Accepted name: *Dendrochilum latifolium* var. *macranthum* (Schltr.) H.A.Pedersen, Opera Bot. 130: 51 (1997)

Subgenus - Platyclinis. Section - Platyclinis.

## **Synonyms**

#### Var macranthum

Dendrochilum macranthum Schltr., Repert. Spec. Nov. Regni Veg. 9: 163 (1911). Dendrochilum grandiflorum Schltr., Repert. Spec. Nov. Regni Veg. 8: 563 (1910), nom. illeg.

Dendrochilum cagayanense Ames, Philipp. J. Sci., C 6: 41 (1911). Dendrochilum serratum L.O.Williams, Bot. Mus. Leafl. 5: 51 (1937), nom. illeg.

#### Var latifolium

Platyclinis latifolia (Lindl.) Hemsl., Gard. Chron., n.s., 16: 656 (1881). Acoridium latifolium (Lindl.) Rolfe, Orchid Rev. 12: 220 (1904).

## Origin in the Wild

Luzon, Visayas (*var macranthum*) Luzon, Mindoro and Mindanao (*var latifolium*)

#### Elevation in the Wild

370 -1, 630 metres (*var macranthum*) 300 - 1, 665 metres (*var latifolium*)

# Habitat in the Wild

#### var macranthum

Within the Visayas group this species has been collected on Negros Oriental on Dumaguete in the Cuernos Mountains; Negros Occidental on the Canlaon Volcano; Leyte at Dagami and Antique at Culasi and on Mount Madia-as.

On Luzon this species is recorded in Rizal Province on Mount Lumutan, Batingtingan, Montalban, Mount Iriga and near Antipolo. Within Kalinga-Apayao Province it has been found on Balbalan. Plants also recorded in Laguna on San Antonio and in Quezon Province on Mount Camatis.

#### var latifolium

Plants recorded from Pampanga Province on Mount Arayat; Quezon Province on Mount Binuang; Bataan Province along the Lamao River on Mount Mariveles and Mount Bataan and Camarines Sur on Mount Isarog.

On Mindoro this species is recorded on Mount Halcon and was described as growing in forests. (Ames 1907).

On Mindanao is recorded in South Cotabato in the Tasaday Forest.

## The Plants Description

Pseudobulbs cluster along short rhizomes and are a fusiform to obpyriform shape. Pseudobulbs measure 1.7-7.5 cm long and 0.5-1.8 cm in diameter. Pseudobulbs are covered by 4-6 cataphylls while they are growing. In variety *macranthum*, the cataphylls are already torn at the time of flowering and disintegrate into persistent fibres as the pseudobulbs mature, in variety *latifolium* they are intact at the time of flowering. The leaves are petiolate, petioles measure 2.7-25.3 cm long. Leaf blades measure 13.5-61.7 cm long and 4.1-8.0 cm wide. Leaf blades are a linear to broadly lanceolate shape and have obtuse to acute or somewhat acuminate apices. Leaves are thin textured and have 9-11 distinct nerves.

Inflorescences are synanthous. Peduncles are suberect to somewhat curved and measure 11.7-52.7 cm long. Rachises are pendent and measure 11.0-39.0 cm long. Flowers alternate distichously and are spaced 3.0-4.5 mm apart. There are 1-5 appressed non-floriferous bracts at the base of the rachises. The flowers open from the proximal or central section of the rachis.

Flowers have yellowish green, green to orange sepals and petals and brown labella. Sepals and petals spread widely. Dorsal sepals are a linear to lanceolate-oblong shape and have acute to obtuse or acuminate apices. Dorsal sepals measure 5.5-12.0 mm long and 1.4-3.4 mm wide. Dorsal sepals are three veined and have entire margins. Lateral sepals are a linear-lanceolate to lanceolate-oblong (rarely elliptic) shape and have obtuse to acute or acuminate apices. Lateral sepals measure 5.4-12.0 mm long and 1.6-3.6 mm wide. Lateral sepals are 3-5 veined and have entire margins. Lateral sepals can have a few minute trichomes. The petals are shaped lanceolate (rarely elliptic) and have acute to somewhat acuminate apices. Petals measure 4.9-10.8 mm long and 1.5-3.9 mm wide. Petals are 3-5 veined and have erose-dentate to nearly entire margins. Petals can have a few minute trichomes. Labella are easily versatile, pendent and 3-lobed. Labella measure 2.7-5.2 mm long and 1.5-4.0 mm wide. Labella are obscurely three veined and have erose or slightly irregular margins from the base to the apices of the side lobes; the remaining margins are entire. The side lobes are usually erect (spreading to erect in var latifolium), an obliquely oblong-triangular shape and have acute to obtuse apices. Mid-lobes are a broadly elliptic to oblong shape and have rounded to obtuse apices. Labella are finely papillose. There are two small calli located on the lateral nerves at the base of the mid-lobe. Columns are suberect, somewhat incurved and measure 2.0-3.4 mm long. The apical wings are prolonged into a rounded apices with a few dentate to somewhat erose margin. The apical wings distinctly exceed the anther caps. Stelidia grow upwards from the base of the columns and are distinctly shorter than the column apices. Stelidia are a linear to lineartriangular shape and have acute to somewhat acuminate apices, sometimes with a small tooth below the apices.

#### Herbarium Specimens

var macranthum

Holotype

**AMES** 

<u>Specimen 18865</u> (photo) (*Dendrochilum cagayanense*)

B – destroyed (*Dendrochilum grandiflorum*)

var latifolium

Holotype

I could not locate the specimen

Isotype

var macranthum

Isotype

US (Dendrochilum cagayanense)

var macranthum

Other herbarium specimens

Royal Botanic Gardens Kew (K)

<u>Specimen K000364913</u> <u>Specimen K000364965</u> <u>Specimen 63791.000</u>

National Herbarium Netherlands (L)

Specimen L0322541 Specimen L0322542 Specimen L0322543

**AMES** 

Specimen 98806 (photo) (Dendrochilum serratum)

var latifolium

Other herbarium specimens

Royal Botanic Gardens Kew (K)

<u>Specimen 73009.000</u> <u>Specimen 19470.000</u> <u>Specimen 19726.000</u> <u>Specimen 74039.000</u> <u>Specimen K000079154</u> (photo)

National Herbarium Netherlands (L)

# <u>Scent</u>

Yes, the scent is more noticeable during brighter days.

# Flowering Season

Flowering plants have been collected in the wild from March to September. Plants in cultivation generally flower during the summer and autumn in Europe.

# Cultivation

This species is found in cultivation globally. I have seen plants in Europe, USA, New Zealand, Brazil, the Philippines and Australia.

# Similar Species

Dendrochilum latifolium var latifolium (see this page for the differences) Dendrochilum magnum (see this page for the differences) Dendrochilum imbricatum

# Other Information

Schlechter originally described *Dendrochilum grandiflorum* during 1910 without realising the name had already been given to a Bornean plant. Schlechter realized this afterwards and published *Dendrochilum macranthum* during 1911. The type specimen must have had incorrect geographical data on it as Schlechter described its origin as the Philippines but the drawing had India written on it. The origin of the type specimen is still not certainly known.

Ames excluded this species from the Philippine orchid flora because the geographical origin was not completely known. L.O. Williams finally confirmed this species as a member of the Philippine orchid flora in 1937; Williams overlooked Schlechter's publication of *Dendrochilum macranthum* and consequently published *Dendrochilum serratum* (Pedersen 1997).

Dendrochilum cagayanense was reduced to a synonym of Dendrochilum latifolium var macranthum by Pedersen in 1997. Dendrochilum cagayanense was given its name based on leaves that were longer than 30cm long and with a length width ratio of c6 (Pedersen 1997).

Ames wrote in 1924 that there was a close relationship between *Dendrochilum latifolium* and *Dendrochilum macranthum*. Henrik Pedersen could not see any difference other than the cataphylls that justified them being separate species and therefore reduced *Dendrochilum macranthum* to a variety of the earlier described *Dendrochilum latifolium*.

The photo in Jim Cootes and David Banks 1995 article labelled as *Dendrochilum magnum* is *Dendrochilum latifolium var macranthum*. (Pedersen 1997).

There is a specimen at Leiden with a provenance labelled as Kalimantan. Jeffrey Wood suspected that the label was an error based on the fact he had seen no live specimens on Borneo (Wood 2001).

This species is very often mislabelled as *Dendrochilum magnum* on many internet sites, photos, plant labels and show tables. The key differences between the two species are outlined by Henrik Pedersen (1997), I have copied them below:

*Dendrochilum magnum*. The labellum more or less porrect with a somewhat cymbiform conformation. Column strongly incurved; stelidia subequal to the column proper.

*Dendrochilum latifolium*. Labellum pendent, flat (side lobes often erect). Column slightly incurved; stelidia shorter than the column proper.

The differences between *Dendrochilum latifolium var la*tifolium and *Dendrochilum latifolium var macranthum* were described by Henrik Pedersen (1997) as:

- 1. Cataphylls not conspicuously inflated, still entire at the time of flowering. Leaf blade usually less than 4cm wide......var. *latifolium*
- 1. Cataphylls conspicuously inflated, already at the time of flowering torn so as to produce dark, c.5mm long, triangular teeth. Leaf blade usually more than 4cm wide......var. macranthum

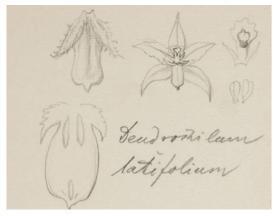
This species and *Dendrochilum magnum* could be conspecific if Lindley's original holotype drawing proves to be incorrect. Further information is provided on that page.



The photos above were taken by Trey Sanders ©. This is of a plant in the collection and is a plant formally held at the Hortus Botanicus



The photos above were taken by Trey Sanders ©.

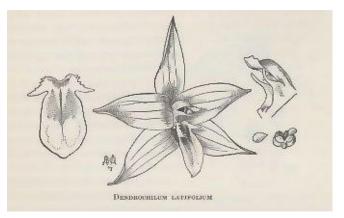


The illustration above is by Kranzlin.

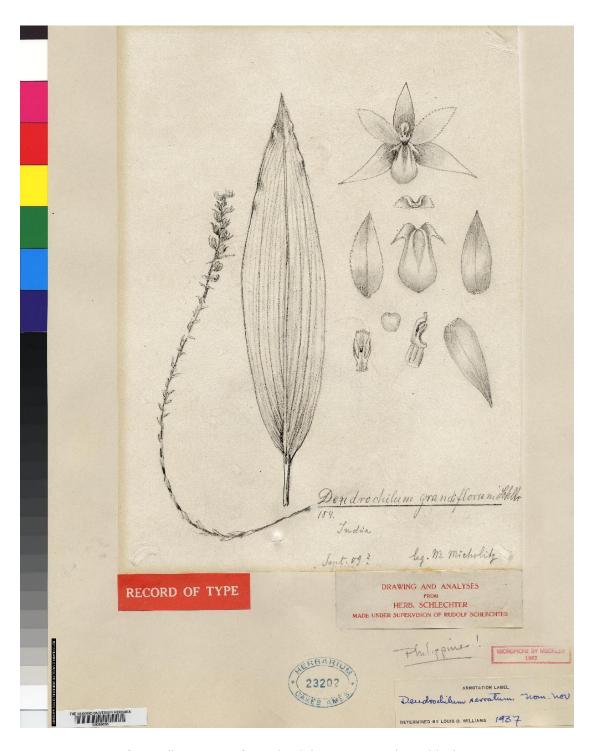




The photos above were taken by Malcolm Perry ©.



Left: An illustration by Oakes Ames.



Left: An illustration of  ${\it Dendrochilum\ serratum\ }$  by Schlechter.



Above and right. Photos taken by Marius Grzelik and used with permission ©.



# Reference -

COOTES, Jim. The Orchids of the Philippines, 2001. Timber Press, USA

PEDERSEN, Henrik. 1997, The Genus Dendrochilum (Orchidaceae) in the Philippines – A Taxonomic Revision. Opera Botanica, Denmark

World Checklist of Selected Plant Families. 27 July 2009. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; http://www.kew.org/wcsp/ accessed **27 July 2009**.