

12 Species Newly Recorded for Orchid Flora of VN

29/06/2011

We received this article "12 Species newly recorded for Orchid Flora of Vietnam" by Dr. Nguyen Thien Tich and Landscape Magazine HCM city.

We would like to introduce you all and sincerely thank Dr. Nguyen Thien Tich and Landscape Magazine, HCM city.

Additions To The Orchid Flora of Vietnam

1. NGUYEN Thien Tich
2. LUU Hong Truong
3. NGUYEN Vu Khoi
4. ANDRÉ Schuiteman
5. JAAP J. Vermeulen

I. 12 species newly recorded for Orchid Flora of Vietnam

1. NGUYEN Thien Tich
2. LUU Hong Truong
3. NGUYEN Vu Khoi

II. Description of species proposed as new for science

1. ANDRÉ Schuiteman
2. JAAP J. Vermeulen
3. NGUYEN Thien Tich

III. Description of species which was proposed as new for science

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2. JAAP J. Vermeulen
3. NGUYEN Thien Tich

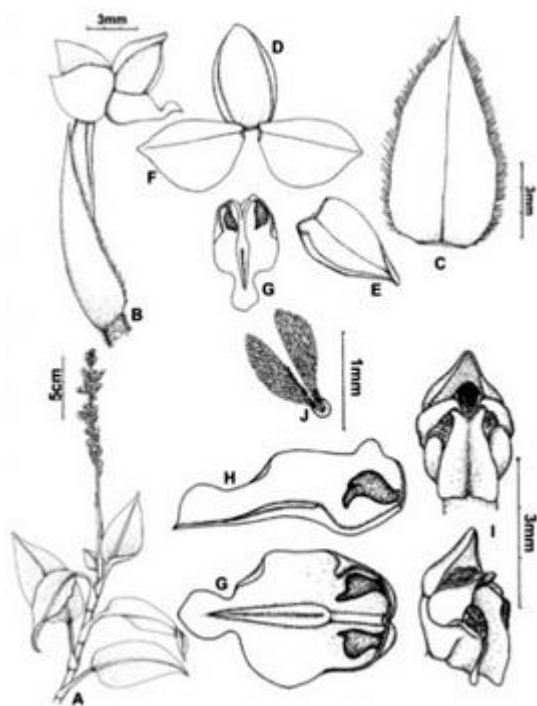
12 Species newly recorded for Orchid Flora of Vietnam

Species	Distribution out side VN	Recorded site in VN	Specimen	Published
1- Anoectochilus abbreviatus Seidenf.	Thailand, Nepal, China	Kon Plong, Kon Tum	N.T.Tich.02.08.10	Not yet
2- Bulbophyllum echinulus Seidenfaden	Thailand	Đà Lạt, Lâm Đồng	N.T.Tich 00.10.09	Hoa Cảnh No 11-2009: 4
3- Bulbophyllum gyrochilum Seidenfaden	Thailand	Đà Lạt, Lâm-Đồng	N.T.Tich 00.10.09a	Hoa Cảnh No 11-2009: 5

4- Dendrobium compactum Rolfe & Hackett	Thailand, Burma, China	Điện Biên	N. T. Tịch 25.10.10	Not yet
5- Dendrobium fuerstenbergianum Schltr.	Thailand	Dak Blo, Kon Tum	N. T. Tịch 04.08.10	Not yet
6- Dendrobium strongylanthum Rchb. F.	Thailand, China, Burma	Điện biên	N. T. Tịch 25.10.10a	Not yet
7- Geodorum citrinum Jacks	India, Myanma, Malaysia, Thailand	Tà Cú, Hàm Thuận, Bình Thuận	N. T. Tịch 30.05.09	Hoa Cảnh No 6-2009:4
8- Oberonia jenkinsiana Griffith.	Sikkim, Khasia, Assam, Burma, Thailand	Phú Quốc, Kiên Giang, Kron Plong, Kon Tum	N. T. Tịch 01.08.10	Wild Orchid of Phú Quốc 2009: 162-163
9- Peristylus lacertiferus (Lindl.) J.J. Sm.	from China to India, Thailand, Malaysia, Indonesia, Philippines ...	Phú Quốc, Kiên Giang	N. T. Tịch 18.08.09	Hoa Cảnh No. 9-2009:10, Wild Orchid of Phú Quốc 2009: 170-171
10-Pteroceras caligare (Ridl.) Holtt.	Malaysia, Singapore, Thailand	Đà Lạt, Lâm Đồng	N. T. Tịch 00.01.10	Hoa Cảnh No 1-2010: 6
11-Sunipia grandiflora (Rolfe) H. F. Hunt	Burma, Thailand	Đà Lạt, Lâm Đồng	N. T. Tịch 07.06.10	Hoa Cảnh No 7-2010 : 7
12-Grammatophyllum speciosum Bl.	Laos, Thailand, Burma, Malaysia, Indonesia, Philippines	Bãi Thơm, Phú Quốc, Kiên Giang	N. T. Tịch 04.06.10	Wild Orchid of Phú Quốc 2009: 124-125, Hoa Cảnh No. 6-2010:6-9

1 - *Anoectochilus abbreviatus* (Lindl.) Seidenf.





Distribution: Thailand, Nepal, China
 Vietnam: Kon Plong - Kon Tum
 Voucher specimens: N.T.Tịch.02.08.10H
 erbarium: VNM

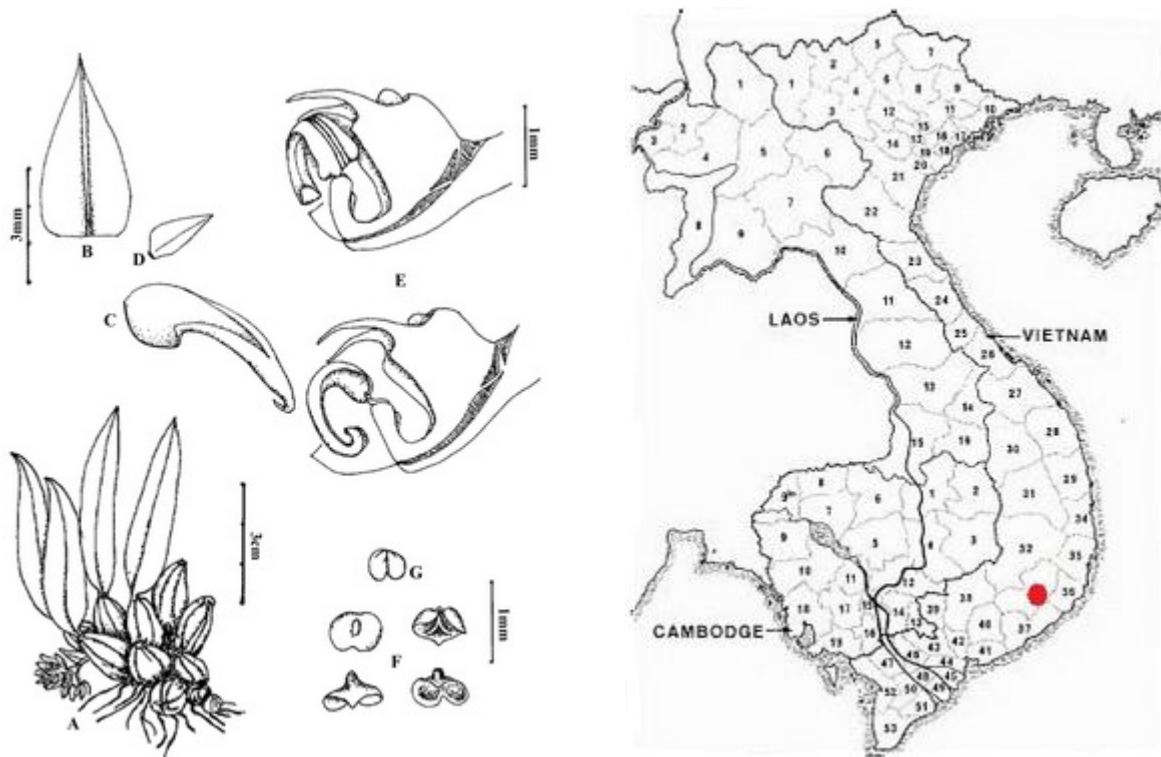
Terrestrial orchid, Inflorescence terminal, **Flowers** densely, sepal brown-pinkish, lip and petals white-pinkish. **Lip** with two glands in hypochile, one median keel from the base and splitting into two lines, disappear toward the top; epichile narrowly rounded with apex quite rise out, 1 mm. long and wide.

Recorded site in Vietnam: Mang Den commune, Kon Plong township, Kon Tum province.
 Specimen: N. T. Tịch 02.08.10VNM.
 Publications: Not yet.

Fig. 1: *Anoectochilus abbreviatus* Seidenf.: **a**– Flowering plant; **b**- Flower side view; **c**- Bract; **d**- Dorsal sepal; **e**- Lateral sepal; **f**- Petals; **g**- Lip; **h**- Longitudinal section of lip; **i**- Column different views; **j**- Polinarium.

2 - *Bulbophyllum echinulus* Seidenfaden





Distribution: Thailand

Vietnam: Đà Lạt, Lâm Đồng Prov.

Voucher specimens: N.T.Tịch 00.10.09

Herbarium: VNM

Reference: Hoa Cảnh No 11-2009: 4

Epiphytic orchid with pseudobulbs close to each other, one leaf. **Inflorescence** very short, many light yellow flowers. **Lip** coral-red, recurved, 3 low keel upper side, with several red hair at two margins toward the base.

Recorded site in Vietnam: Đà Lạt, Lâm Đồng.

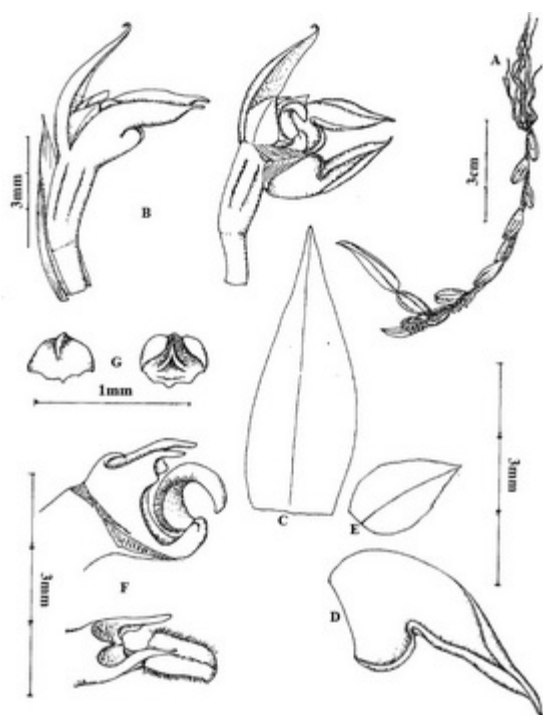
Specimen: N. T. Tịch 00.10.09 VNM., Collected at Le Trong Chau orchid garden.

Publications: Hoa Canh magazine, No. 11-2009: 4.

Fig. 2: *Bulbophyllum echimulus* Seidenf.: a- Flowering plant; b- Dorsal sepal; c- Lateral sepal; d- Petal; e- Column and Lip different views; f- Anther cap; g- Polinarium.

3- *Bulbophyllum gyrochilum* Seidenfaden





Distribution: Thailand

Vietnam: Đà Lạt, Lâm Đồng Prov.

Voucher specimens: N.T.Tịch 00.10.09a

Herbarium: VNM

Reference: Hoa Cảnh No 11-2009: 5

Epiphytic orchid. Pseudobulbs small, 1 leaf. **Inflorescence** shorter than pseudobulb, many brown- redish flowers. **Lip** dark red, recurved like round, tip slightly approaching the base, white hair at the margin.

Recorded site in Vietnam: Da Lat city, Lam Dong province.

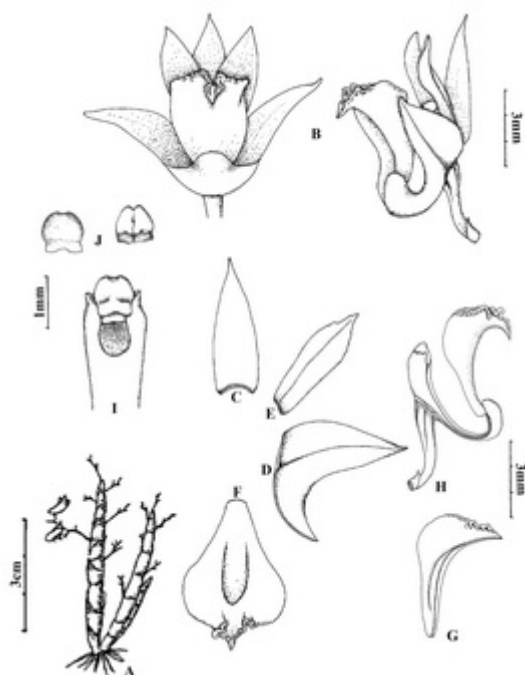
Specimen: N. T. Tịch 00.10.09a VNM. Collected at Le Trong Chau orchid garden.

Publications: Hoa Canh magazine No. 11-2009: 5.

Fig. 3: *Bulbophyllum gyrochinelum* Seidenf.: **a-** Flowering plant; **b-** Flower side views; **c-** Dorsal sepal; **d-** Lateral sepal; **e-** Petal; **f-** Column different views; **g-** Anther cap.

4- *Dendrobium compactum* Rolfe & Hackett





Distribution: Thailand, Burma, China

Vietnam: Điện Biên Prov.

Voucher specimens: N.T.Tịch 25.10.10

Herbarium: VNM

Epiphytic orchid 4-5 cm tall. **Inflorescence** short, many small flowered. **Flowers** yellowish-green. **Lip** 3 lobes: two lateral lobes round, anterior margin thick and undulate; mid-lobe acuminate, recurve toward the base, margin thick, undulate. One distinct median longitudinal ridge starts from a quarter of the base and end in front base of mid-lobe.

Recorded site in Vietnam: Điện Biên province.

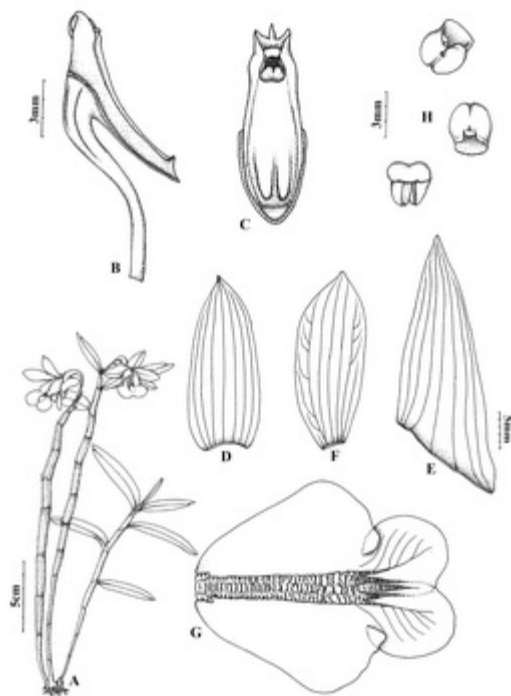
Specimen: N. T. Tịch 25.10.10 VNM. Collected at Le Trong Chau orchid garden, Dalat-Lâm Đồng.

Publications: Not yet.

Fig. 4: *Dendrobium compactum* Rolfe & Hackett: **a-** Flowering plant; **b-** Flower different views; **c-** Dorsal sepal; **d-** Lateral sepal; **e-** Petal; **f-** Lip; **g-** Longitudinal section of lip; **h-** Lip and Column side views; **i-** Column; **j-** Anther cap

5- *Dendrobium fuerstenbergianum* Schltr.





Distribution: Thailand

Vietnam: Dak Blo, Kon Tum Prov.

Voucher specimens: N.T.Tịch 04.08.10

Herbarium: VNM

Epiphytic orchid 20 - 22 cm tall. **Inflorescence** short, 1 or 2-flowered. **Flowers** white.

Lip three lobes: cordate at the tip, one longitudinal wide band with horizontal toothed crests, pink-rosy from the base, darkener to scarlet in front, end with 3-5 laminate keels into central yellow area of the mid-lobe.

Recorded site in Vietnam: Dak Blo watershed forest - Kon Tum.

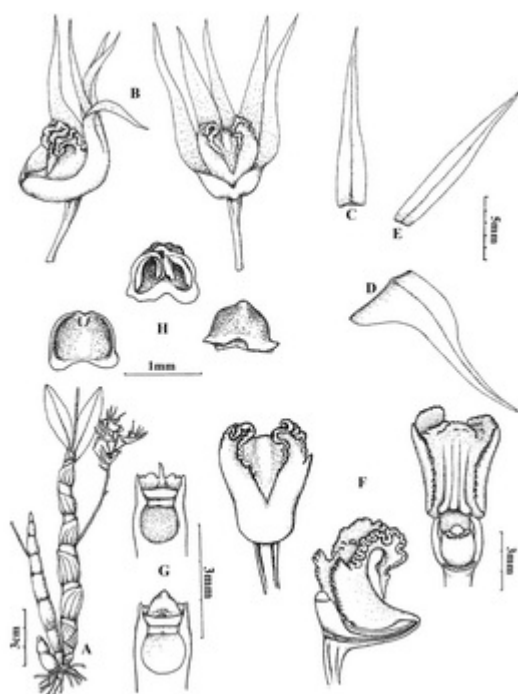
Specimen: N. T. Tịch 04.08.10 VNM.

Publications: Not yet.

Fig. 5: *Dendrobium fuerstenbergianum* Schltr: **a-** Flowering plant; **b-** Column and Ovary; **c-** Column Front views; **d-** Dorsal sepal; **e-** Lateral sepal; **f-** Petal; **g-** Lip; **h-** Anther cap and Polinarium.

6- *Dendrobium strongylanthum* Rchb. f.





Distribution: Thailand, Burma, China

Vietnam: Điện Biên Prov.

Voucher specimens: N.T.Tịch 25.10.10a

Herbarium: VNM

Epiphytic orchid. Inflorescence terminal or axillary opposite the leaves, 7-9-flowers. **Flowers** greenish. **Lip** 3 lobes: lateral lobes erect to suberect, with thick margin, fat teeth, dark brown-violet; mid-lobe acuminate triangular, strongly recurved, with dark brown-violet and thick, undulate, involute edges; one median longitudinal band raising from the base of hypochile, disappearing toward the base of epichile.

Recorded site in Vietnam: Dien Bien province

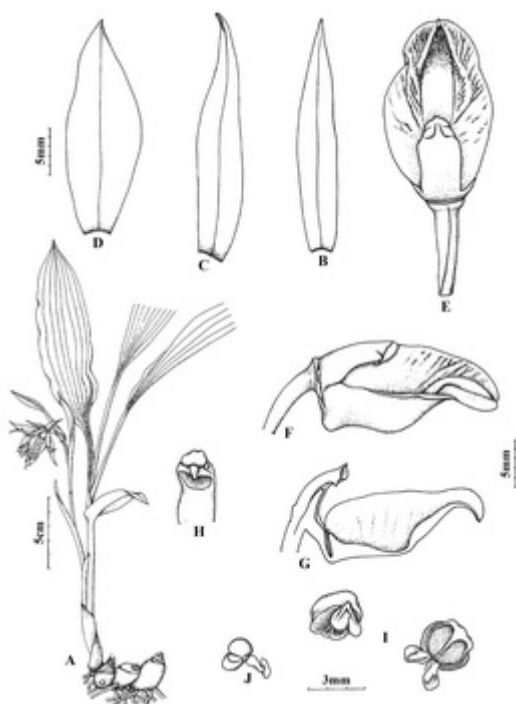
Specimen: N. T. Tịch 25.10.10 VNM. Collected at Le Trong Chau orchid garden

Publications: Not yet.

Fig. 6: *Dendrobium strongylanthum* Rchb. f. **a-** Flowering plant; **b-** Flower different views; **c-** Dorsal sepal; **d-** Lateral sepal; **e-** Petal; **f-** Lip different views; **g-** Column; **h-** Anther cap.

7- *Geodorum citrinum* Jacks





Distribution: India, Myanmar, Malaysia, Thailand

Vietnam: Takou, Binh Thuan Prov.

Voucher specimens: N.T.Tịch 30.05.09

Herbarium: VNM

Reference: Hoa Cảnh No 6-2009:4

Terrestrial orchid 40-50 cm tall. **Inflorescence** with rachis recurved, 5-7 white-greenish (greenish-citrous) flowers, Lip three indistinct lobes, curved inward to vesicle, thick at the median longitudinal area with cream-yellow at base, dark purple lines at the apical part.

Recorded site in Vietnam: Ong Dia stream - Ta Cu, Ham Thuan district, Binh Thuan.

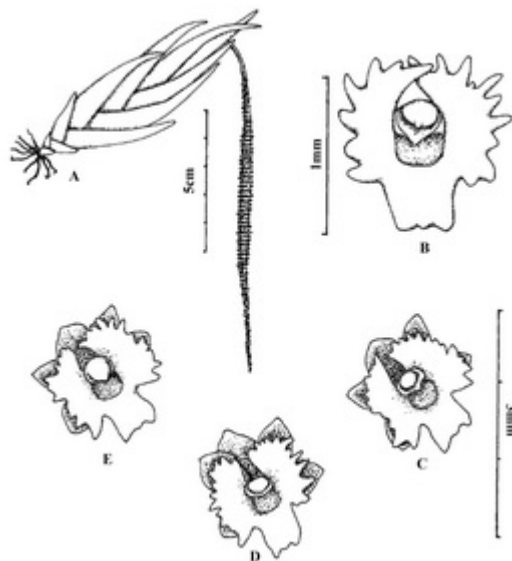
Specimen: N. T. Tịch 30.05.09 VNM.

Publications: Hoa Canh magazine No. 6-2009:4.

Fig. 7: *Geodorum citrinum* Jacks: a- Flowering plant; b- Dorsal sepal; c- Lateral sepal; d- Petal; e, f- Column and Lip different views; g- Longitudinal section of Column and Lip; h- Column; i- Anther cap; j- Polinarium.

8- *Oberonia jenkinsiana* Griffith





Distribution: India, Myanmar, Thailand
 Vietnam: Phú Quốc, Kiên Giang Prov;
 Kon Plong, Kon Tum Prov.
 Voucher specimens: N.T.Tịch 01.08.10
 Herbarium: VNM
 Reference: Wild Orchids of Phú Quốc 2009

Epiphytic orchid 3-5 cm tall. **Inflorescence** terminal, dense flowers. **Flowers** dark red, 1.5 mm diameter. **Lip** 3 lobes: two lateral lobes with obtuse teeth, mid-lobe almost square, about 0.4 mm x 0.4 mm, truncate or 3 teeth unequally.

Recorded site in Vietnam: Phu Quoc, Kien Giang; Mang Den, Kron Plong township, Kon Tum province.

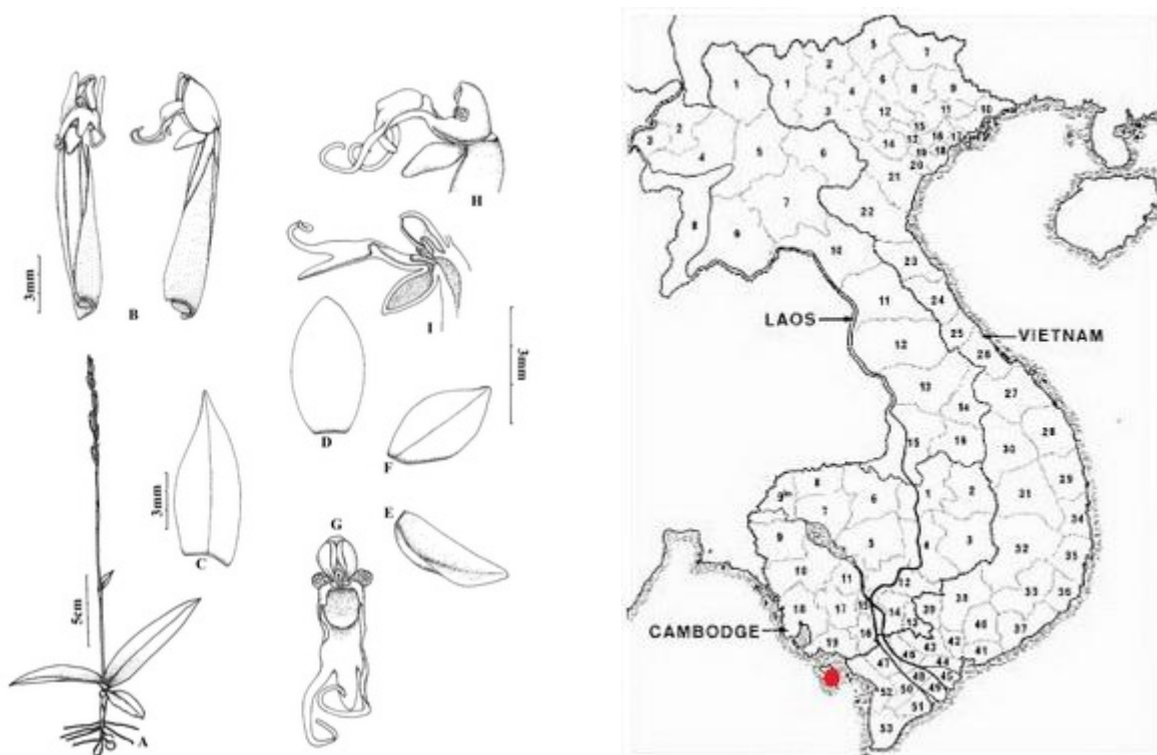
Specimen: N. T. Tịch 01.08.10 VNM.

Publications: Wild Orchid of Phu Quoc 2009: 162-163.

Fig. 8: *Oberonia jenkinsiana* Griffith. : a- Flowering plant; b, c, d, e- Flowers.

9- *Peristylus lacertiferus* (Lindl.) J. J.Sm.





Distribution: China to India, Thailand, Malaysia, Indonesia, Philippines, etc.

Vietnam: Phú Quốc, Kiên Giang Prov;

Voucher specimens: N.T.Tịch 18.08.09

Herbarium: VNM

Reference: Wild Orchids of Phú Quốc 2009

Hoa Cảnh No9-2009:10

Terrestrial orchid 5-6 cm tall, bearing 2-(3) leaves. **Flowers** small, 0.5 mm across, white with greenish at the tepal base. **Lip** three lobes equally, lateral lobe narrowly, with a keel on middle of lip.

Recorded site in Vietnam: Phu Quoc, Kien Giang.

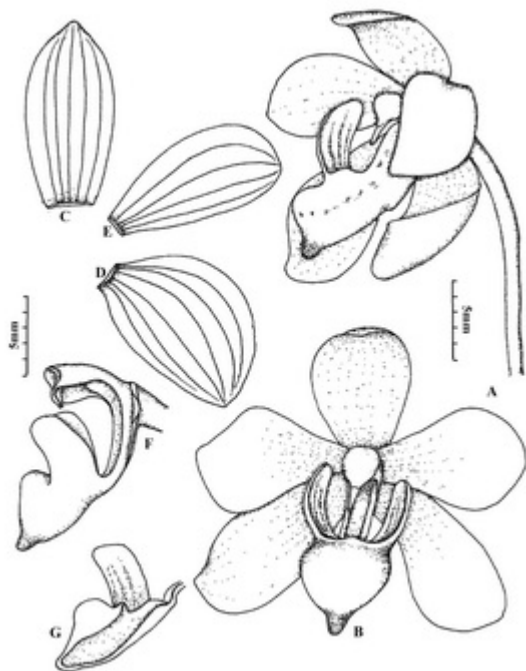
Specimen: N. T. Tịch 18.08.09 VNM

Publications: Hoa Canh magazine No. 9-2009:10, Wild Orchid of Phu Quoc 2009:170-171.

Fig. 9: *Peristylus lacertiferus* (Lindl.) J.J.Sm.: **a-** Flowering plant; **b-** Flower different views; **c-** Bract; **d-** Dorsal sepal; **e-** Lateral sepal; **f-** Petal; **g, h-** Column and Lip different views; **i-** Longitudinal section of Column and Lip.

10- *Pteroceras caligare* (Ridl.) Holtt.





Distribution: Malaysia, Singapore, Thailand
 Vietnam: Da Lat, Lam Dong Prov;
 Voucher specimens: N.T.Tịch 00.01.10
 Herbarium: VNM
 Reference: Hoa Cảnh No 1-2010: 6

Epiphytic orchid. Flower white with purple dots. **Lip** 3 lobes: two lateral lobe erect, purple stripes and spots inside; mid-lobe formed a dark purple sac, thick in front.

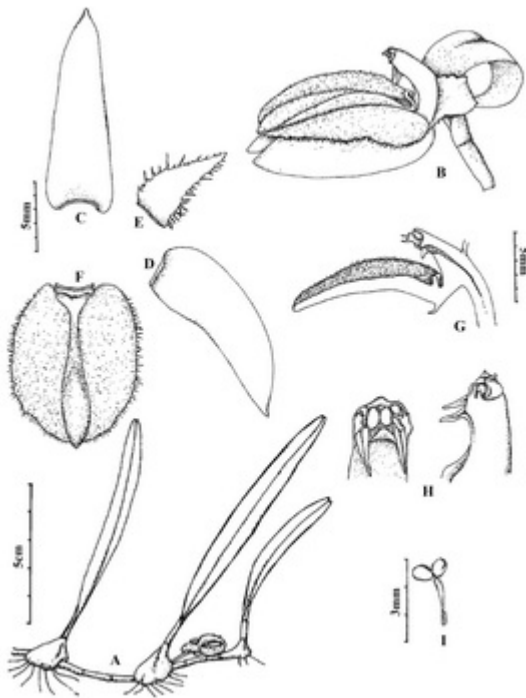
Recorded site in Vietnam: Da Lat, Lam Dong, cultivated at Le Trong Chau Orchid garden
 Specimen: N. T. Tịch 00.01.10 VNM.

Publications : Hoa Canh magazine No. 1-2010: 6.

Fig. 10: *Pteroceras caligare* (Ridl.) Holtt.: a, b- Flower different views; c- Dorsal sepal; d- Lateral sepal; e- Petal; f- Column and Lip; g- Longitudinal section of Lip.

11- *Sunipia grandiflora* (Rolfe) H.F. Hunt





Distribution: Burma, Thailand
 Vietnam: Da Lat, Lam Dong Prov;
 Voucher specimens: N.T.Tịch 07.06.10
 Herbarium: VNM
 Reference: Hoa Cảnh No 7-2010: 7

Pseudobulb pyramid, flattened and widened at base. **Leaf 1, Inflorescence** very short, bearing one large dark purple-violet flower. Lip densely fleshy hair at the upper side, one median longitudinally convex band, concave behind and bar by high ridge at the base.

Recorded site in Vietnam: Dalat city - Lam Dong province. Cultivated at Le Trong Chau Orchid garden.

Specimen : N. T. Tịch 07.06.10VNM.

Publications : Hoa Canh magazine No. 7-2010: 7.

Fig. 11: *Sunipia grandiflora* (Rolfe) H.F. Hunt: **a-** Flowering plant; **b-** Flower; **c-** Dorsal sepal; **d-** Lateral sepal; **e-** Petal; **f-** Lip; **g-** Longitudinal section of Column and Lip; **h-** Column; **i-** Polinarium.

12- *Grammatophyllum speciosum* Bl.





Distribution: Laos, Thailand, Burma, Malaysia, Indonesia, Philippines

Vietnam: Phú Quốc, Kiên Giang Prov

Voucher specimens: N. T. Tịch 04.06.10

Herbarium: VNM

Reference: Wild Orchids of Phú Quốc 2009

Hoa Cảnh No 6-2010:6-9

Almost publications before 2000 on the Orchid of Vietnam, noted: Annam & Cochinchina, Poulo Ding-Ding in the distribution area.

However, according to **Seidenfaden** "The Orchids of Indochina" (1992: 345) noted that "*the locality 'Cochinchina' must be disregarded*" because: "Study of Flayson's report shows clearly that his Pulo Dinding is placed on the west coast of the Malayan Peninsula,..."

From 3 to 6 June 2010, we returned to Phu Quoc. We were guided into the forest at Bai Thom, we discovered one huge tree that was cut down. There were traces of this orchid. The remains of the stem were 1.5 - 2 m high.

Recently, a Phu Quoc ranger caught a person who illegally harvested this species on Bai Thom. **All of these cases originated in the Bai Thom forest. Therefore, the discovery of Grammatophyllum speciosum in Bai Thom, Phu Quoc reveals that this species appears in Vietnam.**

Distribution: Laos, Thailand, Burma, Malaysia, Indonesia, Philippines.

Recorded site in Vietnam: Bai Thom, Phu Quoc, Kien Giang

Publications: Wild Orchid of Phu Quoc 2009: 124-125, Hoa Canh magazine No. 6-2010:6-9

A new species of *Dendrobium* Section *Formosae* (Orchidaceae) from Vietnam.

***Dendrobium daklakense* N.T.Tich, Schuit. & J.J.Verm.**, sp. nov.

Nguyen Thien Tich¹, André Schuiteman², and Jaap J. Vermeulen³

A *D. wattii* (Hook.f.) Rehb.f. inflorescentia 5-7-floro, lobo mediano labellii parvi angusti acuti callo magni instructi differt.

Type: N.T. Tich 20.11.09 (holotype VNM), from Vietnam, Daklak province, flowering in cultivation November 2009.

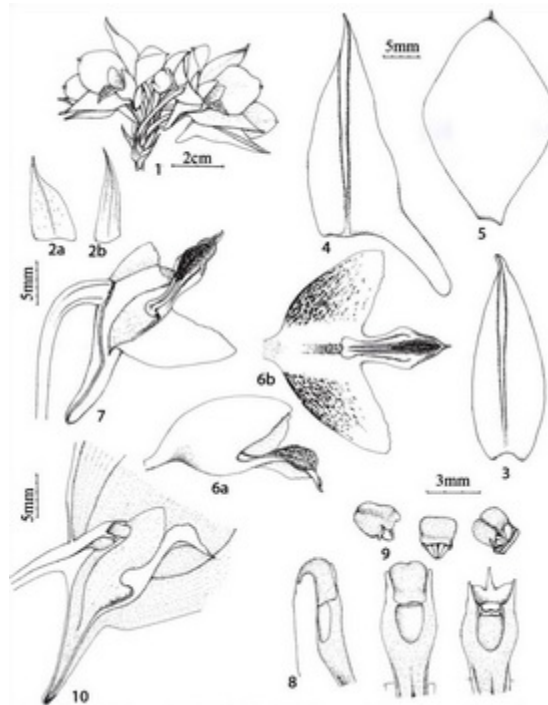


Fig. 13: *Dendrobium daklakense* N.T.Tich, Schuit. & J.J.Verm.: 1- Inflorescence; 2a- Bract; 2b- Floral bract; 3- Dorsal sepal; 4- Lateral sepal; 5- Petal; 6a- Side view of lip; 6b- Flattened lip; 7- Column and lip; 8- Column, different view; 9- Anther cap and Pollinia, different view; 10- Lip and column, longitudinal section.

Epiphyte. Stems clustered, cane-like, terete-slightly fusiform. Leaves dark green above, paler below, densely covered with blackish hairs, apex unequally bilobed, the longest lobe acuminate, below with 3 distinct veins. **Inflorescences** very short, suberect, subterminal as well as lateral in the apical part of the stem opposite the leaves, densely 5-7-flowered; peduncle inconspicuous, entirely enclosed by peduncle-scales, 0.4 cm long; rachis less than 1 cm long. Floral bracts obliquely triangular, wide, acuminate, concave, soon drying out and becoming brownish, persistent, outside with blackish hairs.

Flowers widely opening, about 5 cm across; sepals and petals pure white, glossy, thick, rigid, lip orange-yellow with orange-red keels and papillae, white at the very base, on the lateral lobes with orange-red raised lines, apical part of the mid-lobe sometimes whitish, column and anther white, pollinia orange-yellow, pedicel with ovary white, greenish-white toward the apex. Sepals keeled outside. Dorsal sepal ovate, 2.3 by 0.85 cm, mucronate. Lateral sepals obliquely narrowly ovate-triangular, 2.5 by 1 cm (3.3 cm long along anterior margin, 1.7 cm wide at base), mucronate; mentum narrowly conical, 1.5 cm long. Petals broadly rhombic-elliptic, 2.2 by 1.2-1.5 cm, mucronate. Lip 3-lobed, clawed, when flattened 2.9 by 2 cm including the 0.8 cm long claw; lateral lobes erect, concave, obliquely triangular, 1 cm long along anterior margin, 1.7 cm long along posterior margin, 1 cm wide at base, obtuse, sparsely obtusely dentate-erose in apical part of anterior margin, inside with raised lines arising from the base and the posterior margin, the lines decurrent towards the apex; mid-lobe narrowly rhombic, 1 by 0.4 cm, at the base 0.2 cm wide, margins undulate and strongly inrolled in apical half, apex mucronate; mid-lobe in the basal half with two short lateral keels and with three median keels arranged into a fleshy longitudinal band, in the apical half with a large, semiglobose, papillose-rugose, somewhat laterally flattened callus, the three median keels continue backwards to just below the mid-lobe where they merge into a fleshy emarginate-globose callus, below this callus with a longitudinal median band of papillae that gradually vanishes towards the base of the lip, the basal part of the lip densely verrucose. Column 0.6 cm long, 0.3 cm wide, densely minutely verrucose in front; column-foot grooved, 0.6-0.7 cm long, densely minutely verrucose; anther almost square in outline, 0.25 by 0.25 cm, densely minutely verrucose; pollinia 4, in 2 pairs, 0.15 cm long. Pedicel with ovary clavate, 2.8-3 cm long, slightly sulcate, glabrous.

Distribution: Vietnam, Daklak Province.

Habitat: Epiphyte in semi-deciduous forest at 400-500 m above sea level.

Notes: This is such a distinctive species that without a DNA analysis it is hard to pinpoint its nearest relatives among the other known members of section *Formosae*. In the very broad petals and the narrow, spur-like mentum *D. daklakense* resembles *D. wattii* (Hook. f.) Rchb. f. and related species, but the relatively small and narrow, pointed mid-lobe of the lip with its large callus is quite different from these species. The large number of flowers in the inflorescence (5-7) is unique among the continental Asian species. In this respect *D. daklakense* resembles *D. lowii* Lindl. and *D. bostrychodes* Rchb.f. from Borneo, but these two species differ considerably in the shape and ornamentation of the lip.