

Dendrochilum clowesiae

A new *Dendrochilum* (Orchidaceae) species from the Philippines

Jim COOTES & George TIONG

The recent importation of a number of *Dendrochilum* species, from the Philippines, has revealed a species which we believe to be undescribed. A thorough check of the relevant literature for the Philippines, and her neighbouring countries, has not revealed any suitable epithet for this species, which we hereby describe as new to science and the orchid flora of the Philippines.

Dendrochilum clowesiae COOTES & G. TIONG *sp. nov.*

Holotype: NSW821681 cult: Australia, NSW, Lidcombe, Veronica CLOWES, 26 June 2014.

Type: Philippines, Luzon, Aurora Province: alt. ca 1,000 metres.

Plant description:

Growth habit: upright, sympodial, epiphytic herb. Pseudobulbs: clustered; cylindrical; tapering; to 3 cm long by 5 mm in diameter; unifoliate. Several non-persistent sheaths surround the base of the new pseudobulbs. Leaves: leathery; lanceolate; petiole short, 3 mm long, channelled; leaf blade with mid-vein not particularly prominent, to 6 cm long by 1.3 cm wide; apex bi-

lobed. Inflorescence: heteranthous; peduncle upright to slightly curving, 3.5 cm long; rachis pendulous 5.5 cm long, bearing ca. 40 blooms to 1.5 mm across. The blooms are alternating along the rachis, about 2 mm apart. There is a small circular bract behind each flower, 1.5 mm long by 1.5 mm wide, which prevents the flower opening fully. Flower colour: sepals and petals are bright yellow; labellum is orange basally, fading to yellowish at the apex. Dorsal sepal: narrowly oblong; apex acute, slightly reflexed; to 3.5 mm long by 1.25 mm wide. Petals: narrowly lanceolate; 2.75 mm long by 1 mm wide. Lateral sepals: narrowly lanceolate; 3 mm long by 1.5 mm wide. Labellum: three-lobed; 2 mm across; side lobes falcate, pointed; mid lobe small, circular, pointed. Column: minute.

Habitat and Distribution: *Dendrochilum clowesiae* has only been found in the mountains of Aurora Province, on the central east coast of Luzon, the largest island of the Philippine archipelago. It grows as an epiphyte, at elevations of around 1,000 metres.

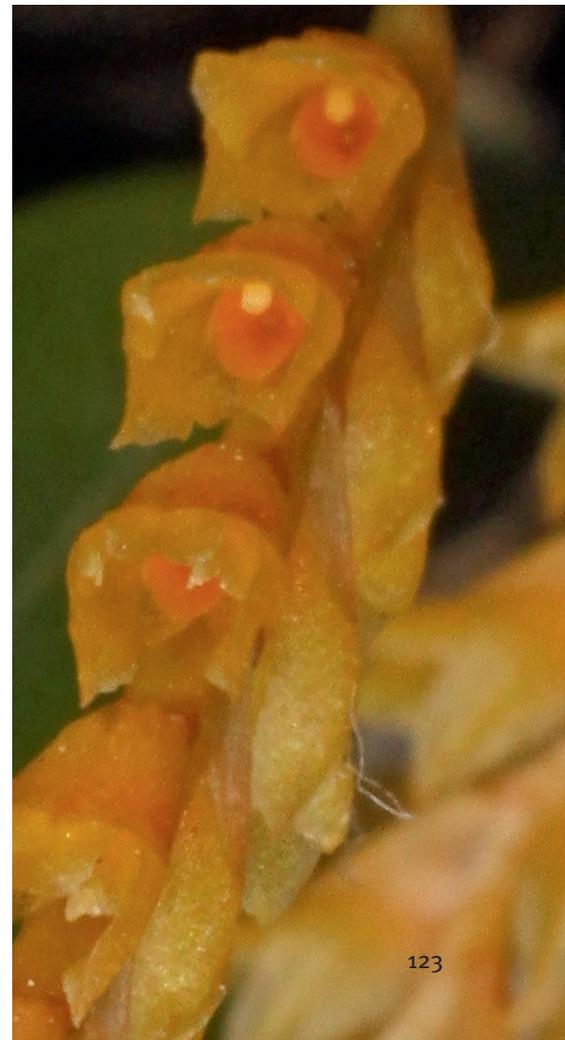
Discussion: The closest relative of *Dendrochilum clowesiae* COOTES & G. TIONG is *Dendrochilum pulcherrimum* (AMES) L.O. WILLIAMS, but differs from that species by its smaller stature in both plant size (10 cm vs 15 cm), and in flower size (1.5 mm vs 4 mm). The side lobes of the labellum of *Dendrochilum clowesiae* COOTES & G. TIONG are shorter than those of *Dendrochilum pulcherrimum* (AMES) L.O. WILLIAMS, which extend well past the mid lobe. Also, the flowers of *Dendrochilum clowesiae* do not open as widely as those of *Dendrochilum pulcherrimum* (AMES) L.O. WILLIAMS.

Dendrochilum clowesiae COOTES & G. TIONG is a member of the subgenus *Acoridium*, section *Heterantha* H.Æ. PEDERSEN. This section contains two other Philippine members *Dendrochilum pulcherrimum* (AMES) L.O. WIL-



LIAMS, and *Dendrochilum smithianum* (AMES) L.O. WILLIAMS.

Etymology: The specific epithet honours Mrs. Veronica CLOWES, long-time personal friend of the senior author. Mrs. CLOWES has a superbly grown collection of *Dendrochilum* species, along with many other choice orchids.



nesia – Indonesian Orchid Society of Jakarta

PEDERSEN H.Æ. 1997. The genus *Dendrochilum* (Orchidaceae) in the Philippines – a taxonomic revision. *Opera Botanica* 131, Copenhagen

SEIDENFADEN G. and WOOD J.J. 1992. The Orchids of Peninsular Malaysia and Singapore. Olsen and Olsen, Frederborg

SMITH J.J. 1984. (Reprint) *Die Orchideen von Java*. Figuren Atlas. Bishen Singh Mahendra Pal Singh, India

SMITH J.J. 1905. *Die Orchideen von Java*. E.J. Brill, Leiden

VALMAYOR H.L. 1984. *Orchidiana Philippiniana*. Eugenio Lopez Foundation, Inc. Manila, Philippines

WOOD J.J. 2001. *Dendrochilum of Borneo*. Natural History Publications (Borneo)

Dendrochilum ewae

A Spectacular New *Dendrochilum* (Orchidaceae) Species from Samar, Philippines

Ronny BOOS, Jim COOTES & Wally SUAREZ

During a field trip to the Visayan island of Samar, in the central Philippines, in December 2010, Ronny BOOS, Ravan SCHNEIDER and Mietek KUZMA found a most spectacular species of *Dendrochilum*. Digital images were taken and sent to Jim COOTES, Wally SUAREZ and colleagues. After considerable research we have concluded to have found a new species. Mietek KUZMA, who is an orchid enthusiast himself, and often explores for plants with his wife Ewa, wants to honor the latter by naming it in her honour.

***Dendrochilum ewae* Boos, Cootes, and W. SUAREZ sp. nov.**

Holotype: NSW821686 cult: Ronny Boos, 26 June 2014, Philippines, Leyte, Tacloban.

Type: Philippines, northern Samar: alt. ca 400 metres, in broadleaf forest.

Plant Description:

Growth habit: an upright, climbing, sympodial, epiphytic herb. Roots: 0.5 to 1 mm in diameter, appearing basally from pseudobulbs and internodes of the rhizome. Rhizome: one to two cm long by 3 to 5 mm in diameter; internodes from 5 mm to 1 cm apart. Pseudobulbs: narrowly ovate, 2 to 3 cm long by 1 cm wide at the base and 0.5 cm at the apex; basally persistent bracts surround the pseudobulb. Leaves: lanceolate, dark green, shiny, up to 25 cm long by 4 cm wide and 3 mm at the base a distinct ridge running lengthwise, petiole 5 cm long by 3 mm in diameter, channelled lengthwise. Bracts: pinkish in colour, 6 mm long by 1 mm wide. Inflorescence: appear with the new growth; from 25 to 35 cm long, 0.5 mm at the base by 1 mm at the apex, bearing up to 35 odourless blooms, 1.5 cm long by 1.3 cm wide, which all open at the same time. Flower colour: translucent cream. Dorsal sepal: oblong, 8 mm long by 3 mm wide at the base and 1 mm at the apex, inner surface densely covered with

short trichomes, apex obtuse. Lateral sepals: narrowly ovate, 8 mm long by 3 mm wide at the base and 1 mm at the apex, inner surface densely covered with short trichomes. Petals: lanceolate, 7 mm long by 2 mm wide at the base and 1 mm at the apex, inner surface densely covered with short trichomes. Labellum: 6 mm long by 1 mm wide at the base and 2 mm towards the apex, one central raised ridge runs from base to apex, tapering and curved at the apex; both surfaces glabrous. Column: 2 mm long by 0.5 mm wide, round at the base, cavity in the centre, semi-circular towards apex, hood-like with flattened edges extending over the anther cap; there are two very short arms at the base of the column. Anther cap: circular, 4 pollinia, birds head-like appearance. Pedicel: 3 mm long and 0.5 mm wide, channelled.



Habitat:

Several flowering plants were found in northern Samar, in dense broadleaf forest, at an altitude of approximately 400 metres.

Discussion:

Dendrochilum ewae seems unrelated to any other known *Dendrochilum* species. The sepals and petals are densely covered, on the inner sur-



PEDERSEN H.Æ. (1997). The genus *Dendrochilum* (Orchidaceae) in the Philippines – a taxonomic revision. *Opera Botanica* 131.

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SMITH J.J. (1984). (Reprint) *Die Orchideen von Java*. Figuren Atlas. - Bishen Singh Mahendra Pal Singh, India.

SMITH J.J. (1905). *Die Orchideen von Java*. E.J. Brill Leiden.

VALMAYOR H.L. (1984). *Orchidiana Philippiniana* - Eugenio Lopez Foundation, Inc. Manila, Philippines.

WOOD J.J. (2001). *Dendrochilum of Borneo*. Natural History Publications (Borneo.)

faces, by short trichomes, and this feature appears to be unique in the genus. The labellum is glabrous on both surfaces. *Dendrochilum ewae* is a member of section *Platyclinis* (BENTHAM) PFITZER.

Etymology:

The specific epithet honors Ewa KUZMA, the wife of orchid and bromeliad enthusiast Mietek KUZMA.

Acknowledgements:

The senior author would like to thank Mietek KUZMA for financing the field trip, and Ravan SCHNEIDER for accompanying.

Wally SUAREZ
98 Brgy. Sintangtala Mabitac
Laguna · Philippines

A New *Aerides* (Orchidaceae) species from the northern Philippines

Jim COOTES & Wally SUAREZ

For a number of years a beautiful *Aerides* species has been in cultivation, both in the Philippines, and more recently in Australia. It has been known as *Aerides quinquevulnera* var. *calayanensis* HORT., or *Aerides calayana* HORT., neither of which names have ever been validly published. Interestingly no-one appears to have studied

the plant and flowers closely.

When plants, imported as *Aerides quinquevulnera* LINDLEY, bloomed in the collection of the first author, a study was made, and we have concluded that we have an undescribed species. Vegetative traits evoke that of a large *Aerides leana* REICHENBACH F. with closely spaced leaf bases, and quite

broad, arching leaves. The flower morphology seems to be an amalgam of various Philippine species. The sharply upturned spurs call to mind *Aerides odorata* LOUREIRO; in contrast the spurs of *Aerides quinquevulnera* are directed forwards. The sidelobes are semi-falcate like in *Aerides quinquevulnera*, but are diagonally truncated instead of broadening at the ends, and their upper margins meet over the spur, much like in *Aerides leana*. The fragrance of the flowers is more akin to the Philippine *Aerides odorata* than that of *Aerides quinquevulnera*, which is likened to cosmetics. We consider that the most noticeable traits of this species which sets it apart from known species are the pastel pink flower colouration, and the short columns which are hidden behind the hooded dorsal sepal and the rather large sidelobes. The midlobe of *Aerides magnifica* COOTES & W. SUAREZ, is often bilobed, with shallowly retuse frontal margins.

***Aerides magnifica* COOTES & W. SUAREZ sp. nov.**

Holotype: NSW821691 cultivated: Jim COOTES, Australia, NSW, Riverwood. 26 May 2014.

Type: Philippines, Luzon, Calayan island.

Plant Description:

Growth habit: epiphytic; upright; monopodial. Roots: appearing from the base of the stem, freely branching, 6.5 mm in diameter at the base. Stems: terete, reaching lengths of 40 cm by 1 cm





in diameter; enclosed by leaf sheaths; with many internodes. Leaves: linear to narrowly oblong, leathery, unequally bilobed at the apex, arching, to 30 cm long by 4 cm wide. Inflorescences: horizontal to gently arching, bearing 4 pointed bracts; longer than

the leaves, rachis bearing many flowers about 2.6 cm in diameter, which are sweetly perfumed. Flower colour: base colour is white, heavily spotted with pastel pink; labellum dark pink; tip of spur is green. Dorsal sepal: ovate, hooded, 1.1 cm long by 9 mm wide. Petals: obovate, 1.2 cm long by 8.5 mm wide. Lateral sepals: broadly ovate, 1.3 cm long by 1.1 cm wide. Labellum: three lobed; side lobes oblong, apices rounded, 8 mm long by 7 mm wide, edges wavy; midlobe curving back towards the column, apex hidden by overlapping side lobes, 9 mm long by 5 mm wide, apex unequally bilobed. Overall the labellum is 1.9 cm long by 7 mm wide. Spur: short, conical, pointing upwards. Pedicel and Ovary: 2 cm long by 2 mm in diameter; there is a short, pointed floral bract at the base. Column: 3.5 mm long by 3 mm wide. Column foot: 9 mm long.

Habitat and Distribution: *Aerides magnifica* is a Philippine endemic, and has been found on the island of Cala-

yan in the Babuyan Group of Islands, composed of five major islands, located north of Luzon. The Calayan group consists of the islands of Calayan, Camiguin del Norte, Dalupiri, and Babuyan Island, while the island of Fuga is a part of the municipality of Aparri on mainland Luzon. The highest peak on the island of Calayan is Mt. Calayan which stands at 543 m asl, and there are anecdotal reports that *A. magnifica* has been found here. However, the whole island is generally mountainous, with a central ridge that is still thickly forested, and it may be possible that this new species is rather widely spread on the island. Field observations are still lacking and we do not know yet the altitudinal preferences or the ecology of this attractive species.

Etymology: The specific name is Latin for “majestic”, and is a reference to the countenance of the flowers of this stunning species.