

## **I. Description**

- Terrestrial herb, 5-7 cm tall.
- Pseudo bulbs, largely conical, 3 cm tall, 1 cm wide, enveloped in leaf sheaths 3 x 0.5 cm, scales at the base.
- Stem, erect, with 4 leaves and terminal inflorescence.
- Leaves thin, plicate, narrowly ovate or ovate elliptic, 8 x 4 cm, acute at the apex, narrowing toward the base into broad sheath enveloping stem, brown with 5 sunken nerves on upper surface and whitish spots at 2/3 margin toward the tip, lightly green with 5 pink convex nerves on under surface.
- Inflorescence a lake spike, 15 cm long, usually with 15-20 flowers, peduncle, purple, pubescent, winged, 7-8 cm long, bract triangle, 2 mm long, 0.5 mm wide, whitish- purple.
- Flowers large, 7 mm, purple-yellow,
- Pedicels lightly purple, 4 mm long, 0.6 mm wide
- Sepals, narrowly oblong, lightly purple, 3 -4 mm long
- Petals, like sepal, but narrower and shorter, lightly purple, 2.5-3.5 mm long.
- Lip, heart-shaped, obtuse at the apex lobe, divided two lobes from the bottom to the center, developing column, thin, lightly yellow, 5 mm long, 4 mm wide.

## **II. Identification**

Based on the above description and the pictures of this plant, Averyanov (2007) certainly identified it as a *Malaxis calophylla* (Reichenb.f.) Kuentze, and also showed that this plant is widespread, very rare, and vulnerable; especially first recorded with the pictures and specimen in Vietnam.

Therefore, this orchid species is first recorded at Phu Quoc island on the map of orchid distribution of Vietnam.

## **III. Distribution**

*Malaxis calophylla* (Reichenb.f.) Kuentze., was found in southern Vietnam, Kien Giang Province, Phu Quoc District, K7-Ham Ninh Mountain of Phu Quoc National Park, within seed orchard area.

It is under broad-leaved, evergreen, closed forest nearby a stream, on a west-facing steep slope of more than 30° and on sandy soil with partially disintegrated forest floor at an elevation of about 20m a.s.l.

A single specimen of this orchid species was found on partially decomposed ground cover near granite rock covered by mosses, other orchids and grass plants in the seed orchard with dominant component of Dipterocarpaceae (*Anisoptera cochinchinensis*, *Shorea hypochra*, *Shorea Pierrei*, *Dipterocarpus dyeri*) mixed with Podocarpaceae (*Decussocarpus fleuryi*, *Nageia wallichiana*) and Myrtaceae (*Tristanopsis merguensis*) and without the suppressed and shrub stratification for natural regeneration.

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<sup>3</sup> Forestry ranger of PhuQuoc National Park

#### IV. Flowering in the wild:

July (Based on direct observation of a single wild specimen)

#### V. Conservation status:

- Decree 32/2006/N<sub>-</sub>CP: None
- IUCN red book: None
- According to Prof. Leonid V. Averyanov: very rare and vulnerable species

#### Acknowledgment

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#### Reference

Leonid V. Averyanov & Anna L. Averyanova. 2003. Updated Checklist of The Orchids of Vietnam. Vietnam National University Publishing House, Hanoi.

Pham Hoang Ho. 1993 An illustrated flora of Vietnam. Montreal.

<http://www.iucnredlist.org/> The 2006 IUCN Red List of Threatened Species.

<http://www.kiemlam.org.vn/> Decree 32/2006-N<sub>-</sub>CP

#### Photos of *Malaxis calophylla* (Reichenb.f.) Kuentze



Close-up of flower



Orchid in the wild



Flower cluster

All photos: Nguyen Vu Khoi – Wildlife At Risk (WAR), 2007