

Accepted name: *Dendrochilum cruciforme* J.J.Wood in J.J.Wood & P.J.Cribb, Checklist Orchids Borneo: 169 (1994)

Subgenus – *Platyclinis*.

Synonyms

None

Origin in the Wild

Sabah

Elevation in the Wild

900 – 2,000 metres

1,9080 – 2,500 metres (*var. longicuspe*)

Habitat in the Wild

var cruciforme

Jeffrey Wood wrote that this species has been collected in the Crocker Range on Mount Alab and Mount Kinabalu. The habitat is recorded as lower montane forest. This plant is found as an epiphyte amongst 8m high *Leptospermum/Dacrydium* growing on east facing slopes on weathered sandstone and shale (Wood 2001).

var. longicuspe

Jeffrey Wood wrote that this species has been collected on Mount Kinabalu. The habitat has been recorded as upper montane mossy forest. This plant can be encountered on the Kinabalu summit trail just below Layang Layang (Wood 2001).

The Plants Description

Pseudobulbs cluster along a short rhizome. Pseudobulbs are a cylindrical or narrowly fusiform shape. Pseudobulbs measure 0.5-2.5cm long and 0.2-0.4cm in diameter. Pseudobulbs are covered by 3-4 cataphylls while they are growing and disintegrate into non-persistent fibres as the pseudobulbs mature. Leaves are petiolate; petioles measure 0.5-2cm long. Leaf blades are a narrowly linear shape and have subacute to acute apices. Leaf blades measure 5-11.5cm long and 0.1-0.3cm wide.

The Inflorescence

Peduncles are erect and measure 2.5-6.5cm long. Rachises are erect or suberect and measure 3.5-5cm long. Rachises are quadrangular in cross-section. The flowers alternate distichously and are spaced 1-2mm apart. There are no non-floriferous bracts at the base of each rachis.

The Flowers

Flowers are variable and the following colours have been described, pinkish cream with purple spots, pale yellow, cream-green, cream-yellow, cream or pure white. Labella generally have a dark coloured blotch at the base of the side lobes and at the apices of the keels. Dorsal sepals are an oblong-elliptic shape and have acute apices. Dorsal sepals measure 2.2-2.6mm long and 0.6-0.9mm wide. Dorsal sepals have entire margins and are 1-veined. Lateral sepals are an ovate-elliptic shape and have

acute apices. Lateral sepals measure 2.1-2.5mm long and 0.8-1mm wide. Lateral sepals have entire margins and are 1-veined. Petals are a narrowly elliptic shape and have acute apices. Petals measure 2.0-2.6mm long and 0.4-0.7mm wide. Petals have entire margins and are 1-veined. Labella are cruciform and measure 2-2.5mm long and 1.5-2mm at its widest point. Side lobes are a triangular shape, sometime falcate and have acute or subacute apices. Mid-lobes are a triangular-acuminate shape and are cuspidate. Labella margins are entire. There are 2 elevated keels that nearly join at the base of the hypochile and finish before the base of the side lobes. Columns are 1-1.2mm long. Apical hoods are elongated, have acute apices with bidentate or tridentate margins. Stelidia grow from the base of columns are a linear-ligulate shape and have obtuse apices. Stelidia measure 0.9-2mm long and are slightly shorter than or equal to apical hoods.

Herbarium Specimens

Holotype

Royal Botanic Gardens Kew (K)

[Specimen 60406.000](#)

[Specimen K000078174](#) (photo)

[Specimen K000078173](#) (photo)

Isotype

AMES

[Specimen 112212](#) (photo)

BO

The Royal Botanic Garden of Edinburgh (E)

[Specimen E00050138](#)

HBG

BM

G

Other herbarium specimens

Royal Botanic Gardens, Kew (K)

[Specimen 60405.000](#)

[Specimen 56590.000](#)

[Specimen 61498.000](#)

[Specimen 60407.000](#)

National herbarium Netherlands, Leiden (L)

[Specimen L0322441](#)

[Specimen L0322442](#)

[Specimen L0322443](#)

The Royal Botanic Garden of Edinburgh (E)

www.dendrochilum.com

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[Specimen E00050135](#)
[Specimen E00050134](#)
[Specimen E00050063](#)

Scent

According to Bacon, flowers have a musky scent. Jeffrey Wood wrote that the flowers are unscented (Wood 1997).

Flowering Season

Flowering plants have been collected in the wild during all months except February, April, May and July. Collections of *var. longicuspe* flowers are recorded from August

Cultivation

I do not think this species is in cultivation.

Similar Species

Dendrochilum hastilobum

Dendrochilum dolichobrachium

Dendrochilum devogelii (see this page for the differences)

Dendrochilum gibbsiae

Other Information

D. cruciforme var. cruciforme differs from *var. longicuspe* because the mid lobe is triangular-acuminate and cuspidate rather than long-acuminate. On *var longicuspe* the mid-lobe is longer and more pointed at its apex. The side lobes on *var longicuspe* are narrower and the stelidia are longer than the apical hood.

I am using the name that Jeffrey Wood described in the *Dendrochilum* of Borneo. Kew's list of Monocotyledons states *Dendrochilum cruciforme var. longicuspum*, which is not the name it was given when first described by Jeffrey Wood and Phillip Cribb in 1994's Checklist of the Orchids of Borneo. Kew have made several spelling mistakes in this genus (*convallariaeforme*, *yuccaefolium*).

This species differs from *D. devogelii* by the cruciform shaped labellum and shorter stelidia.

This species differs from *Dendrochilum dolichobrachium* but has shorter keels, wider side lobes and a smaller mid-lobe.

This species differs from *Dendrochilum gibbsiae* by its smaller habit, narrower grass-like leaves, three lobed labellum and longer column.

The side lobes are variable in shape and size. The apical hood varies from bifid to acute and acuminate but is always longer than the stelidia.

The epithet refers to the cross or cruciform shaped labellum and *longicuspe* refers to the sharp point at the apex of the mid-lobe.



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Bottom left: This photo was taken by Todd Barkman and is used with permission. ©

Reference -

WOOD, Jeffrey. 1997, Orchids of Borneo volume 3. The Sabah Society, Kota Kinabalu, Malaysia.

WOOD, Jeffrey. Dendrochilum of Borneo, 2001. Natural History Publications (Borneo), Malaysia.

World Checklist of Selected Plant Families. 15 February 2009. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/> accessed **15 February 2009**.