

ICONES ORCHIDACEARUM

Fascicle 17(1)

THE GENUS EPIDENDRUM

Part 13

“Species New & Old in Epidendrum”

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EPIDENDRUM FALSIGARAYI Hágsater et Karremans, *sp. nov.*

Type: ECUADOR: Imbabura: timberline vegetation on Hacienda Yura Cruz, 10 km N of Ibarra, 3700-3800 m, 0°22'N 78°05'W, 25 May 1973, **Luritz Broder Holm Nielsen, Stig Jeppesen, Bernt Løjtant & Benjamin Øllgaard 6477**, Holotype AAU! Illustration of flower by Løjtant, published as *Epidendrum garayi* Løjtant (1977).

Similar to *Epidendrum garayi* Løjtant but the flower brick-red, petals and margin of lip wine-red (vs. greenish purple), sepals 12.0-12.3 x 6.0-6.3 mm, ovate (vs. sepals 10-12 x 3.0-4.0 mm, oblong-lanceolate, lateral sepals falcate), petals 8.6 x 4.4 mm, triangular-ovate, acute (vs. petals 10.5-11.5 x 2.5-3.0 mm, lanceolate, shortly acuminate, falcate), and lip widely cordiform (vs. lip cordiform).

Epiphytic, sympodial, branching, pendulous herb, to ca. 40 cm long, with successive sub-apical growths, forming long chains of short stems, sometimes branching from a middle internode. **Roots** 1 mm in diameter, terete, thin, white, generally produced from the basal stems only. **Stems** to 50 x 2.5 mm, simple, cane-like, terete, thin, pendent, formed by 3-5 internodes, short, secund, facing the same direction, the internodes covered by infundibuliform, acute, non-foliar sheaths to 12 mm long. **Leaves** 3-4[-6], aggregate at the apex of the apical internode, sub-pendent, coriaceous, articulate, similar in size and shape; sheaths 2-3 mm long, tubular, minutely striated when dry; blade to 25-50 x 3-5 mm, linear-lanceolate, acuminate, margin serrulate towards the apex, spreading. **Spathes** lacking. **Inflorescence** apical, sessile, 1-flowered, flowering only once. **Floral bracts** 5 mm long, much shorter than the ovary, linear-lanceolate, acuminate, amplexicaul. **Flowers** 1, non-resupinate, facing downward, brick-red, the petals and margin of the lip, petals and margin of lip wine-red; fragrance not registered. **Ovary** 17 mm long, terete, thin, not inflated, longitudinally striated along the apical half just behind the perianth. **Sepals** free, partly spreading, ovate, acuminate, 5-veined, margin entire, spreading; dorsal sepal 12.0 x 6.0 mm, the lateral sepals 12.3 x 6.3 mm, slightly oblique. **Petals** 8.6 x 4.4 mm, free, partly spreading, triangular-ovate, acute, 3-veined, margin entire, spreading. **Lip** 7.3 x 9.6 mm, united to the column, entire, widely cordiform, base cordate, apex apiculate, concave, margin entire, spreading, the lip concave in natural position; ecallose; disc glabrous, with 3 parallel thickened ribs along the apical half of the lip, the mid-rib nearly reaching the apex. **Column** 5 mm long, forming a 120° angle with the ovary, thick, straight, apex with a pair of wide, rounded lateral wings. **Anther** spherical, 4-celled. **Pollinia** ovoid, red, caudicles soft and granulose, nearly as long as the pollinia. **Rostellum** apical, slit. **Lateral lobes of the stigma** short, about half as long as the stigmatic cavity. **Nectary** very short, barely penetrating the ovary, wide, unornamented. **Capsule** 30 x 13 mm, pedicel 7 mm long, thin, body 26 x 13 mm, ellipsoid, apical neck thick, very short.

OTHER SPECIMENS: COLOMBIA: Cauca: Parque Nacional Puracé, Quebrada La Esperanza, 3300 m, 31 VIII 1972, *Sánchez 368*, CUVCI! **Nariño:** San Juan de Pasto: 3 km E de la población de Dolores, 3000 m, 3 VIII 1991, *Ramírez 1044*, PSO! Southeast of Ipiales toward La Victoria, 3000-3200 m, 22 II 1978, *Luer 2726*, SEL! **ECUADOR: Carchi:** Motúfar: Parroquia González Suárez, Loma Bretaña, entre el río Minas y la quebrada Central, 3100 m, 18 VIII 2010, *Cerón 68576*, QAP! Huaca: Parroquia Mariscal Sucre, Estación Biológica Guandera, 3530 m, 16 IX 1999, *Mites 199*, QCNE! Carrera Julio Andrade La Bonita cerca de Cerro Mirador, 3400 m, 20 V 2003, *Tobar 583*, AMO! (digital images of live plant, AMO!) **Sucumbios:** El Mirador, Playón de San Francisco-Julio Andrade, km 12, 3200-3400 m, 11 VII 1991, *Dodson 18779*, QCNE! Road Tulcán-Carmelo-Santa Barbara, *Hirtz 2447*, 2650-3200 m, 6 IV 1985, MO x2! digital image, AMO! Road Tulcán-Carmelo-Santa Barbara, *Hirtz 2467*, 2650-3200 m, 6 IV 1985, MO!

OTHER RECORDS: COLOMBIA: Cauca: Puracé: Sector Crucero, Resguardo Indígena Puracé, Pilimbamba (Puente Tierra), 28 III 2018, *Hágsater 15641*, digital image, sterile, AMO! **ECUADOR: Sucumbios:** Playón de San Francisco, XI 2017, *A. Karremans s.n., R. Jenny, R. Lok & S. Vieira-Urbe* (LCDP voucher). **Pichincha:** Quito: San Miguel de Nono, Reserva Ecológica Yanacocha, 3500m, 13 VIII 2018, *Gelis s.n.*, (digital images, AMO!) Ecuador, *Gary Yong*, digital image, AMO! (Photo voucher).

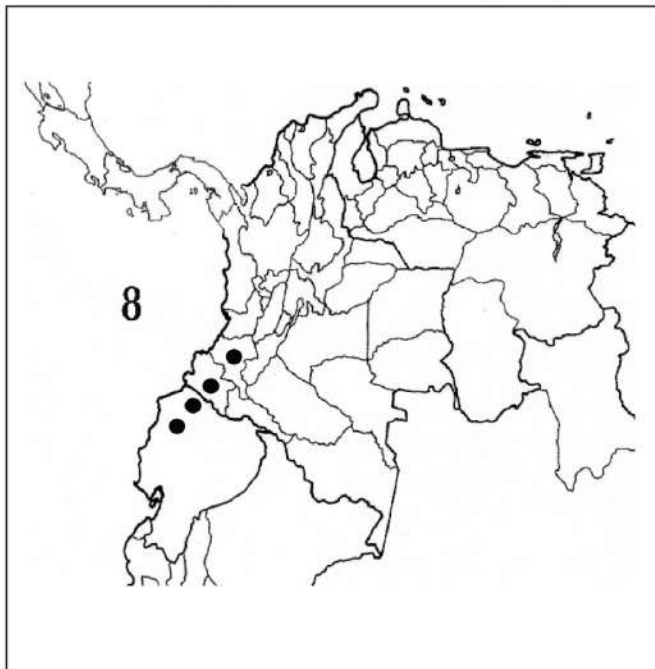
DISTRIBUTION AND ECOLOGY: Common in northern Ecuador and southern Colombia, from Quito to Popayán, in subpáramo andean wet forest and cloud forest on *Clusia flaviflora* Engl., *Weinmannia pinnata* L. and páramo on short trees and on frailejones, *Espeletia* sp. Flowering May to November.

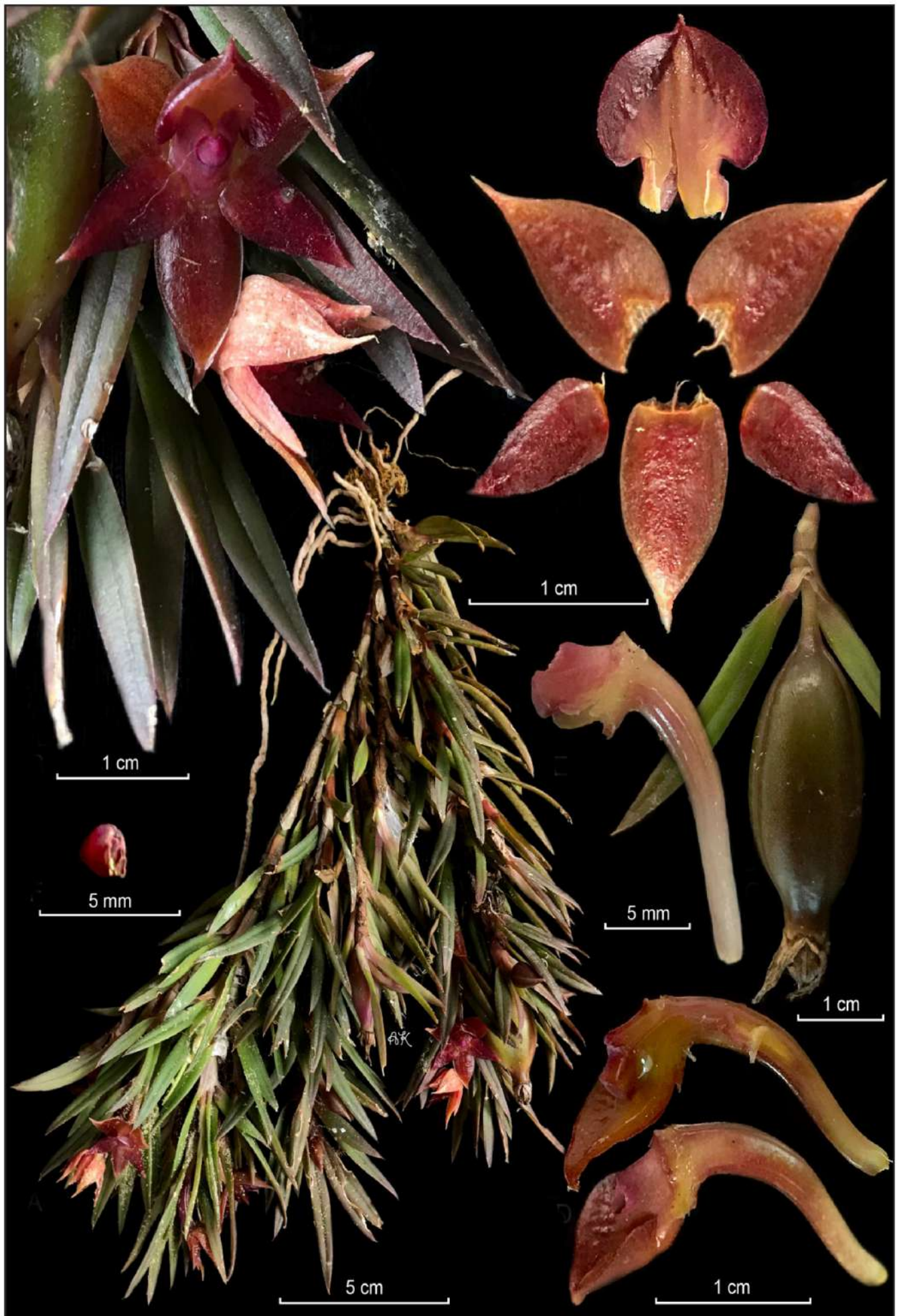
RECOGNITION: *Epidendrum falsigarayi* belongs to the Kalopternix Group, Garayi Subgroup which is recognized by pendent chain of stems, arising each from a sub-apical internode of the previous stem, each with 1-3 linear-lanceolate leaves [in the primary stem there are up to 6 leaves in a fan], inflorescence apical, flowering only once, 1-2 flowered, the flowers non-resupinate, green to red or yellow, the lip cordiform. The species is recognized by the 3-6 leaved stem segments, leaves 2.5-5.0 x 0.3-0.5 mm long, 1 brick-red flower, ovate, acuminate sepals 12.0-12.3 mm long, triangular ovate, acute petals, 8.6 x 4.4 mm, and a widely cordiform, apiculate lip 7.3 x 9.6 mm. *Epidendrum wolffii* Hágsater & E. Santiago has short, bifoliate, cane-like stems, 2, linear-lanceolate leaves 1.1-2.7 cm long, sessile, two-flowered inflorescences, successive and opposite, pink, immaculate flowers, the lip is widely cordiform with the apex obtuse, the disc with a single evident, low, wide rib running down the middle. *Epidendrum carmelense* Hágsater & Dodson forms pseudobulbs at the end of the unifoliate stems, leaves are 3.5-8.5 cm long, with 1-2 greenish to ochre flowers with red dots, the lip is reniform without any ribs. *Epidendrum garayi* Løjtant has 2-4-leaved stems, the leaves linear-lanceolate, up to 5 cm long, flowers purplish green, the lip cordiform with the apex acuminate, the disc has 3 thickened veins running nearly the entire length of the lip. *Epidendrum palalabrum* Hágsater has acuminate, non-foliar, a single leaf 5.0-8.7 x 0.6-0.8 cm, sepals 13-14 x 3.7-4.0 mm, lanceolate, acuminate, 3-veined, petals 11.7 x 2.5 mm, lanceolate, acuminate and lip 11 x 7.4 mm, shovel-shaped, base truncate, basal half quadrate, apical half triangular, apex acuminate.

CONSERVATION STATUS: DD. Data deficient. The species seems to be relatively common and widespread in the areas where it has been collected, and where not many orchids thrive. It is found in protected areas.

ETYMOLOGY: From the Latin *falsus*, false, and *Garay* in honor of Leslie A. Garay, in reference to this species having been incorrectly illustrated by Løjtant (1977) as *Epidendrum garayi* and thus is the false-garayi.

REFERENCES: Hágsater, E., & C.H. Dodson, 1993, *Epidendrum carmelense* in E. Hágsater & G.A. Salazar (eds.), The Genus *Epidendrum*, Part. 1, **Icon. Orchid.** 2: t. 120. Hágsater, E., 2019, *Epidendrum garayi* in E. Hágsater & E. Santiago (eds.) The Genus *Epidendrum*, Part. 13, **Icon. Orchid.** 17(1): t. 1722. Hágsater, E., 2019, *Epidendrum palalabrum* in E. Hágsater & E. Santiago (eds.), The Genus *Epidendrum*, Part. 13, **Icon. Orchid.** 17(1): t. 1747. Hágsater, E., & E. Santiago, 2013, *Epidendrum wolffii* in E. Hágsater & L. Sánchez S. (eds.) The Genus *Epidendrum*, Part. 10, **Icon. Orchid.** 14: t. 1496. Løjtant, B., 1977, Notes on the genus *Epidendrum* (Orchidaceae) in Ecuador, **Bot. Not.** 130: 321-328.





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