

Accepted name: *Dendrochilum convallariaeforme* Schauer, Nov. Actorum Acad. Caes. Leop.-Carol. Nat. Cur. 19(Suppl. 1): 429 (1843).

Subgenus – *Platyclinis*

Synonyms

Acoridium convallariaeforme (Schauer) Rolfe, Orchid Rev. 12: 220 (1904).
Platyclinis bistorta H.Wendl. & Kraenzl. in H.G.Reichenbach, Xenia Orchid. 1: 169 (1856).
Acoridium bistortum (H.Wendl. & Kraenzl.) Rolfe, Orchid Rev. 12: 219 (1904).
Dendrochilum bistortum (H.Wendl. & Kraenzl.) J.J.Sm., Recueil Trav. Bot. Néerl. 1: 64 (1904).
Dendrochilum bicallosum Ames, Orchidaceae 2: 117 (1908).
Dendrochilum bicallosum var. *minor* Ames, Orchidaceae 2: 118 (1908).
Dendrochilum confusum Ames, Philipp. J. Sci., C 6: 41 (1911).
Acoridium confusum (Ames) Ames, Orchidaceae 7: 80 (1922).

Origin in the Wild

Philippines: Luzon, Mindoro, Visayas, Samar and Mindanao. Var *minor* is recorded from Luzon, Mindoro and Leyte

Elevation in the Wild

var convallariaeforme

300 – 1,915 metres

var. minor

700 - 830 metres

Habitat in the Wild

On Mindanao this species has been collected in Bukidnon Province from the Katanglad Mountains and in Davao del Sur Province along the Miran River on Mount Apo.

This species has been collected on Masbate, its exact locality there is unknown. On Mindoro this species has been collected from Puerto Galera and on Mount Halcon in mossy ridge forest.

On Luzon this species has been collected in Quezon Province at Lucban. In Rizal Province species have been collected on Montalban; within Camarines Sur on Mount Iriga, Mount Madooy and Mount Potianay; in Laguna Province on Mount Maquiling and within the Sierra Madre Mountain Range; within Sorsogon on the Bulusan Volcano.

This species can be found at lower elevations. A specimen was recorded as growing on a *Quercus* ssp. Ames described a plant from Mount Maquiling that grew in ridge forest at 550 metres (Ames 1909). Jim Cootes wrote that this plant grows as an epiphyte, often in shaded areas (Cootes 2001).

Variety minor has been collected in Laguna Province on Mount Maquiling and in Sorsogon on the Bulusan Volcano. On Leyte, at Masaganap near Jaro.

Ames described variety minor as growing on a ledge in ridge forest on Mount Halcon, Mindoro (Ames 1907).

The Plants Description

Pseudobulbs cluster along a short to slightly elongate rhizome. Pseudobulbs are a fusiform to somewhat obpyriform shape and measure 1.7-4.5cm long and 0.3-0.8cm in diameter. Pseudobulbs are covered by 3-4 cataphylls while they are growing. The cataphylls soon disintegrate into persistent fibres as the pseudobulbs mature. Leaves are petiolate; petioles measure 0.7-9.9cm long. Leaf blades are an oblanceolate shape and have acuminate to obtuse apices. Leaf blades measure 5.8-22.5cm long and 1.8-4.9cm wide. Leaves are thin textured and have 3-9 distinct nerves.

The Inflorescence

Inflorescence are synanthous and appear with new leaves. Peduncles are erect to curved and measure 3.6-24cm long. Rachises are pendent and measure 4.3-15.1cm long. Flowers alternate distichously and are spaced 1.0-3.0mm apart; rachises twists to form a cylindrical spiral. There is one appressed non-floriferous bract at the base of each rachis. Flowers open from the proximal section.

The Flowers

Henrik Pedersen wrote that the flower colour varies from whitish and dull shades of brown, yellow, green and salmon pink (Pedersen 1997). Up to 50 flowers can grow on an inflorescence (Cootes 2001). Sepals and petals spread widely and rarely have a few ocelli around their margins. Dorsal sepals are an oblong to lanceolate shape and have obtuse to acute apices. Dorsal sepals measure 3.0-5.5mm long and 1.3-2.3mm wide. Dorsal sepals are three veined and have entire margins. The lateral sepals are shaped slightly oblique, oblong and have obtuse to acute apices. Lateral sepals measure 4.1-5.8mm long and 1.5-2.4mm wide, are three veined and have entire margins. Petals are a lanceolate to narrowly obovate shape and have obtuse to subacuminate apices. Petals measure 3.6-5.0mm long and 1.4-2.1mm wide, are three veined and have entire margins. Labella are pendent, entire, an oblanceolate to elliptic shape and have subacuminate apices. Labella measure 3.2-4.5mm long and 1.6-3.5mm wide. Labella are three veined and have entire margins. There can be a few scattered ocelli found around the margins. Column are suberect or straight and measure 1.7-2.4mm long. Apical hoods are prolonged into rounded apices with an irregular to finely erose margin. Stelidia grow outwards from the top of the column and are almost equal to the apical hood. Stelidia are a linear-triangular shape, often slightly falcate and with acute apices.

Herbarium Specimens

Holotype

AMES

[Specimen 18867](#) (photo) (*Dendrochilum bicallosum*)

var minor

Philippine National Herbarium, (PNH)

Specimen – destroyed

AMES

[Specimen 18862](#) (photo) (*Dendrochilum confusum*)

Other herbarium specimens

Kew Botanical Gardens (K)

[Specimen 49393.000](#) (*Dendrochilum bicallosum*)

[Specimen 38594.000](#) (*Dendrochilum bicallosum*)

[Specimen 71102.000](#) (*Dendrochilum bicallosum*)

[Specimen 74905.000](#)

[Specimen 72192.000](#)

[Specimen K000079142](#)

[Specimen 71184.000](#) (var minor)

[Specimen 70871.000](#) (vat minor)

National Herbarium Netherlands, Leiden (L)

[Specimen L0269518](#)

[Specimen L0269519](#)

[Specimen L0269520](#)

[Specimen L0269521](#)

[Specimen L0269522](#)

[Specimen L0269523](#)

[Specimen L0269524](#)

[Specimen L0269525](#) (var minor)

Scent

No

Flowering Season

Flowering plants have been collected in the wild during May and from October to December. Flowering plants of variety minor have been collected in the wild during February, May and November.

Plants in cultivation in the northern hemisphere are known to flower at any time of the year. Plants flower during the winter in Australia (Cootes et al).

Cultivation

This species is common in cultivation worldwide, both varieties. It can be grown slightly warmer and drier than many other species.

This species is commonly known in the United States by its synonym *Dendrochilum bicallosum*.

Similar Species

Dendrochilum copelandii

Dendrochilum ecallosum (see this page for differences)

Dendrochilum propinquum (see this page for differences)

Other Information

Ames wrote (1909) that he found several of the leaves of Luzon originating specimens to be longer and broader than those from Mindoro. Ames presumed the more

luxuriant growth on the Luzon specimens was due to more favourable conditions for the plants.

There are two known spellings of this species. Rolf used *convallariaeforme* when transferring Schauer's original 1843 description of *Dendrochilum convallariaeforme* in 1904. Oakes Ames also continued to use the original name as did Henrik Pedersen in 1997. I believe that *convallariiforme* was only used by Pfitzer and Kranzlin and Kew have continued to follow that name in their world check list. For this website, I am not following the spelling on the world check list and I am staying with the original spelling and that has been used by the most taxonomists.

Ames described *Dendrochilum bicallosum* in 1908; Ames compared this species to *Dendrochilum mearnsii* and *Dendrochilum copelandii*. Ames wrote that *D. bicallosum* was larger in all its flower parts and differed from the other two species by the calli and in outline (Ames 1909). Henrik Pedersen grouped this species with *Dendrochilum propinquum* and *Dendrochilum ecallosum* and that it differs from the *D. graciliscapum* group by not having the transverse callus at the base of the labellum (Pedersen 1997).

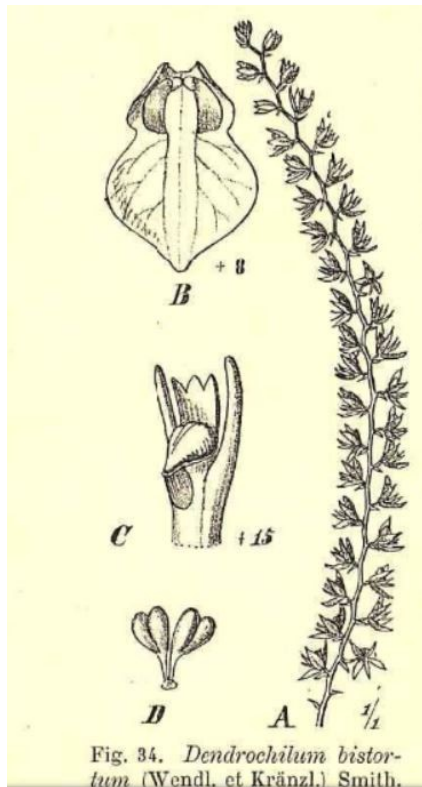
Henrik Pedersen reduced *Dendrochilum bicallosum* as a synonym because Ames description was a re-description of *Dendrochilum convallariaeforme* and *Dendrochilum bistortum*. Ames was not able to procure herbarium material of the two just mentioned.

Pedersen wrote (1997) that the drawing of *Dendrochilum convallariiforme* published by Pfitzer and Kranzlin is probably *Dendrochilum cornutum* or a species from that group.

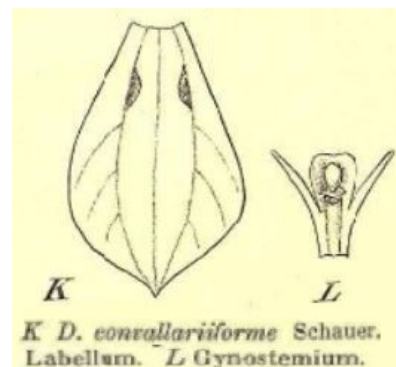
Ames wrote of *Dendrochilum confusum* "This is the small flowered plant which I described in Orchidaceae II as *Dendrochilum bicallosum* var *minor*. More material has come to hand which necessitates a revision of my former views. Having compared the type location and other sparse material of *Dendrochilum confusum* to *Dendrochilum convallariaeforme*, however I reached the contrasting result that only the size of the flowers seems to represent a consistent difference between the two taxa. Due to the inclusion of *Dendrochilum bicallosum* as a synonym under *Dendrochilum convallariaeforme*, it thus become necessary to publish the new combination *D. convallariaeforme* var. *minor*".

The epithet refers to a likeness with Lily of the Valley (*Convallaria* spp). The synonym *Dendrochilum bicallosum* was named on account of the two calli on the labellum (Cootes et al 1995).

The differences between the two varieties are the generally smaller nature of pseudobulbs and inflorescences in variety minor and the shape of the labellum in variety minor.



Left. The problematic illustration by Pfitzer and Kranzlin. This is not *Dendrochilum bistortum* (*convallariaeforme*) but likely *Dendrochilum cornutum*. Below is Kranzlin's drawing of the labellum and column of *Dendrochilum convallariiforme* in another publication. Although the labellum fits var *minor*, the arms of the stelidia are longer than normal, although this could be variation within a species. The photo below of var *convallariaeforme* has longer stelidia.



This photo of variety *convallariaeforme* was taken by Trey Sanders ©



The photos above and below of variety *minor* were taken by Peter Quakenbush on Santo Thomas in Makiling Forest Reserve, Laguna, Luzon and are used with permission ©



This photo of variety *minor* was taken by Malcolm Perry and is used with permission ©



This photo of variety *minor* was taken by Malcolm Perry and is used with permission ©

Reference –

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

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World Checklist of Selected Plant Families. 08 January 2009. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/> accessed **08 January 2009**.