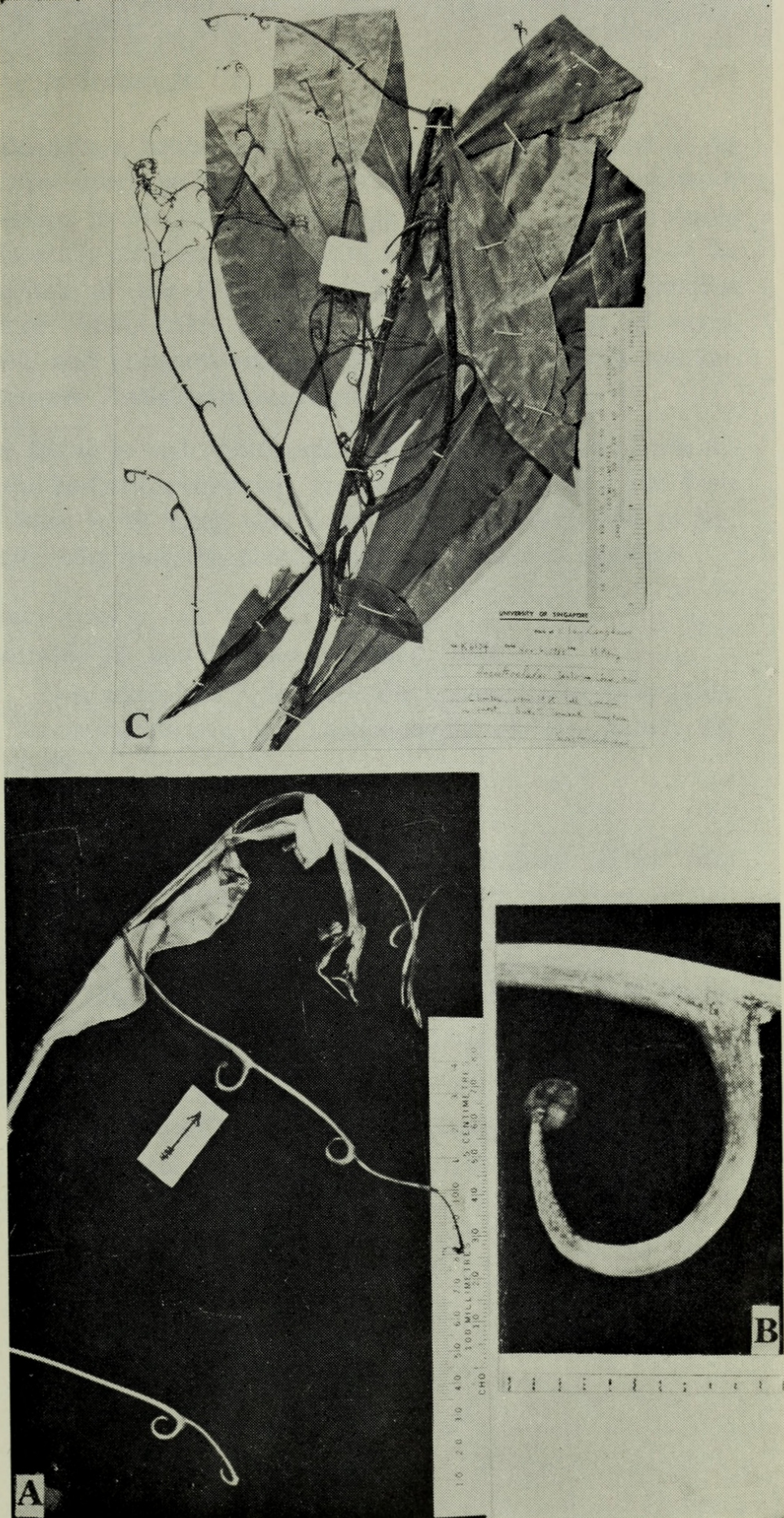


Plate 1. *Ancistrocladus tectorius* (Lour.) Merr.

A. Terminal portion of an actively growing plant, showing several sympodial cirrhate branches. In one branch the lower hook (marked with an arrow) bears an enlarged tip.

B. Portion of A, enlarged (scales in mm), showing the enlarged tip which is an aborted flower, with normal but smaller perianth and reduced androecium and gynoecium.

C. Herbarium specimen, the cirrhate branches are excessively ramified, comparable closely to a fully developed inflorescence.





Keng, Hsuan. 1970. "Further Observations on *Ancistrocladus tectorius* (*Ancistrocladaceae*)." *The Gardens' bulletin, Singapore* 25, 235–237.

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