RESEARCH ARTICLE

Species of Orchids (Orchidaceae) Newly Recorded to the Flora of Vietnam

Leonid V. Averyanov

Komarov Botanical Institute of the Russian Academy of Science, Prof. Popov str., 2, St.-Petersburg, 197376, Russian federation. Email: av_leonid@mail.ru; av_leonid@yahoo.com

(Manuscript received 6 May 2009; accepted 10 August 2009)

ABSTRACT: *Bulbophyllum cauliflorum, B. dissitiflorum, B. depressum, B. leopardinum, B. nematocaulon, B. pectinatum, B. trichocephalum, Cleisomeria pilosulum, Dendrobium jenkinsii, D. lagarum, D. monticola, D. strongylanthum, Eria affinis, Eulophia chaunanthe, Liparis resupinata, Peristylus laceriferus, Thrixspermum acuminatissimum* and *Uncifera lancifolia* were discovered in Vietnam during 2006-2009 at first for the Vietnamese orchid flora. Geographical position of all discovered localities and illustrations for these species are presented.

KEY WORDS: Orchidaceae, new orchid species, flora of Vietnam.

INTRODUCTION

During botanical expeditions on the territory of Vietnam in period of 2006-2008 years, 18 orchid species new to the country flora were discovered at first. Names and localities of these species are listed below in alphabetical order. Data on types, general distribution and illustration are additionally given for each recorded species. Discovery of these species essentially expands our current knowledge on endemism and phyto-geographic connections of modern Indochinese flora. According to their distribution largest part of discovered species belongs to "*Himalayan*" geographic group spreading from Himalaya to Myanmar, southern China and Indochina. These 9 species are - *Bulbophyllum cauliflorum, B. leopardinum, B. pectinatum, B. trichocephalum, Dendrobium jenkinsii, D. monticola, D. strongylanthum, Liparis resupinata* and *Uncifera lancifolia*. Species endemic to Indochinese Peninsula form next group of 5 species - *Bulbophyllum dissitiflorum, Cleisomeria pilosulum, Dendrobium lagarum, Eria affinis* and *Eulophia chaunanthe*. Last 4 species belong to "*Malesian*" species spreading into Indochina from Indonesia (*Bulbophyllum nematocaulon, Thrixspermum acuminatissimum*) and species of very broad distribution in tropical Asia (*Bulbophyllum depressum, Peristylus laceriferus*). Voucher duplicate specimens of mentioned collections are housed at HN and LE Herbaria, original plant photos are integrated into personal image data-base of the author.

TAXONOMIC TREATMENTS

New orchid species in the flora of Vietnam Figs. 1-3

1. ***Bulbophyllum cauliflorum*** Hook.f., 1890, Fl. Brit. India 5: 758. Fig. 1A

Described from NE. India ("*India, Khasia Hills*"). Lectotype ("*Griffith Kew Distr. 5139*") – K. Distribution. NE. India, Bhutan, Myanmar, S. China, N. Vietnam.

N. Vietnam, Nghe An province, Tuong Duong district, Tam Hop municipality, Pa Lom village, around point 19º04'41''N 104º20'51''E at elevation 1400-1500 m a.s.l., submontane primary evergreen closed forest on very steep mountain slopes composed with stratified solid shale, creeping epiphyte on tall mossy trees on very steep shady mountain slope, flowers yellowish, locally common, 24 March 2007, *L.Averyanov, P.K.Loc, N.V.Trai et al., HLF 6948*.

2. ***Bulbophyllum depressum*** King & Pantl., 1897, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 66: 585. – *B. hastatum* T.Tang & F.T.Wang, 1974, Acta Phytotax. Sin. 12: 44. Fig. 1B

Described from NE. India ("*Khasia Hills; in woodland hollows between Jowai and Jhorain; Jaintia Hills; elevation 3000 feet*"). Type ("*Pantling No 627*) - K? Distribution. N. India, S. China, Myanmar, Thailand, Laos, N. Vietnam, Java, Sumatra, Kalimantan.

N. Vietnam, Quang Binh province, Minh Hoa district, Dan Hoa municipality, Chuong Lon mountain, Vietnam-Laotian border, about 6 km to N of Cha Lo borders station, around point 17º44'04''N 105º46'53''E, primary broad-leaved forest on very steep slopes and rocky cliffs of remnant mountain composed with solid marble-like highly eroded limestone at elevation 400-700 m a.s.l., epiphyte on tall trees, not rare, 19 April 2008, *L.Averyanov, P.K.Loc, N.T.Vinh, N.S.Khang, HAL 11706a*.

3. ***Bulbophyllum dissitiflorum*** Seidenf., 1979, Dansk Bot. Ark. 33: 116. Fig. 1C

臺灣大學學術期刊資料庫

Described from N Thailand ("*Doi Suthep*"). Type ("*GT 2785*") – C. Distribution. Thailand, Laos, S. Vietnam.

S. Vietnam, Dac Lac province, Buon Don district, Krong Na municipality, Yok Don national park, 12º51'39''N 107º41'49''E, dry open *Dipterocarpus* forest and grassy woodlands with short bamboo on ferralite thin weathered soils at elevation about 200 m a.s.l., creeping epiphyte on tall tree, locally very common, 14 March 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HLF 7123*; Yok Don national park, Yok Don Ridge around point 12º51'12"N 107º41'18"E, primary dry evergreen forest on thin gray soils derived from sandstone with quartzite dykes along ridge edge at elevation 300-350 m a.s.l., creeping epiphyte, flowers yellowish-brown, tepals with dark brown-purple stripes, lip yellowish, very common, 18 March 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HLF 7178*; Dac Lac province, Ea H'Leo district, Ea Ral municipality, around point 13º13'54''N 108º11'03''E, primary swamp coniferous forest with *Glyptostrobus pensilis* at elevation about 570 m a.s.l., creeping epiphyte in canopies of tall trees including *Glyptostrobus,* very common, 4 April 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HAL 11419*; S. Vietnam, Tay Ninh province, Tan Bien district, Tan Binh municipality, Lo Go Xa Mat national park around point 11°36'47"N 105°52'01"E, dry evergreen closed primary shady *Dipterocarpus* forest on thin soils at elevation about 13 m a.s.l., creeping epiphyte on tall tree, flowers yellowish-brown, rare, 20 December 2008, *T.H.Thai, Averyanov L., P.K.Loc et al., HLF 7495*, d-EXSICCATES OF VIETNAMESE FLORA *0145/HLF 7495*; Lo Go Xa Mat national park around point 11°37'43"N 105°52'26"E, slightly logged primary closed evergreen broad-leaved lowland forest with the dominance of species of Dipterocarpaceae (*Dipterocarpus dyeri, D. costatus, D. alatus, D. obtusifolius, Shorea* sp.) mixed with *Lagerstroemia calyculata, Irvingia malayana, Anogeissus acuminata, Sindora siamensis, Pterospermum* sp., on thin soils at elevation about 13 m a.s.l., epiphyte on tall old tree, flowers brown, rare, 26 December 2008, *T.H.Thai, L.Averyanov, P.K.Loc et al., HLF 7676*; Lo Go Xa Mat national park around point 11°37'38"N 105°52'45"E, evergreen shady primary and secondary forest on thin ferralite soils at elevation about 13 m a.s.l., creeping epiphyte on old trees in shady places, flowers brown, occasional, 28 December 2008, *T.H.Thai, L.Averyanov, P.K.Loc et al., HLF 7740*; Lo Go Xa Mat national park around point 11°38'18"N 105°56'36"E, evergreen shady primary and secondary forest on thin ferralite soils at elevation about 13 m a.s.l., creeping epiphyte on old tall tree in shady place, flowers brown, occasional, 28 December 2008, *T.H.Thai, L.Averyanov, P.K.Loc et al., HLF 7749*.

4. ***Bulbophyllum leopardinum*** (Wall.) Lindl., 1829, in N.Wallich, Numer. List: 1918. - *Dendrobium leopardinum* Wall., 1826, Tent. Fl. Napal.: 39. Fig. 1D

Described from Nepal ("*Chandaghiri*"). Type ("*Wall. 1981*") – K. Distribution. Nepal, Bhutan, NE. India, Myanmar, Thailand, Laos, N. Vietnam.

N. Vietnam, Lai Chau province, Sin Ho district, Phin Ho municipality, Ta Genh village, around point 22º28'26"N, 103º17'46"E, 1290 m, slopes of non-limestone mountains, epiphyte, locally common, 13 Jun 2006, *P.K.Loc, N.T.Vinh, N.S.Khang et al., HAL 8810*.

5. ***Bulbophyllum nematocaulon*** Ridl., 1924, Fl. Mal. Penins. 4: 63. Fig. 1E

Described from Peninsular Malaysia ("*Perak, ... Bukit Fraser*"). Syntypes ("*Scortechini 614*", "*Burkill & Holttum 8955*") – SING, K. Distribution. Peninsular Malaysia, Kalimantan, N. Vietnam.

N. Vietnam, Ha Giang province, Quan Ba district, Can Ty municipality, Bat Dai Son Mountains, Bat Dai Son nature reserve, rocky limestone at elevation about 1050 m a.s.l., epiphyte, 2007, *N.T.Vinh, sine n.*

6. ***Bulbophyllum pectinatum*** Finet, 1897, Bull. Soc. Bot. France 44: 268. Fig. 1F

Described from S. China ("*Yunnan: Between Mienning and Yung Chan*"). Type ("*Duc d'Orl.*, sine no") – P. Distribution. NE. India, Myanmar, S. China, Thailand, N. Vietnam.

N. Vietnam, Lao Cai province, Sa Pa district, SE slopes of Hoang Lien Son Ridge, around Sa Pa town at elevation around 1500-2000 m a.s.l., creeping epiphyte, flowers pinkish with small red marks, rare, 26 April 2008, *L.Averyanov, P.K.Loc, HAL 11844*.

Doubtful record of this species (reported with questionmark) for N. Vietnam ("*Tonkin*") by Gagnepain (Seidenfaden, 1979) was probably true. Our discovery confirm occurrence of this species in NW. Vietnam at least in Sa Pa town area in Lao Cai province.

7. ***Bulbophyllum trichocephalum*** (Schlechter) Tang et F.T.Wang, 1951, Acta Phytotax. Sin. 1: 90. - *Cirrhopetalum trichocephalum* Schlechter, 1919, Repert. Spec. Nov. Regni Veg. Beih. 4: 72. Fig. 1G

Described from S. China ("*Yunnan: Szemao*"). Syntypes ("*Henry 12286, 12286a*") – AMES, K. Distribution. NE. India, S. China, Thailand, N. Vietnam.

N. Vietnam, Lai Chau province, Sin Ho district, Ma Quai municipality, Tua Vang mountain ridge, around

臺灣大學學術期刊資料庫

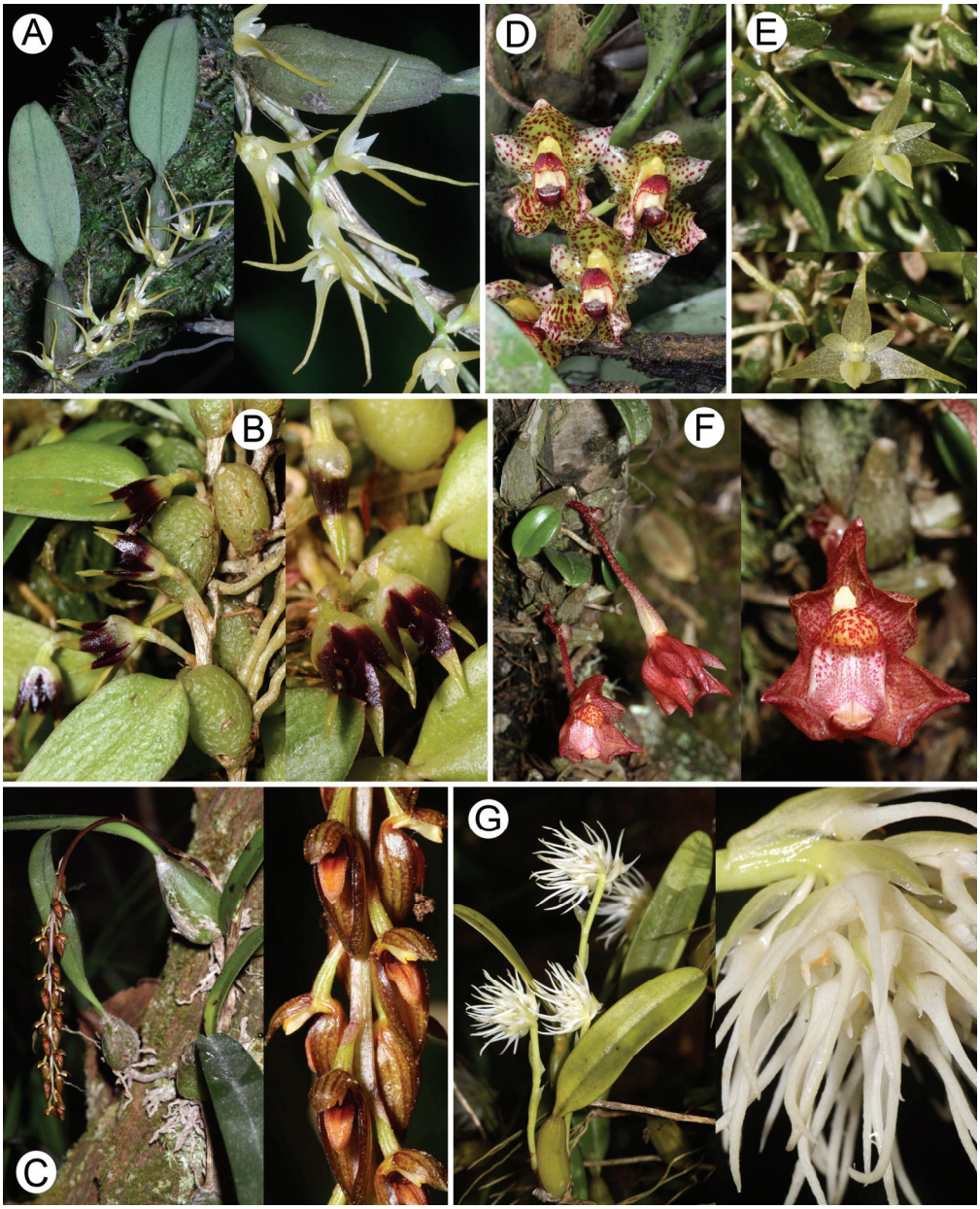


Fig. 1. New species of orchids in the flora of Vietnam. A: *Bulbophyllum cauliflorum*. B: *B. depressum*. C: *B. dissitiflorum*. D: *B. leopardinum*. E: *B. nematocaulon*. F: *B. pectinatum*. G. *B. trichocephalum* (A-C, E-G – photos of Leonid V. Averyanov; D – photo of Phan Ke Loc).

point 22º24’01’’N 103º22’22’’E, broad-leaved evergreen closed wet primary forest on steep mountain slopes composed with sandstone at elev. 1500-1650 m a.s.l., creeping epiphyte on mossy trees on shady mossy rocky slope, flowers light yellowish, rare, 18 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 9949*; Lai Chau province, Tam Duong district, Ho Thau community, Ho Thau village, around point 22°22’19’’N 103°36’14’’E, secondary and primary evergreen closed forest on very steep mountain slopes composed with granite and quartzite at elevation from 1500 to 2000 m a.s.l., creeping epiphyte on tall mossy tree on very steep rocky shady mountain slope, flowers yellowish, not common, 30 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 10236*; Lao Cai province, Sa Pa district, SE sloes of Hoang Lien Son Ridge, around Sa Pa town at elevation around 1500-2000 m a.s.l., creeping epiphyte, flowers white, lip light yellowish, rare, 26 April 2008, *L.Averyanov, P.K.Loc, HAL 11846*.

臺灣大學學術期刊資料庫

8. ***Cleisomeria pilosulum*** (Gagnep.) Seidenf. & Garay, 1972, Bot. Tidsskr. 67: 120. - *Cleisostoma pilosulum* Gagnep., 1932, Bull. Soc. Bot. France 79: 35. Fig. 2A

Described from Cambodia ("*Kompong Speu*"). Type ("*Poilane 17742*") – P. Distribution. Thailand, Laos, Cambodia, S. Vietnam.

S. Vietnam, Dac Lac province, Buon Don district, Krong Na municipality, Yok Don national park, around point 12º51'27"N 107º41'52"E, open dry semi-deciduous *Dipterocarpus* forest on thin ferralite gray soils at elevation about 200 m a.s.l. along Srepok river valley, epiphyte on Dipterocarpaceae trees, common, 23 March 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HLF 7339a*.

9. ***Dendrobium jenkinsii*** Lindl., 1839, Edwards's Bot. Reg. 25: t. 37.

Described from NE. India ("*Assam: Gaualpara*"). Type ("*Jenkins*, sine no") – K. Distribution. Bhutan, NE. India, Myanmar, S. China, Thailand, Laos, N. Vietnam.

N. Vietnam, Son La province, Yen Chau district, Muong Lum municipality, Na Lang Village, around point 21º01'17''N 104º30'47''E, broad-leaved evergreen dry forest on steep slopes and on tops of ridge composed with rocky crystalline solid marble-like highly eroded limestone at elev. 900-1000 m a.s.l., creeping epiphyte, occasional, 3 Nov. 2006, N.*T.Hiep, L.Averyanov, P.V.The, HAL 9462*; Xao village, around point 20º59'54''N 104º38'47''E, broad-leaved and coniferous (with *Pinus kwangtungensis* and *Calocedrus rupestris*) evergreen forest on steep slopes and on tops of ridge composed with rocky crystalline solid marble-like highly eroded limestone at elev. 1100-1300 m a.s.l., creeping epiphyte (particularly on *Calocedrus rupestris*), common, 4 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 9488*.

10. ***Dendrobium lagarum*** Seidenf., 1985, Opera Bot. 83: 187. Fig. 2B

Described from E. Thailand ("*Ubon*"). Type ("*Sakdi 4322*") – C. Distribution. Thailand, Laos, S. Vietnam.

S. Vietnam, Dac Lac province, Buon Don district, Krong Na municipality, Yok Don national park, 12º51'39''N 107º41'49''E, dry open *Dipterocarpus* forest and grassy woodlands with short bamboo on ferralite thin weathered soils at elevation about 200 m a.s.l., epiphyte on Dipterocarp tree, not rare, 14 March 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HLF 7116*, flowered in Hanoi at 22 Feb. 2009, flowers odorless, tepals white, sometimes with light pink tint, lip white with yellow-brown center, column and anther light pink.

11. ***Dendrobium monticola*** P.F.Hunt et Summerh., 1961, Taxon 10: 110. Fig. 2C

Described from N. India ("*Garhwal*"). Type ("*Royle 1006*") – K. Distribution. N. India, Nepal, S. China, Thailand, Laos, N. Vietnam.

N. Vietnam, Son La province, Moc Chau district, Chieng Hac municipality, around point 20º51'50''N 104º31'17''E, broad-leaved evergreen dry forest on steep slopes and on tops of ridge composed with rocky crystalline solid marble-like highly eroded limestone at elev. 1200-1300 m a.s.l., epiphyte on mossy trees along ridge edge, flowers light greenish, lip with light purple nerves, not common, 31 Oct. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 9427*.

12. ***Dendrobium strongylanthum*** Reichenb.f., 1878, Gard. Chron. 1878(1): 462. Fig. 2D

Described from N. Myanmar? Type ("*Herb. Reichenbach 50293*") – W. Distribution. India, Myanmar, S. China, Thailand, Laos, N. Vietnam.

N. Vietnam, Son La province, Thuan Chau district, Ban Lam municipality, Ban Lam village, around peak mountain Hua Bay, 21º12'45''N 103º46'44''E, remnants of broad-leaved primary and secondary forest on steep slopes composed with clay shale at elev. 1600-1800 m a.s.l., epiphyte on tall tree, flowers yellowish, rare, 10 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 9598*; Lai Chau province, Sin Ho district, Ta Ngao municipality, Hai Ho village, around point 22º16'09''N 103º14'34''E, remnants of primary and secondary evergreen closed wet forest on very steep rocky slopes and cliffs of remnant mountains composed with stratified solid gray highly eroded limestone at elev. 1500-1600 m a.s.l., epiphyte on very steep rocky shady slopes, flowers greenish-yellow, lip with dark brown-purple marks, rare, 20 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 10066*.

13. ***Eria affinis*** Griff., 1851, Not. Pl. Asiat. 3: 297. Fig. 2E

Described from peninsular Myanmar ("*Mergui*"). Type ("*Griffith 1074*") – K, W. Distribution. Myanmar, Thailand, S. Vietnam.

S. Vietnam, Dac Lac province, Buon Don district, Krong Na municipality, Yok Don national park, around point 12°52'17"N 107°48'08"E, dry open *Dipterocarpus* forest with short bamboo on ferralite thin weathered soils at elevation about 200 m a.s.l., epiphyte on tall *Dipterocarpus* tree, flowers light yellow, lip center lemon-yellow, occasional, 17 March 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HLF 7144a*.

14. ***Eulophia chaunanthe*** Seidenf., 1984, Opera Bot. 72: 34. Fig. 2F

臺灣大學學術期刊資料庫

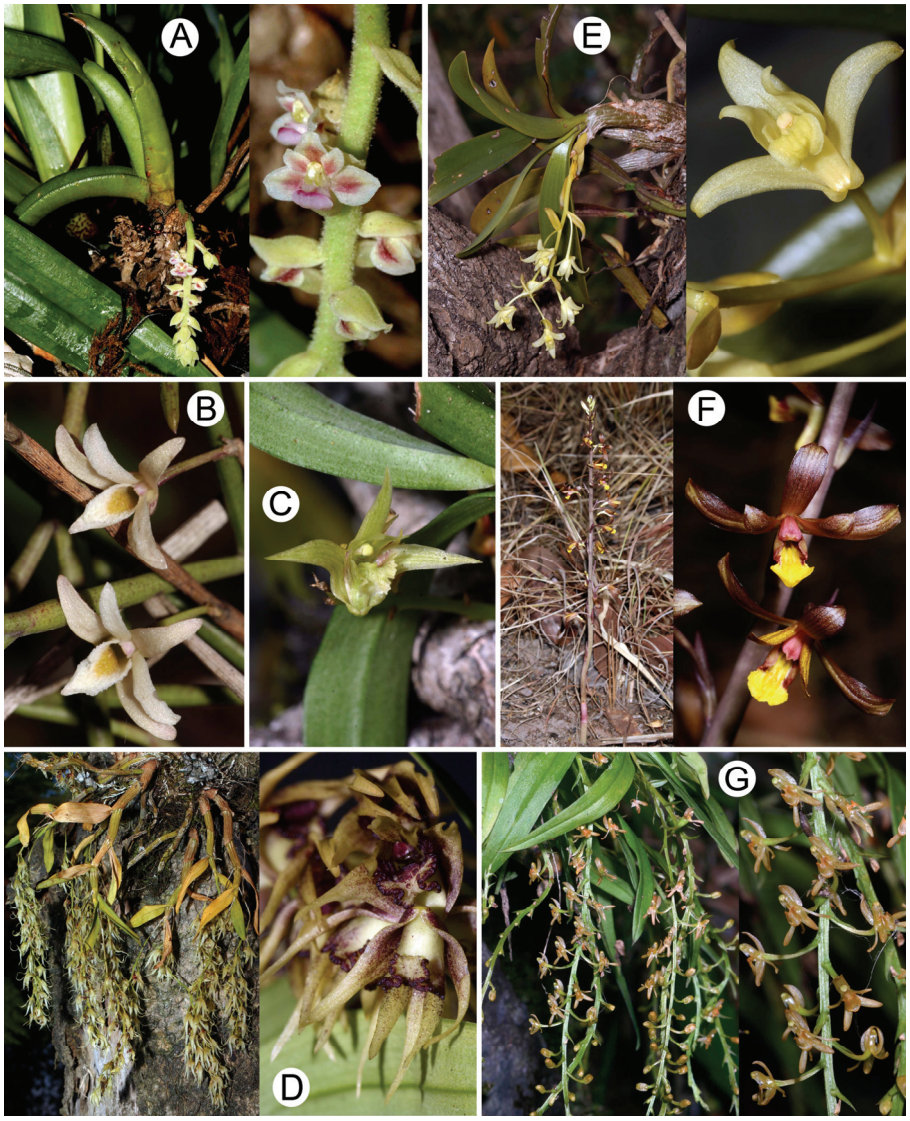


Fig. 2. New species of orchids in the flora of Vietnam. A: *Cleisomeria pilosulum*. B: *Dendrobium lagarum*. C: *D. monticola*. D: *D. strongylanthum*. E: *Eria affinis*. F: *Eulophia chaunanthe*. G: *Liparis resupinata* (A – photo of Phan Ke Loc; B-G – photos of Leonid V. Averyanov).



Fig. 3. New species of orchids in the flora of Vietnam. A: *Thrixspermum acuminatissimum*. B: *Uncifera lancifolia* (Photos of Leonid V. Averyanov).

臺灣大學學術期刊資料庫

Described from E. Thailand ("*Udawn 200 m*"). Type ("*Kerr 135*") – K. Distribution. Thailand, S. Vietnam.

S. Vietnam, Dac Lac province, Buon Don district, Krong Na municipality, Yok Don national park, around point 13º04'13"N 107º37'57"E, open dry semi-deciduous *Dipterocarpus* forest and woodlands on thin ferralite gray to brown rocky soils at elevation about 200 m a.s.l., terrestrial ephemeroid tuberiferous herb with erect leafless stem to 30 cm tall, flowers odorless, tepals chestnut-brown, lip yellow, side-lobes whitish with purple nerves, epichile brightly yellow, spur yellowish with brown-purple nerves, very rare, 27 March 2008, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HLF 7403*, d-EXSICCATES OF VIETNAMESE FLORA *0114/HLF 7403*.

15. ***Liparis resupinata*** Ridl., 1886, J. Linn. Soc., Bot. 22: 290. Fig. 2G

Described from NE. India ("*Khasia*?", fide Seidenfaden, 1976). Type ("*Griffith 5082*") – AAU, C, K, S. Distribution. India, Nepal, Bhutan, S. China, Thailand, N. Vietnam.

N. Vietnam, Son La province, Yen Chau district, Muong Lum municipality, Na Hat village, around point 21º00'37''N 104º30'06''E, broad-leaved (former coniferous forest with *Calocedrus rupestris*) evergreen forest on steep slopes and on tops of ridge composed with rocky crystalline solid marble-like highly eroded limestone at elev. 900 m a.s.l., creeping lithophyte on shady rocky slope, flowers white to yellowish, lip dirty violet, very common, 5 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 9552c*; Lai Chau province, Sin Ho district, Ta Ngao municipality, Hai Ho village, around point 22º21'34''N 103º15'02''E, secondary forest and shrubs on foothills of remnant hills and mountains composed with stratified solid gray highly eroded limestone at elev. about 1500 m a.s.l., epiphyte on mossy trees in spring-water swamp on travertine along stream valley, flowers yellowish-brown, occasional, 19 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 10001*; Lai Chau province, Tam Duong district, Ho Thau municipality, Ho Thau village, around point 22°22'31''N 103°35'15''E, secondary and primary evergreen closed forest on very steep mountain slopes composed with granite and quartzite at elevation from 1100 to 1900 m a.s.l., epiphyte on mossy trees along rocky shady wet stream valley, flowers yellowish-brown, common, 29 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 10168*; Lai Chau province, Phong Tho district., Sin Suoi Ho municipality, Sa Ma Pho village, around point 22°32'17''N 103°32'41''E, secondary open evergreen broad-leaved dry forest and secondary woodlands on very steep mountain slopes composed predominantly with weathered granite at elev. about 1200-1400 m a.s.l., canopy epiphyte on tall tree on steep shady rocky slope along stream, flowers dull yellowish-brown, not common, 15 Dec. 2006, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HAL 10792b*.

16. ***Peristylus laceriferus*** (Lindl.) J.J.Smith, 1927, Bull. Jard. Bot. Buitenzorg, 3, 9: 23. - *Coeloglossum lacertiferum* Lindl., 1835, Gen. Sp. Orchid. Pl.: 302.

Described from peninsular Myanmar ("*Tenasserim: Tavoy*"). Type ("*Wallich 7055*") – K. Distribution. Nepal, Bhutan, India, China, Japan, Myanmar, Thailand, N Vietnam, Malacca, Java, Sumatra, Kalimantan, Philippines.

N. Vietnam, Son La province, Thuan Chau district, Ban Lam municipality, Ban Lam village, around peak mountain Hua Bay, 21º12'45''N 103º46'44''E, secondary grasslands and open secondary shrubs on very steep mountain slopes composed with clay shale at elev. 1500-1700 m a.s.l., terrestrial ephemeroid tuberiferous herb, very rare, 10 Nov. 2006, *N.T.Hiep, L.Averyanov, P.V.The, HAL 9686a*.

17. ***Thrixspermum acuminatissimum*** (Blume) Reichenb. f., 1868, Xenia Orchid. 2: 121. - *Dendrocolla acuminatissima* Blume, 1825, Bijdr.: 286. Fig. 3A

Described from Java ("*Pantjar*"). Type ("*Blume 1927*") – L? Distribution. Thailand, Cambodia, S. Vietnam, Malacca, Java, Sumatra, Kalimantan, Philippines.

S. Vietnam, Tay Ninh province, Tan Bien district, Tan Binh municipality, Lo Go Xa Mat national park around point 11°37'43"N 105°52'26"E, slightly logged primary closed evergreen broad-leaved lowland forest with the dominance of species of Dipterocarpaceae (*Dipterocarpus dyeri, D. costatus, D. alatus, D. obtusifolius, Shorea* sp.) mixed with *Lagerstroemia calyculata, Irvingia malayana, Anogeissus acuminata, Sindora siamensis, Pterospermum* sp., on thin soils at elevation about 13 m a.s.l., epiphyte in shady place, very rare, 26 December 2008, *T.H.Thai, L.Averyanov, P.K.Loc et al., HLF 7683*, flowered in cultivation at February – March 2009, flowers odorless, sepals and petals light yellowish, lip white with yellow and reddish-brown spots, apex white, column and anther light yellow.

18. ***Uncifera lancifolia*** (King & Pantl.) Schlechter, 1914, Orchideen: 583. - *Saccolabium lancifolium* King & Pantl., 1896, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 65: 122. Fig. 3B

臺灣大學學術期刊資料庫

Described from NE. India ("*India, Darjeeling, Rississum*"). Type ("*Pantling 152A*") – CAL (holotype), BM, K, L, LE, W (isotypes). Distribution. NE. India, Bhutan, N. Vietnam.

N. Vietnam, Lai Chau province, Phong Tho district, Sin Suoi Ho municipality, Sa Ma Pho village, around point 22°32'20''N 103°33'31''E, secondary open evergreen broad-leaved forest and secondary woodlands on very steep mountain slopes and cliffs composed predominantly with weathered granite at elev. about 1700-1900 m a.s.l., miniarture canopy epiphyte, locally common, 12 Dec. 2006, *N.T.Hiep, L.Averyanov, P.K.Loc et al., HAL 10672a*, flowered in cultivation et February 2007, flowers odorless, pale yellow, lip apex callus bright yellow; Lao Cai province, Sa Pa district, slopes of Hoang Lien Son Range in vicinities of Sa Pa town. evergreen broad-leaved montane forest on very steep mountain slopes at elevation about 1500-1800 m a.s.l., epiphyte on tall mossy trees, flowers light green, lip yellowish-green, not common, 24 Apr. 2007, *L.Averyanov, P.K.Loc, A.Averyanova, HAL 11134*.

ACKNOWLEDGEMENTS

Author cordially thanks all participants of field botanical explorations in Vietnam, particularly Dr. Nguyen Tien Hiep and Prof. Phan Ke Loc (Center for Plant Conservation of Vietnam Union of Science and Technology Associations) for their key role in organization of our expeditions. Field works, results of which are presented in this publication, were supported in different parts from investigation programs of U.S.A. National Geographic Society - "*Exploration of primary woods along constructed highway Hanoi - Ho Chi Minh for their sustainable conservation in limits of Ha Tinh, Quang Binh, Quang Tri, Thua Thien Hue, Quang Nam and Kon Tum provinces of central Vietnam*" (*#8418-08*), American Orchid Society ("*Exploration of orchid flora in Laos and allied areas of Vietnam*") and Henry Luce Foundation, Vietnam Botanical Conservation Program.

LITERATURE CITED

Seidenfaden, G. 1976. Orchid genera in Thailand IV. Dansk. Bot. Ark. **31**: 1-105.

Seidenfaden, G. 1979. Orchid genera in Thailand VIII. Dansk. Bot. Ark. **33**: 1-240.

越南植物誌的蘭科植物新紀錄種

Leonid V. Averyanov

Komarov Botanical Institute of the Russian Academy of Science, Prof. Popov str., 2, St.-Petersburg, 197376, RUSSIAN FEDERATION, Email: av_leonid@mail.ru; av_leonid@yahoo.com

(收稿日期：2009 年 5 月 6 日；接受日期：2009 年 8 月 10 日)

摘要：在 2006-2009 年之間越南的蘭科植物新增加了下列新物種：*Bulbophyllum cauliflorum, B. dissitiflorum, B. depressum, B. leopardinum, B. nematocaulon, B. pectinatum, B. trichocephalum, Cleisomeria pilosulum, Dendrobium jenkinsii, D. lagarum, D. monticola, D. strongylanthum, Eria affinis, Eulophia chaunanthe, Liparis resupinata, Peristylus laceriferus, Thrixspermum acuminatissimum* 以及 *Uncifera lancifolia*。本文內提供這些新物種的地理位置與圖片。

關鍵詞：蘭科、新蘭科植物、越南植物誌。

臺灣大學學術期刊資料庫