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Beyond Classical Approaches

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CRYPTOCORYNE (ARACEAE): POTENTIAL FOR COMMERCIAL AQUARIUM PLANTS FROM SARAWAK

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ABSTRACT

The extensive field survey in more than 400 rivers, streams and forest pools in Sarawak recorded 14 species with 3 varieties and one new natural hybrid. *C. zaidiana* Ipor & Tawan, a spectacular new species, was found at Long Tran, Miri. The discovery of *C. fusca* De wit in Lubok Antu had extended its geographical endemism in Borneo. All the collected species are cultivated in both greenhouse and aquarium conditions to determine their suitability for successful aquarium plants.

Keywords: *Cryptocoryne,* Araceae, Sarawak

INTRODUCTION

Cryptopcoryne (Araceae) is locally known as kiambang batu (Melayu Sarawak), teron anum (Melanau) and kelatai (Iban) (Simon *et al.*2007). There is limited information on these plants in Sarawak. The available reports are Schulze (1971), Jacobsen (1976), Arends *et al* (1982), Jacobsen (1982), de Witt (1983) and Jacobsen (1985) that mainly focused on the taxonomy, distribution and habitat description. The present study is mainly to determine the potentiality of *Cryptocoryne* speies as successful commercial aquarium plants.

MATERIALS AND METHODS

The entire studied area covered nearly the whole part of Sarawak. The position of each occurrence of *Crytopcoryne* was recorded using GPS. The brief description of methods and procedures carried out in this study were essentially included as reference to any researchers who have high interest in this plant. Fertile specimens were taken in field for morphological identification and measurements. The morphological characteristics, such as leaves, cataphylls, rhizomes and inflorescences (kettle, tube, limb, spadix, stamen, stigma) were recorded. All the species collected from the field were cultivated in greenhouse and aquarium conditions.

RESULTS AND DISCUSSION

The wide distribution of the occurrence of *Cryptocoryne* species covered diverse range of habitats from the mangrove swamp area to the highland areas such as Mulu National Park and Bario. The field observation tended to agree with Jacobsen (1985) as he mentioned that *Cryptocoryne* could be found in different types of habitats The habitats might included inner tidal zone (the amphibious life forms), at the slow to fast running rivers (aquatic life forms) and at the bank of some of the smaller rivers and stream with plants (rheophytic life forms). The recorded localities were commonly situated in deep shades.

Fourteen species were recorded during the field survey. The species are the *C. ciliata* (Roxburgh) Schott (both varieties of *ciliata* and *latifolia*), *C. cordata* (*C. cordata* (Griffith) var. *zonata* (De wit) N. Jacobsen, *C. striolata* Engler, *C.*