DE LA SALLE UNIVERSITY

ANATOMICAL STUDY OF THE STEMS OF SOME SPECIES OF PHILIPPINE RATTANS

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by

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ABSTRACT

The stems of 15 identified and 18 unidentified species of *Calamus*, 5 identified and 3 unidentified species of *Daemonorops*, 2 identified and 1 unidentified species of *Korthalsia*, and 1 identified species of *Plectocomia* were processed using the paraffin method and were studied for their anatomical characters. Their cross section anatomy showed that anatomical characters such as the presence or absence of a yellow cap layer and the number of phloem strands present can aid in the identification and differentiation of the four genera of Philippine rattans. Anatomical characters such as the presence or absence and varying quantities of fibrous strands at the ground tissue, mucilage canals, air lacunae, and abnormal and small vascular bundles also aid in the identification and differentiation of *Calamus* and *Daemonorops* species. The anatomical similarities and differences among the four genera are consistent with those suggested by their gross morphology. This, however, is not applicable at the species level with some particular exceptions. These observations may be used only as additional evidence in the taxonomic classification of Philippine rattans.