

New Orchids from Peru*

By

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橋本 保**：ペルー産新ラン科植物*

Among recent collections made by Mr. Masashi Nakata, a member of the Second Cryptogamic Expedition to South America led by Dr. Hiroshi Inoue, four new orchid taxa from Peruvian Andes have been recognized. The following descriptions were prepared with living specimens in the research greenhouse of the Tsukuba Botanical Garden (TBG).

Epidendrum siphonosepaloides Hashimoto, sp. nov.

Differt a *E. siphonosepalum* Garay & Dunsterville inflorescentis subumbellatis, tubo calycino brevissimo, sepalo dorsali obtuso, labello tricristato.

Plant epiphytic, caespitose. Leafy stems prostrate or suberect, to 45 mm long, somewhat flattened, often branching near the base, entirely concealed by leaf-sheaths. Leaves distichous, to 12 for a branch, articulated; blade carnose (to 1.5 mm thick), narrowly lanceolate, 10-23 mm long, 3.5-6 mm wide, apiculate from a dorsal keel with minutely ciliolate apical margins, moderately recurved; sheath evergreen, tubular, more or less dorsally expanded, 3-7 mm long. Inflorescences terminal, subumbellate, rarely 1-, usually 2- or 3-flowered, basally concealed by 2 or 3 spatheform sheaths with compressed apices. Flowers yellowish green with purplish sepals. Pedicellate ovary about 3 mm long, ventrally swollen. Sepals slightly connate below for about 0.3 mm: dorsal sepal narrowly triangular, 13 mm long, 1.8 mm wide, obtuse, 3-nerved; lateral sepals slightly oblique, narrowly triangular, 14 mm long, 5 mm wide, acuminate, 5-nerved. Petals oblique, narrowly lanceolate, 12 mm long, 2 mm wide, obtuse, 5-nerved. Lip narrowly triangular, 13 mm long, 4.5 mm wide when expanded, obtuse, cuneate, lateral lobes folded upwards; disc with a median and two less distinct ridges at the base. Column short, about 2.5 mm long, adnate to the lip. Anther greenish; pollinia 2 unequal paired, yellow, compressed, with a fragile caudicle.

Depto. PASCO. Prov. Oxapampa: Quebrada Honda, near Sogormo, along the road in 'Selva Alta' zone, alt. 1100 m, coll. M. Nakata (581), cult. in TBG (acc. no. 54724), May 3, 1985—type in TNS.

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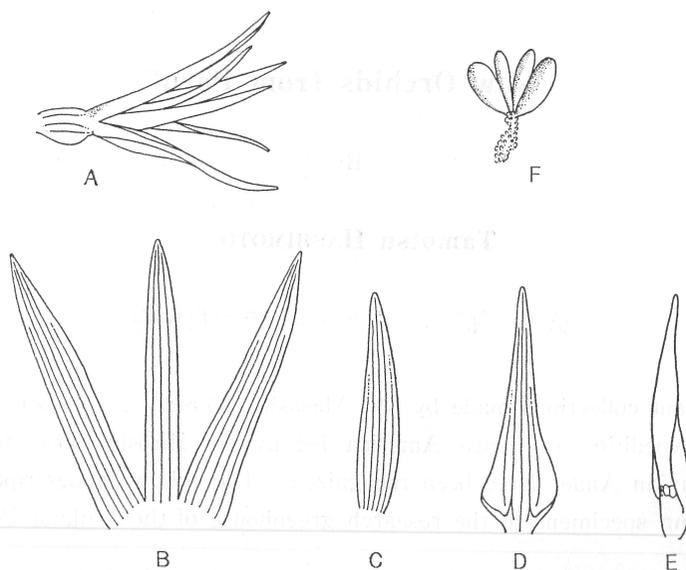


Fig. 1. *Epidendrum siphonosepaloides*. A, Flower from side, \times ca. 2. B, Sepals, expanded, \times 2.6. C, Petal, \times 2.6. D, Lip, expanded, \times 2.6. E, Lip from side, \times 2.6. F, Pollinarium, \times 26.

As the specific epithet indicates, this new species is allied to Venezuelan *E. siphonosepalum* Garay & Dunsterville. It differs from the latter in having more flowers on an inflorescence, nearly free sepals, obtuse lateral sepals and a three ridged lip. Less carnosely leaves, larger flowers, 5-nerved lateral sepals and petals, and shorter pedicellate ovaries of the new species are probably additional differences from *E. siphonosepalum*.

Neolehmania difformis (Jacq.) Pabst

var. ***angustata*** Hashimoto, var. nov.

Differt a typo omnibus partibus minoribus, foliis angustatis et tridentatis, caudiculis longioribus.

Stems caespitose, suberect, to 4 cm long, with 3-5 leaves. Leaves articulated; blade carnosely, narrowly elliptic to narrowly lanceolate, 20-80 mm long, 4-10 mm wide, unequally tridentate at the apex, canaliculate or with involute margins; sheaths tubular, closely concealed a stem in the living specimen. Inflorescences terminal, subumbellate, 3-flowered in the type specimen. Flowers yellowish green, fragrant, about 2 cm in diameter. Pedicellate ovary about 15 mm long. Sepals free, narrowly ovate, 12-13 mm long, acuminate, with revolute margins. Petals linear oblanceolate, 10 mm long, 1.5 mm wide, obtuse. Lamina of lip transversely elliptical, 7 mm long, 13 mm wide, minutely apiculate at the apex, cordate at the base; disc with 2 basal calli. Column 5-6 mm long, adnate to the lip, shallowly lacinate at the top. Anther brownish green; pollinia 2 unequal pairs, yellow, compressed, with 4 fragile caudicles on a translucent viscidium.

Depto. PASCO. Prov. Oxapampa: Quebrada Honda, near Sogormo, along the road in 'Selva Alta' zone, alt. 1100 m, coll. M. Nakata (586), cult. in TBG (acc. no. 54725), Mar. 27, 1985—type in TNS.

Neolehmania difformis has been recorded from the whole American tropics under the name of *Epidendrum difforme* Jacq., and it has been known as a polymorphic species by many orchidologists (Ames *et al.* 1934, Dunsterville & Garay 1961, Foldats 1970).

This dwarf variety has narrowly oblong (nearly linear) and canaliculate leaves when flowering. The leaf-sheath, which conceals the stem closely, seems to be an additional peculiarity. Although there are insufficient taxonomic informations on the pollinaria of *N. difformis* varieties and the related species, the relatively long caudicles and an ovate viscidium of the variety seems to be noteworthy.

***Pleurothallis nakatae* Hashimoto, sp. nov.**

P. agathophyllae Rchb. f. affinis, a qua imprimis differt caulibus canaliculatis, sepalis liberis et non carnosis.

Plant epiphytic. Rhizome green, long creeping, flexuous, branching, about 2 mm in diameter, provided with more or less distant sheaths. Sheaths tubular, dark violet verrucose. Stems unifoliate, 10-25 mm remote, erect or ascendent, 12-38 mm long, canaliculate throughout, slightly inflated above, with 2 loose and dark violet verrucose sheaths. Leaves sessile, carnosae, convex above, ovate to broadly elliptical or elliptical when young, 22-33 mm long, 12-23 mm wide, round or acute with a minute tridentation at the apex, round or cuneate at the base. Inflorescence much shorter than the leaf, 2-5, racemose, 10-15 mm long, commonly 4-flowered, rising above the base of the leaf; basal spathe conduplicate, about 5.5 mm long, acuminate; floral bract minute; pedicel abbreviated. Ovary about 1 mm long. Flower dark purple. Dorsal sepal narrowly oblong, 8.5 mm long, 2 mm wide, acute, 3-nerved. Lateral sepals close together except the apical 1/7, oblique, slightly wider than the dorsal sepal, acuminate, forming a small mentum at the

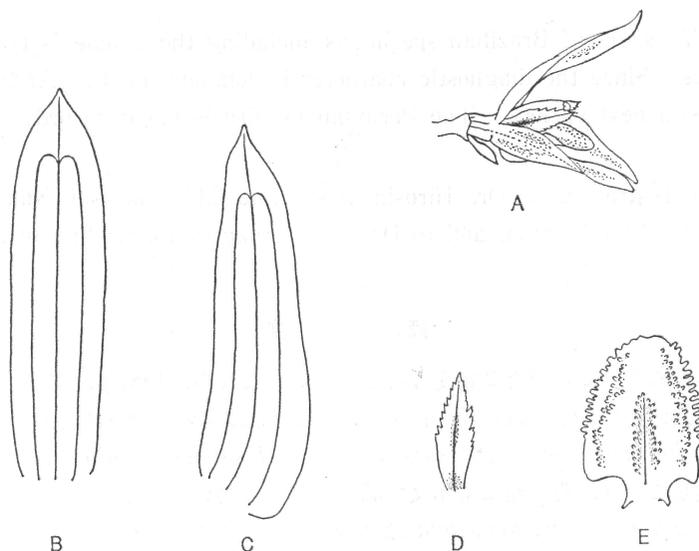


Fig. 2. *Pleurothallis nakatae*. A, Flower, oblique view from side, $\times 3.3$. B, Dorsal sepal, expanded, $\times 6.6$. C, Lateral sepal, expanded, $\times 6.6$. D, Petal, $\times 6.6$. E, Lip, expanded, $\times 6.6$.

base, 3-nerved. Petals translucent, white with a red nerve, lanceolate, 2.5 mm long, 0.9 mm wide, acute, dorsally keeled at the apex, irregularly laciniate above 1/3, 1-nerved. Lip carnose, reddish violet, elliptical, 3 mm long, 1.7 mm wide, rounded at the apex, sulcate; base shortly hinged to the column-foot and flanked by a pair of auricles. Column shorter than the petals with the laciniate apical edge. Anther white; pollinia 2, yellow, with a short caudicle.

Depto. JUNÍN. Prov. Chanchamayo: Fundo Monte Bello, near La Merced, along the road in 'Selva Alta' zone, alt. 1700–1800 m, coll. M. Nakata (626), cult. in TBG (acc. no. 54737), May 8, 1985—type in TNS.

This new species is very similar to *P. agathophylla* Rchb. f., detailed and illustrated by Vásquez & Dodson (1982), and to *P. cyclophylla* Luer, from Bolivia, but is readily distinguishable by its thin (no cushion-like thickening) and free (not connate) sepals, and by the canaliculate stems.

The name commemorates Mr. Masashi Nakata, who collected this plant.

Comparettia coccinea Lindl.

var. **longicalcarata** Hashimoto, var. nov.

C. coccinea Lindl., sensu Vásquez & Dodson in Icon. Pl. Trop. 6: pl. 521, 1982.

A typo simile, sed calcar sepalino longiore.

Sepaline spur apparently longer than the lip, 20–25 mm long. Others same to the type variety.

Depto. PASCO. Prov. Oxapampa: Nagazu, about 13 km east of Paucartambo Bridge, near Villarica, in forest in 'Selva Alta' zone, alt. ca. 1500 m, coll. M. Nakata (522), cult. in TBG (acc. no. 54696), May 3, 1985—type in TNS. Also Bolivia (Vásquez & Dodson 1982).

The sepaline spurs of Brazilian specimens including the Lindley's type are not surpassing the lips. Since the diagnostic character is common to the Andean plants, the author proposes a new variety. The Peruvian locality is newly recorded as the species.

The author is grateful to Dr. Hiroshi Inoue and Mr. Masashi Nakata for giving chances to study the collection, and to Dr. Syo Kurokawa for reading of the manuscript.

摘 要

ペルー産ラン科植物，2新種と2新変種を記載した。これらは1984年，第二次南米隠花植物調査団（団長井上浩博士）の中田政司氏が採集し，生品を筑波実験植物園に持ち帰ったものである。

Epidendrum siphonosepaloides は，ペネズエラ産の *E. siphonosepalum* に似ているが，萼片がほとんど離生しており，その他にも本文で記したような違いがある。

Neolehmania difformis var. *angustata* は熱帯アメリカに広く分布し，変異も多いといわれる種の中で，小形で狭葉の変種である。ふつうに見られるものに比べて，全体に色々な特徴があるように思われるので，それらの形態についても記載した。

Pleurothallis nakatae はボリビアから知られていた *P. agathophylla* に近縁だが，側萼片が

互いに癒合していないなどの際立った特徴がある。

Comparettia coccinea var. *longicalcarata* は、ペルーとボリビアに産する萼の距が長い変種である。種としてはペルーに未記録であった。

References

- Ames, O., F. T. Hubbard and C. Schweinfurth, 1934. Three polymorphic alliances in *Epidendrum*. Bot. Leaf. Harvard Univ. 2: 41-69.
- Dunsterville, G. C. K. and L. A. Garay, 1961. Venezuelan orchids illustrated 2: 1-360. Andre Deutsch, London.
- and ———, 1972. Ditto 5: 1-334. Andre Deutsch, London.
- Foldats, E., 1970. Flora de Venezuela 15-3. 1-522. Instituto Botánico, Ministerio de Agricultura y Cría, Caracas.
- Lindley, J., 1838. *Comparettia coccinea* Lindl. Bot. Reg. 24: t. 68.
- Luer, C. A., 1976. Miscellaneous species of *Pleurothallis*. Selbyana 3: 38-201.
- Pabst, G. F. J., 1978. Noticias orquidológicas-XVIII. Bradea 2: 306.
- Reichenbach, H. G., 1881. *Xenia orchidacea* 3(2): 25-48 & tt. 211-220.
- Schweinfurth, C., 1959. Orchids of Peru (*Pleurothallis*~*Epidendrum*). Fieldiana, Bot. 30(2): i-vi+261-532.
- , 1960. Ditto (*Cattleya*~*Trizeuxis*). Ibid. (3): i-vi+533-786.
- , 1970. First supplement to the orchids of Peru. Ibid. 33: 1-80.
- Vásquez Ch., R. and C. H. Dodson, 1982. Orchids of Bolivia. Icon. Pl. Trop. 6: pls. 501-600.