

Morphology of wild orchid in Bukit Tiga Puluh National Park, Riau

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ABSTRAK

Bukit Tiga Puluh National Park is conservation forest that located in two provinces, Riau and Jambi Province. This tropical rain forest is blessed with its high biological diversity, both flora and fauna, as well as other organism. The wild orchid is one of plant group distributed in this area. This study used exploration method. A total of seven wild orchid were identified from this region.

Key words : morphology, wild orchid, Bukit Tiga Puluh National Park.

Introduction

Bukit Tiga Puluh National Park is a conservation forest that located in two province, Riau and Jambi Province. This forest is lowland tropical rain forest that blessed with its biological diversity. One of the forest function is as habitat for flora and fauna, as well as other organisms. The occurrence of endangered and rare species had been reported from this park, such as *Rafflesia hasseltii* (Widyatmoko and Zich, 1998).

Orchid is one of plant group occur in this area. Eventhough the diversity of orchid in low land tropical rain forest is lesser than high montain forest, however, the member of this plant is necessary to be observed.

Orchid belongs to the Orchidaceae family, this plant is the largest plant group in Angiosperm (Dressler & Dodson 1960). This family is one of attractive plant and become a public interest due to its diversity and fastinating of floral structure. Howeve, according to Cameron *et al.* (1999) the diversity of floral structure makes the complexity and overwhelming

diversity of orchid flowers and vegetative structures and most of the orchid species have not been fully investigated.

Methods

This study used exploration method. The study site was focused on the west site of the park, in Riau Province, due to the accesibility. Every orchid species that found in the study site was collected. The detail of morphological characters were then observed and characterized. The organ observed were both vegetative (root, stem and leaf) and generative parts (flower, fruit and seed).

Result

List of species

During the exploration, a total of seven wild orchid were collected as mentioned in Table 1 below. This number of orchid was quite few. The highest species number was found in *Dendrobium*. This genus is actually a huge genus of orchid. But however, only three species found in the study site.



Table 1. List of identified wild orchid

No.	Genus-Species
1.	Arundina <i>Arundina graminifolia</i> (D.Don) Hochr
2.	Dendrobium <i>Dendrobium mutabile</i> (Blume) Lindl. <i>Dendrobium roseatum</i> Ridl. <i>Dendrobium</i> sp.
3.	<i>Grammatophyllum</i> <i>Grammatophyllum speciosum</i> Blume
4.	<i>Spatoglotis</i> <i>Spathoglotis plicata</i> Blume
6.	<i>Eria</i> <i>Eria</i> Sp.

Morphology

Arundina graminifolia

Ground orchid. Polypodial. Stem is thin, up to 1,5m in height, reedy, forming into large clumps. Leaves : alternating, lanceolate, acuminate leaf, 9 -20 in length, about 1.5cm in width.. Flower : Terminal, simple or branched, scapose, bracteate inflorescence carries 2 to 6, fragrant flower, whitish purple in color. Petal : entire margin, acuminate tip, light purple. Sepal : Whitish purple, entire, wider than sepal. Labelum : whitish purple at the base, bright purple in the middle toward tip part, wavy margin.

Habitat : open space, abundant near the water fall.

Local name : Commonly called the bamboo orchid / anggrek bambu.

Dendrobium mutabile

epiphytic orchid. Sympodial. Stem has pseudobulb at the base, about 10 cm long. Leaf bases form sheaths that completely envelope the stem, ovate, entire margin, bright green. The axillary inflorescence

come from the lateral side of stem. Flower : white, small, fragrant.

Local name : Jasmine orchid / anggrek melati due to its white and fragrant flower

Dendrobium roseatum

Epiphytic orchid. Sympodial. Stem : brownish grey with pseudobulb at the base, about 10 cm long. Leaf bases form sheaths that completely envelope the stem, ovate, entire margin, bright green. The axillary inflorescence come from the lateral side of stem. Flower : white, small, with thin stalk.

Local name : anggrek mawar.

Dendrobium sp.

Epiphytic orchid. Sympodial. Stem has pseudobulb at the base, about 5 - 15 cm long. Leaf bases form sheaths that completely envelope the stem, ovate, entire margin, bright green.. No flower found in this study.

Grammatophyllum speciosum

epiphytic and occasionally a lithophytic orchid forming spectacular root bundles. Pseudobulbs : cylindric can grow up to 2.5 m in length forming a gigantic clusters. Stem yellowish brown to green. Leaves : linear, enveloping the stem at the base, green, margin is entire. Each raceme can grow up to 3 m, bearing up to eighty flowers, each 10 cm wide. Flowers ; are yellow colored with maroon or dark red spots. There is no lips on the lowest flower.

Local name : anggrek harimau due to its yellow flower with dark spot or anggrek tebu due to its cylindric long stem.

Spathoglotis plicata

Ground or terrestrial orchid . Stem short with almost cylindric pseudobulb at the base. leaves : almost linear, wider in the middle, bright green, rosette at the base, up to 40 cm long or more, 6 cm wide or more. The inflorescence straight upward bearing



purple flowers. Flower stalk is dark purple, with bright flowers part.

Local name : anggrek sendok due to its spoon-shape leaves.

***Eria* sp.**

Ground orchid. Shrub. Root whitish. brownUp tp 60 in height. Sympodial. Leaf light green, lobed, single, elongated and wider at the middle, margin entire, tip acute, obtuse at the base, green pinnatifid vein. No inflorescent found in this study.

Habitat : open space, near the path.

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