

# ORCHIDEENJOURNAL

Publisher: V.D.O.F.  
Vereinigung Deutscher Orchideenfreunde e.V.

Vol. 3 · 1  
2015



*Epicrianthes davidii*

## Contents:

- Three New Species of Orchidaceae  
from the Philippines

Page 1 – 12  
ISSN-Internet 2195-772X  
1.10.2015

**Three New Species of Orchidaceae from the Philippines ..... page 3****Jim COOTES & Ronny BOOS**

Abstract: Three new orchid species are here named.

Keywords: Philippines, endemic, *Cirrhopetalum hampelii*, *Dendrobium hampelii*, and *Epicranthes davidii*.

Editors note : *Epicranthes* and *Cirrhopetalum* are today *Bulbophyllum*

Published by:  
VDOF e.V.  
Mittelcarthausen 2  
58553 Halver  
Germany  
email: schetorchi@online.de

Editor in chief: Roland SCHETTLER

**Date of Publication: 1.10.2015, 22:00 Uhr MEZ**

# Three New Species of Orchidaceae from the Philippines

**Jim Cootes and Ronny Boos**

**Abstract:** Three new orchid species are here named. **Keywords:** Philippines, endemic, *Cirrhopetalum hampelii*, *Dendrobium hampelii*, and *Epicrianthes davidii*.

A recent visit, by the authors to the southern Philippine island of Mindanao, in February 2015, has revealed three new orchid species, from the two orchid collections, which we visited.

The first collection we had the pleasure to inspect was that of Dr. Miguel DE LEON, and he was also our host during our stay in Mindanao. Dr. DE LEON's collection has reached mammoth proportions in a comparatively short time. It was the source of the holotype specimen of *Epicrianthes davidii* COOTES and BOOS.

The second collection we visited was that of Mr. Georg and Mrs. Chariz HAMPEL. This collection is also a commercial nursery having orchids and plants from all over the world, but specialising in the orchids of the Philippines. The nursery of Mr. and Mrs. HAMPEL was the source of the holotype specimens of *Cirrhopetalum hampelii* COOTES and BOOS, and *Dendrobium hampelii* COOTES and BOOS.

A study has been made by the authors, of the orchid floras of neighbouring countries and no matches could be found. We hereby name the following as species new to science.

## ***Epicrianthes davidii* COOTES and BOOS sp. nov.**

**Holotype:** CMUH00009780 Cult: PHILIPPINES, MINDANAO, Cagayan de Oro, Miguel DE LEON, 23 February 2015.

**Type:** PHILIPPINES, Mindanao, Misamis Oriental: alt. ca 700 metres.

**Growth habit:** pendulous, sympodial, to 80 cm long, branching, roots mainly at the base; rhizomes covered with persistent papery sheaths; carrying pseudobulbs at 1-2 cm intervals. Rhizome to 2mm in diameter. **Pseudobulbs:** four angled, slightly flattened, oblong, 1.5 cm long by 5 mm wide, unifoliate, desiccated. Brown with purplish tinge, upper surface grooved basally. **Leaves:** ovate, to oblong; edges involute, making the appearance of being tubular; distinctly grooved on upper surface; apices obtuse, leathery; underside dark green; upper surface purplish brown; to 5 cm long by 2 cm wide when flattened. **Inflorescence:** appearing from base of pseudobulbs; bearing 1-3 blooms at intervals. **Pedicel and ovary:** 1 cm long by 1 mm in diameter, grooved. Only a single flower appears. **Flower colour:** sepals dark red (claret) edged in white;

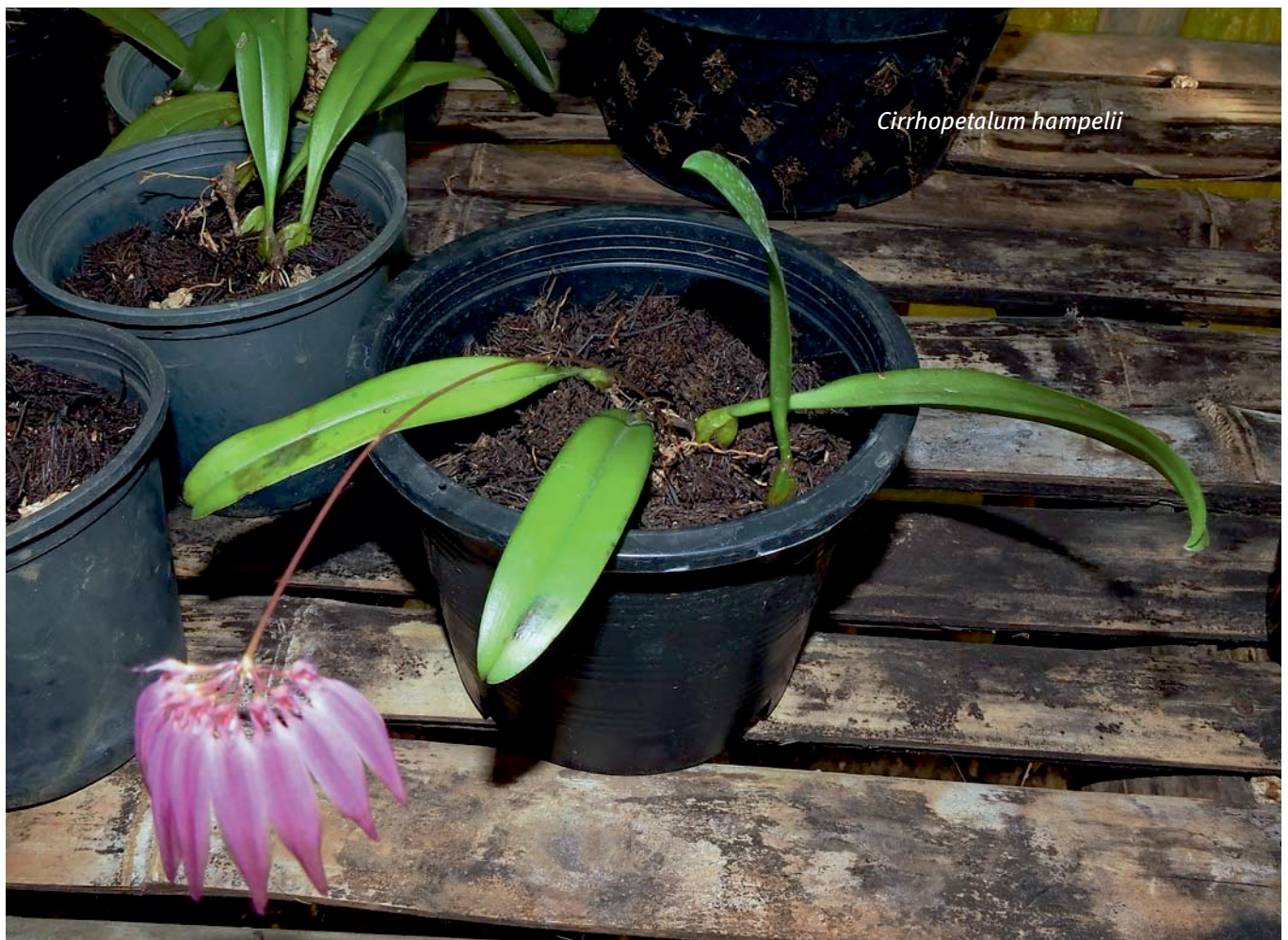








*Cirrhopetalum hampelii*



*Cirrhopetalum hampelii*





*Cirrhopetalum hampelii*

petals reddish; appendages dark green; labellum orange overlaid with red spotting. Column base colour white with red spotting. **Sepals:** ovate, becoming acute, edges involute at apices, 9 mm long by 4 mm wide; surface glabrous. **Petals:** minute; oblong; 1 mm long, bearing 5-6 appendages. **Appendages:** 4-5 mm long by 2 mm in diameter, surface papillose. **Labellum:** mid lobe ovate; constricted basally, surface minutely papillose, two basal ridges; 2 mm long by .8 mm wide; underside of labellum grooved. **Column:** 1.5 mm long by 1 mm wide; 2 obtuse stelia slightly longer than anther cap; minute, downward pointing with a tooth below stelia.

**Comparison:** *Epicrianthes davidii* can be compared with *E. glebodactyla*, but differs in the shape of the sepals which are acute apically; appendages of *E. davidii* are widely spread, pointing in different directions. Flowers are also considerably smaller at 1 cm across lateral sepals vs. 1.7 cm.

**Habitat:** Mindanao, Misamis Oriental, growing epiphytically on *Shorea* sp., at elevations of about 700 metres above sea level, in bright light to full sun. This species has also been observed, by the first author, in Bukidnon province.

**Etymology:** Named after Dr. David DE LEON, late grandfather of the owner of the holotype specimen, Dr. Miguel David DE LEON. Dr. David DE LEON was an eminent pathologist from the 1950s until the early 1980s.

### ***Cirrhopetalum hampelii* Boos sp. nov.**

**Holotype:** CMUH00009779 Cult: PHILIPPINES, MINDANAO, Misamis Oriental, Claveria, Georg Hampel, 28 February 2015.

**Type:** PHILIPPINES, Mindanao, Surigao del Norte: alt. ca 700 metres.

**Growth habit:** upright, sympodial herb. **Rhizome:** terete, 2 to 3 mm in diameter, bearing the pseudobulbs at 1 - 6 cm intervals. **Pseudobulbs:** tapering, four-angled, centrally grooved, 1.5 cm tall by 15 mm wide, unifoliate. **Leaves:** narrowly oblong, leathery, petiolate; petiole 1 - 2 cm long by 3 mm wide, channelled; leaf blade 9 -13 cm long by 1.9 - 4 cm wide. **Inflorescence:** upright, appearing from the base of the pseudobulb, to 20 cm long, bearing three small, pointed bracts. Blossoms are in an umbel. **Flower colour:** pink on the outer surface; dirty white on the underside. Labellum is deep red. **Dorsal sepal:** obovate, hooded, apex drawn out into a 5 mm long thread-like growth, edges hairy, overall 8 mm long by 2.5 mm wide. **Petals:** appear to remain enclosed inside the lateral sepals, tapering, edges hairy, 5 mm long by 1.5 mm wide. **Lateral sepals:** acutely triangular, joined throughout their length, 3.5 cm long by 4 mm wide (single lateral sepal measured). **Labellum:** fleshy, slightly recurved, tongue-like, apex rounded, two keels from base to apex, 1 central ridge; 3 mm long by 1 mm wide. **Column:** short, bearing two circular, fleshy, stelia at the apex, which point slightly downwards, margins curved slightly inwards, and are longer than the anther cap.

**Comparison:** Appears to be closest to *Cirrhopetalum cumingii* LINDLEY, but differs in the drooping habit of sepals, the two circular column wings at the apex of the column, which point slightly downwards.

**Etymology:** Named for Mr. Georg HAMPEL, in whose nursery this species was found.

**Habitat:** Mindanao, Surigao del Norte at 700 metres elevation. It grows as an epiphyte.

### ***Dendrobium hampelii* COOTES and BOOS *sp. nov.***

**Section:** *Crumenata* Pfitzer

**Holotype:** CMUH00009781 Cult: PHILIPPINES, MINDANAO, Misamis Oriental, Claveria, Georg Hampel, 28 February 2015.

**Type:** PHILIPPINES, Mindanao, Misamis Oriental: alt. *ca* 1,200 metres.

**Growth habit:** upright, sympodial herb. Roots at the base of the pseudobulbs are thin and fibrous. **Pseudobulbs:** basally terete to 8 mm long by 2 mm in diameter; then laterally flattened for three internodes, oblong to ovate, 6.5 cm long by 3.5 mm thick, tapering into a stem about 20 cm long by 2.5 mm wide which is also flattened. Occasionally further stems develop along the main stem. Leaves are in the apical portion of the stem. **Leaves:** narrowly ovate to lanceolate, thinly textured, distinctly ridged basally, apex rounded, 2 - 3.2 cm long by 5 - 6.5 mm wide. **Inflorescence:** single-flowered, appearing from a tubular bract which is 7 mm long and is at the apex of the stem. Flowers do not open widely. **Flower colour:** sepals and petals are cream to pale yellow. Callus on the labellum is dirty yellow to brownish orange. **Dorsal sepal:** broadly ovate, apex rounded, hooded over the column, 7 mm long by 4.5 mm wide, five-veined. **Petals:** subspathulate to oblong, apices obtuse to acute, forward pointing, 6 mm long by 3 mm wide. **Lateral sepals:** triangular, attached to the column foot, forming a rounded mentum, overall 9 mm long by 5.5 mm wide. **Labellum:** three lobed; side lobes are triangular, meeting over the column; mid lobe rectangular, edges erose. There are three thickened ridges running from the base, terminating into a large, upright, squarish callus. Overall 1.1 cm long by 4.5 mm wide; mentum slightly constricted centrally; distinct ridge on the column foot terminating in a ball-like gland that contains nectar. **Column:** short and stout; concave, with ridges on the upper surface. There are a number of small ridges around the stigmatic surface.

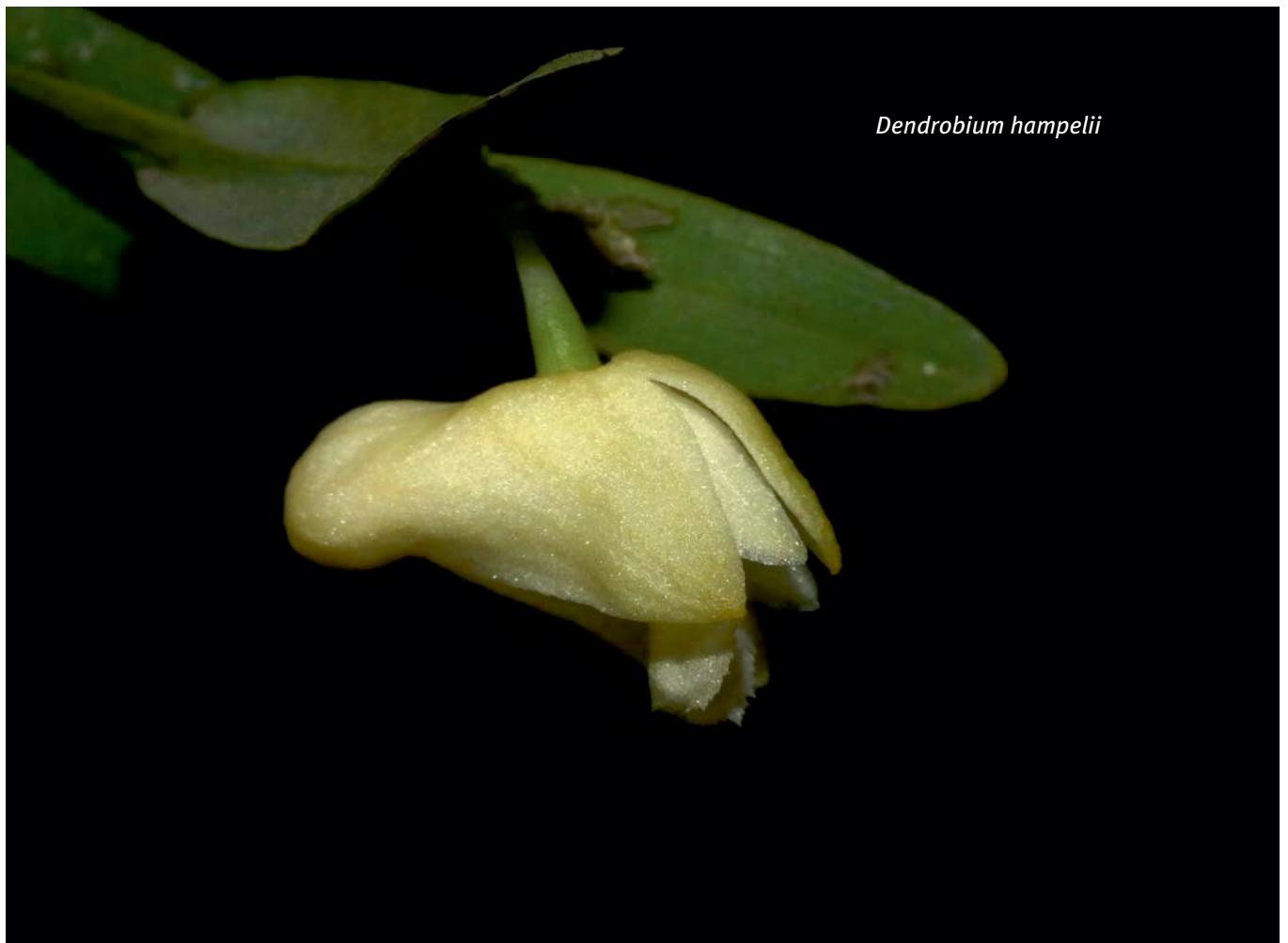
**Comparison:** Appears to be related to *Dendrobium blumei* (BLUME) LINDLEY but differs in the thin, flattened pseudobulbs, finely textured leaves and the erose margin of the labellum. It is also more closely related to the Bornean *Dendrobium lancilobum* J.J. WOOD, but differs in the shape of the side lobes and mid lobe of the labellum, and the lack of hairs around the callus.

**Etymology:** Named for Mr. Georg HAMPEL, in whose nursery this species was found.





*Dendrobium hampelii*



*Dendrobium hampelii*



*Dendrobium hampelii*

**Habitat:** Mindanao, Misamis Oriental at 1,200 metres, where it grows as an epiphyte.

**Acknowledgements:** The authors wish to take this opportunity to thank Dr. Miguel DE LEON, and Mr. Georg and Mrs. Chariz HAMPEL for their hospitality during out stays in their respective residences.

## References:

- AGOO E.M.G., SCHUITEMAN A., and de VOGEL E.F. 2003. *Flora Malesiana: Orchids of the Philippines Vol. 1* World Biodiversity Database CD-ROM Series. ETI/National Herbarium of the Netherlands.
- AMES O. 1905 to 1922. *Studies in the Family Orchidaceae* Fascicles I to VII. (Reprint) Bishen Singh Mahendra Pal Singh, India.
- AMES O. 1922 to 1930. *Schedulae Orchidianae* Volumes 1 to 10 (Reprint) Bishen Singh Mahendra Pal Singh, India.
- EVERYANOV L.V. 1994. *Identification guide to Vietnamese orchids (Orchidaceae - Juss.)* S. Petersburg.
- BARRETTO G., *et al.* 2011. *The Wild Orchids of Hong Kong*. Natural History Publications (Borneo)
- BEAMAN T., *et al.* 2001. *Orchids of Sarawak* - Natural History Publications (Borneo).
- CHAN C., LAMB A., SHIM P., WOOD J.J. 1994. *Orchids of Borneo Vol. 1.* - The Sabah Society, Kota Kinabalu, Sabah, Malaysia.
- Chen Singchi, Liu Z.J., Luo Y.B., Jin X.H., & Tsi Z.H. 2009. *A Field Guide to the Orchids of China*.
- COMBER J.B. 1990. *Orchids of Java* - Royal Botanic Gardens, Kew.
- COMBER J.B. 2001. *Orchids of Sumatra* - Natural History Publications (Borneo).
- COOTES J.E. 2011. *Philippine Native Orchid Species*. Katha Publishing Co. Inc. 388 Quezon Ave, Quezon City, Philippines.
- HANDOYO Frankie. 2010. *Orchids of Indonesia*. Indonesian Orchid Society.
- HANDOYO Frankie and Ramadani Prasetya. 2014. *Orchids of Sulawesi*. Indonesian Orchid Society.
- LIN Tsan-Piao. 1975. *Native Orchids of Taiwan Vol. 1* - Southern Materials Center, Taipei, R.O.C.
- LIN Tsan-Piao. 1987. *Native Orchids of Taiwan Vol. 2* - Southern Materials Center, Taipei, R.O.C.
- LIN Tsan-Piao. 1988. *Native Orchids of Taiwan Vol. 3* - Southern Materials Center, Taipei, R.O.C.
- LIN Wei-Min & Wang Yi-Fu. 2014. *The Wild Orchids of Taiwan - An Illustrated Guide*. KBCC Press Pingtung County, Taiwan.
- RAULERSON L. and RINEHART A. 1992. *Ferns and Orchids of the Mariana Islands*.



- SEIDENFADEN G. 1973. 'Notes on **Cirrhopetalum** LINDL.' - *Dansk Botanisk Arkiv* **29** (1).
- SEIDENFADEN G. 1985. 'Orchid Genera in Thailand **XII. Dendrobium** Sw.' - *Opera Botanica* 83.
- SEIDENFADEN G. 1992. The Orchids of Indochina. *Opera Botanica* 141.
- SEIDENFADEN G. and WOOD J.J. 1992. **The Orchids of Peninsular Malaysia and Singapore** - Olsen and Olsen, Fredensborg.
- SHIH-WEN Chung. 2008. **Orchids of Taiwan** Vol. 1 ISBN 9789860133141 and **Orchids of Taiwan** Vol. 2. ISBN 9789860173819.
- SMITH J.J. 1984. (Reprint) **Die Orchideen von Java**. Figuren Atlas. - Bishen Singh Mahendra Pal Singh, India.
- VALMAYOR H.L. 1984. **Orchidiana Philippiniana** - Eugenio Lopez Foundation, Inc. Manila, Philippines.
- VERMEULEN J.J. and O'BYRNE P. 2011. **Bulbophyllum of Sulawesi**. Natural History Publications (Borneo).
- VERMEULEN J.J., O'BYRNE P., and LAMB A. 2015. **Bulbophyllum of Borneo**. Natural History Publications (Borneo).
- WOOD H.P. 2006. **The Dendrobiums**. A.R.G. Gantner Verlag, Ruggell/Liechtenstein
- WOOD J.J., BEAMAN R.S., and BEAMAN J.H. 1993. **The Plants of Mount Kinabalu 2. Orchids** Royal Botanic Gardens, Kew and Toihaan Publishing Co., Kota Kinabalu, Sabah, Malaysia.
- WOOD J.J., BEAMAN T.E., LAMB A., CHAN C.L., and BEAMAN J.H. 2011. **The Orchids of Mount Kinabalu**. Two Volumes. Natural History Publications (Borneo) Kota Kinabalu.
- WOOD J.J. 2015. **Dendrobium of Borneo**. Natural History Publications (Borneo) in association with Royal Botanic Gardens, Kew.
- Wu Z.-G., Raven P. and Hong D.Y. (eds.) 2009. **Flora of China 25**. Science Press, Beijing & Missouri BG Press, St. Louis.
- ZHIHUI Xu, HONG Jiang, DEPING Ye, & ENDE Liu. 2010. **The Wild Orchids in Yunnan**. Yunnan Publishing Group Corporation & Yunnan Science and Technology Press.

Jim COOTES  
8 Salt Pan Road, Riverwood  
NSW, Australia

Ronni Boos