

IX. INSTRUCTIONS FOR COLLECTING TREE FERNS OF THE
FAMILY CYATHEACEAE

The next monographic study which will be undertaken for the series Pteridophyta of the Flora Malesiana will be devoted to the tree ferns of the Cyatheaceae.

In connection with the large size of these plants and the desirability of having more and complete material at our disposal, the following notes are addressed to field collectors who may be in a position to obtain specimens. For securing essential parts tree ferns appear less unmanageable than they may look at first sight.

As it is impossible to dry complete leaves these must be cut into parts. The leaves selected should if possible have sori in a mature condition, neither very young nor consisting of sporangia which have all lost their spores. The minimum collection from one plant should consist of:

(a) the base of a petiole with scales attached (it may be desirable to cut a young frond for this purpose as well as a mature frond for the sori);

(b) two complete pinnae, from the middle of the frond, attached to the main rachis. If possible, it is desirable also to have the lowest pinnae and the frond-apex.

The bases of the petioles of tree-ferns are often thick and fleshy, and are difficult to dry. They may be dried separately, not in a press, but if so should be handled carefully to avoid damage to the scales; the most delicate parts of the scales are the most important diagnostically. If necessary, a petiole may be split longitudinally for drying. Collectors who have the necessary equipment would do valuable service by putting a very young frond (still completely coiled), or part of it, into liquid preservative.

Field notes should include information about any peculiar features of the leaf-bases (they sometimes have a series of small depressions which serve for aeration), also of the nature of the scars where leaf-bases are caducous. If the trunk is cut down, a transverse section of the trunk, say 3-5 cm thick, would add valuable information.

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