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# ICONES ORCHIDACEARUM

Fascicle 8

THE GENUS EPIDENDRUM

Part 5

“Species New & Old in Epidendrum”

Eric Hágsater

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**Herbario  
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# ICONES ORCHIDACEARUM

Fascicle 8, plates 801 to 900

## THE GENUS *EPIDENDRUM* Part 5

"Species New & Old in *Epidendrum*"

Reference Map

### TROPICAL AMERICA

(numbers refer to the portions of the map used in individual plates)



*EPIDENDRUM QUISPEI* Hágsater et Collantes, sp. nov.

Type: PERU: Cusco: Santuario Histórico de Machu Picchu, Quebrada Alccamayo, bosque de neblina, 3000 m, octubre 2004, collected by Moisés Quispe y Ermitaño Quispe Batallanos, *Machu Picchu Pueblo Hotel-Inkaterra 86*. Holotype: USM! (Illustration voucher.) Isotype: MOL!

*Epidendro madsenii* Hágsater & Dodson in partibus vegetativis aliquantum simile sed inflorescentia elongata, floribus magnis cum segmentis lanceolatis, petalis quam sepalis angustioribus, labello ecalloso profunde cordiforme acutoque, discrepans.

Hierba epífita, monopodial, colgante, de 17 a 30 cm de largo. Raíces de los entrenudos basales del tallo primario, escasas, delgadas, 1 mm de grosor. Tallos sencillos, producidos de los entrenudos apicales del tallo anterior, tipo caña, teretes, delgados, rectos a ligeramente flexuosos, 6-17 x 0.2-0.3 cm. Hojas 4-9, distribuidas a lo largo del tallo, caedizas con el tiempo, extendidas, alternas, articuladas; vaina tubular, finamente estriada, 5.3-10 x 2-3 mm; lámina ovado lanceolada, ápice subagudo, con un apículo diminuto, con una quilla dorsal baja, margen entero, 1.4-2 x 0.4-0.6 cm. Bráctea espátacea ausente. Inflorescencia apical, racemosa, colgante, densa, florece una sola vez, 8.5 cm de largo; pedúnculo 2.3 mm de largo, fractiflexo, provisto de 2 brácteas prominentes, tubulares en la base, conduplicadas en el ápice, agudas, cubriendo casi en su totalidad al mismo, 9-13 x 1.5-2.5 mm. Brácteas florales casi tan largas como el ovario, gradualmente más pequeñas, lineares, acuminadas, abrazadoras, 2-5 mm de largo. Ovario terete, delgado, no inflado, no ornamentado, 6 mm de largo. Flores 5-10, la mayoría abierta de manera simultánea (aunque algunas apicales presentes aún en botón floral), resupinadas, de color casi blanco a tenuemente rosado ocráceo a rojo vinoso, sin fragancia. Sépalos extendidos, libres, angostamente ovados, agudos, margen entero, 8-8.2 x 3-3.7 mm; el dorsal 3-nervado; los laterales 5-nervados, diminutamente apiculados, oblicuos. Pétalos extendidos, libres, angostamente ovados, agudos, 3-nervados, las nervaduras ramificadas desde la base dando la apariencia de ser 5-nervados, margen diminutamente crenulado, 7 x 3.5 mm. Labello unido a la columna, entero, triangular cordiforme, profundamente cordado en la base, agudo en el ápice, margen diminutamente crenulado, 5-5.5 x 4-4.4 mm; ecalloso, desprovisto de quillas. Columna recta, delgada, 4 mm de largo. Clinandrio reducido, entero. Antera reniforme, 4-locular. Polinios 4, obovoides, redondeados, lateralmente comprimidos; caudículas suaves y granulosa ligeramente más largas que los polinios, subiguales. Rostelo apical, hendido. Lóbulos laterales del estigma no vistos. Nectario incipiente, sin penetrar el ovario, liso. Cápsula no vista.

Epiphytic, monopodial, pendent herb. Roots from the basal internodes of the primary stem, scarce, thin. Stems simple, produced from the subapical internodes of the previous stem, cane-like, terete, thin, straight to somewhat flexuous. Leaves 4-9, distributed throughout the stem, deciduous with time, spreading, alternate, articulate; sheath tubular, minutely striated; blade ovate-lanceolate, apex subacute, with a minute apicule, the dorsal keel low, margin entire. Inflorescence apical, racemose, pendent, dense, flowering only once, with a short fractiflex peduncle that bears 2 prominent bracts, tubular at their base, conduplicate towards the apex, acute, nearly totally covering the peduncle. Floral bracts nearly as long as the ovary, gradually shorter, linear, acuminate. Ovary terete, thin, not inflated, smooth. Flowers 5-10, most of them open simultaneously, resupinate, from nearly white to ochre-pink to wine-red, without fragrance. Sepals spreading, free, narrowly ovate, acute, margin entire; the dorsal sepals 3-veined, the lateral sepals 5-veined, minutely apiculate, oblique. Petals spreading, free, narrowly ovate, acute, 3-veined, the veins branching from the base and thus appearing 5-veined, margin crenulate. Lip united to the column, entire, triangular-cordiform, deeply cordate at the base, apex acute, margin minutely crenulate; ecallose, without keels. Column straight, thin. Clinandrium-hood reduced, entire. Anther reniform, 4-celled. Pollinia 4, obovoid, rounded, laterally compressed, subequal; caudicles soft and granule, slightly longer than the pollinia. Rostellum apical, slit. Nectary short, without penetrating the ovary, smooth.

OTHER SPECIMENS: PERU: Cusco: Santuario Histórico de Machu Picchu, Quebrada Alccamayo, bosque de neblina, 3000 m, agosto 2005, collected by Ermitaño Quispe, *Machu Picchu Pueblo Hotel-Inkaterra 86bis*, AMO! CUZ! Historic Sanctuary of Machu Picchu, Aguas Calientes, 2700 m, 6 XII 2001, *Nauray MP-621*, CUZ. Illustration, xerox, AMO!

DISTRIBUTION AND ECOLOGY: Known presently only from Machu Picchu, 2700-3000 m altitude, epiphytic on incense trees (*Cusia trochiformis*) in cloud forest. Flowering in October to December.



RECOGNITION: *Epidendrum quispei* belongs to the Quispei Group which is characterized by the monopodial, branching habit, the new stems produced from a subapical internode of the previous stem, the lack of spathaceous bracts, with 1-2 bracts on the peduncle, racemose inflorescence, the flowers star-shaped, the petals somewhat narrower than the sepals, the lip deeply cordiform and acute. The species is recognized by the pendent plants, racemose inflorescence with 5-10 flowers, 8 mm long sepals, deeply cordiform lip without calli, and the petals as wide as the sepals. Most other pendent *Epidendrum* species of this size have a spathaceous bract, and we have not found any species similar to this one. The plant habit is reminiscent of the Nanun Group, monopodial with the new stem produced from a subapical internode of the previous stem; however, the inflorescence is long and many-flowered, and the flowers, are typically *Epidendrum*-like, but somehow unique, with the deeply cordate, acute, ecallose lip.

CONSERVATION STATUS: DD. Data deficient.

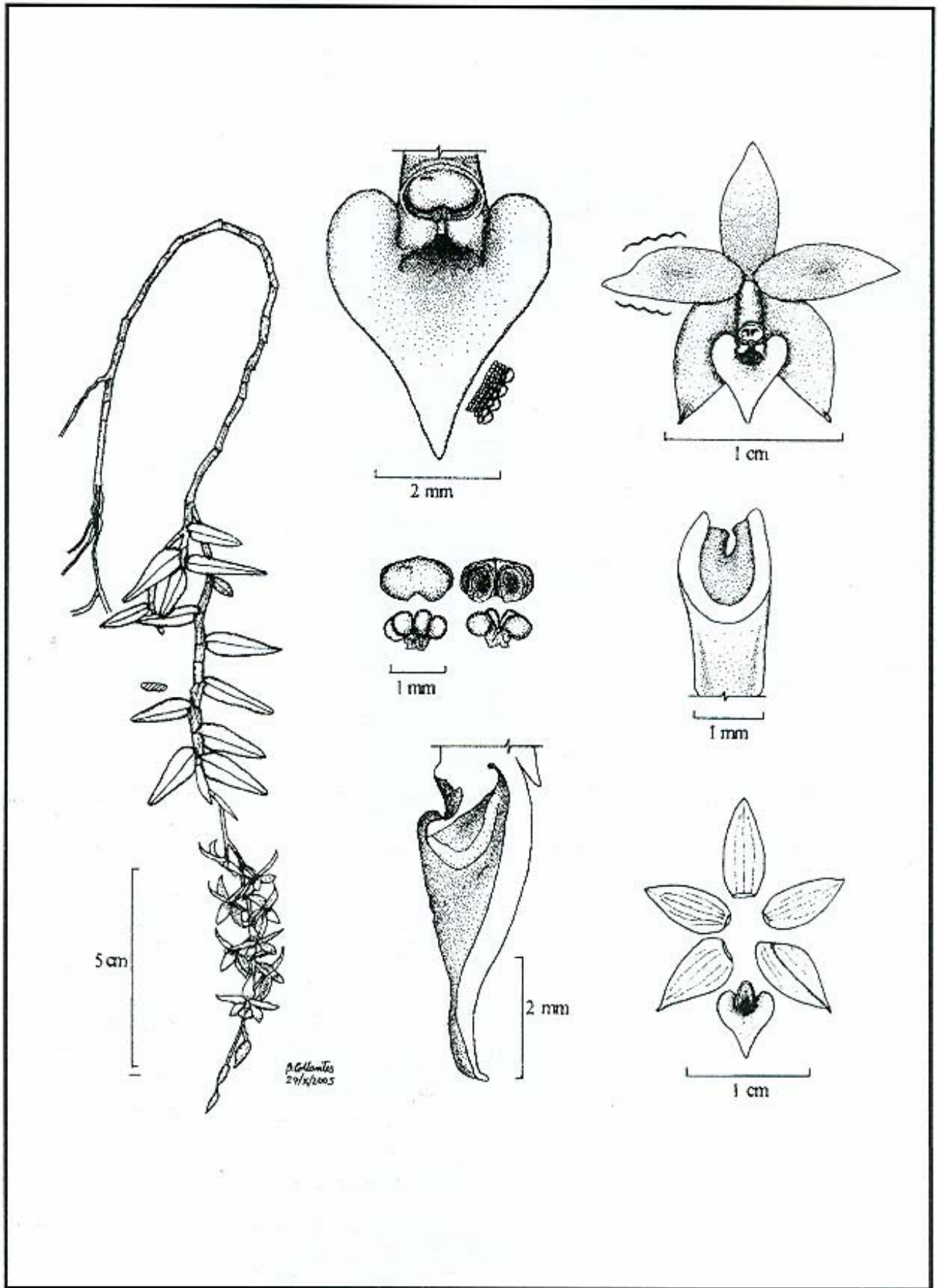
ETYMOLOGY: In honor of Moisés Quispe, an excellent conservationist collector, gardener at the Machu Picchu Pueblo Hotel-Inkaterra, who perished tragically in the huayco of April 2004 that affected the Machu Picchu Pueblo. Moisés and Ermitaño Quispe are not related.

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EPIDENDRUM QUISPEI Hagsater & Collantes

THE GENUS EPIDENDRUM PART 5

*EPIDENDRUM PACHACUTEQIANUM* Hágsater et Collantes, sp. nov.

Type: PERU: Cusco: Santuario Histórico de Machu Picchu, Quebrada Alccamayo, bosque de neblina, 3000 m, agosto 2005, cultivated by Ermitaño Quispe Batallanos y Ricardo Ojeda Abarca at the *Machu Picchu Pueblo Hotel-Inkaterra 85*. Holotype: USM! (Illustration voucher).

*Epidendro serpenti* Lindl. simile sed foliis bis majoribus oblongis rotundatis, floribus successivis majoribus, petalis oblongo-lanceolatis quam sepalis duplo angustioribus, labello cordiforme acuminato, separabile.

**Hierba** epífita, cespitosa, simpodial; 11 cm de alto, incluyendo la inflorescencia. **Raíces** a lo largo del rizoma, carnosas, blanquecinas, el ápice en crecimiento morado violáceo; 2 mm grosor. **Tallos** formando pseudobulbos algo engrosados, teretes, cortos, cubiertos con vainas tubulares no foliares; 2 x 0.6 cm. **Hojas** 1 ó 2, (aunque generalmente unifoliada) agregadas en el ápice del pseudobulbo, erectas, carnosas, gruesas, coriáceas, oblongas, ápice redondeado, margen entero, de color verde oscuro mate; 8.3 x 1.8 cm. **Bráctea espalácea** ausente. **Inflorescencia** apical, racemosa, subsésil, erecta, produciendo nuevos racimos con el tiempo; 2 cm de largo; pedúnculo muy corto, cubierto en su totalidad por 4 brácteas prominentes e imbricadas, arrosotadas. **Brácteas florales** más pequeñas que el ovario, anchamente triangulares, agudas, abrazadoras, de color rosado; 5 mm de largo. **Ovario** terete, delgado, no inflado, liso; 8 mm de largo. **Flores** 4-5, sucesivas, no resupinadas, con un duración de más de un mes cada una, sépalos y pétalos de color rosado grisáceo a rosado pálido cobrizo, el labelo rosado a verde cremoso, la columna verde cremosa con manchas fucsia dorsalmente en la base; sin fragancia. **Sépalos** libres, acuminados, 3-nervados, margen extendido y entero; el dorsal extendido, triangular lanceolado; 6 x 2.5 mm; los laterales entreabiertos, ovado triangularés, con una quilla dorsal prominente, oblicuos; 8 x 3.5 mm. **Pétalos** extendidos, libres, oblongo lanceolados, agudos, 1-nervados, oblicuos, margen extendido, diminutamente papiloso; 6.5 x 1.5 mm. **Labelo** unido de manera oblicua a la columna, ligeramente cóncavo en posición natural, entero, cordiforme, con un apículo en el ápice, margen extendido, papiloso; 6.5 x 4.5 mm; ecaloso, con una quilla lisa, carnosa, baja que se origina en la mitad de la lámina y se desvanece hasta el ápice de la misma. **Columna** gruesa, geniculada en la base con respecto del ovario, el cuerpo arqueado hacia arriba; 4 mm de largo. **Clinandrio** reducido, margen entero. **Antera** ovada, 4-locular. **Polinios** 4, obovoides a piriformes, subiguales; caudículas granuladas, más largas que los polinios. **Rostelo** apical, hendido. **Lóbulos laterales del estigma**, angostos, ocupando la tercera parte de la cavidad estigmática. **Nectario** poco profundo, sin penetrar el ovario, amplio, liso. **Cápsula** no vista.

Epiphytic, caespitose, sympodial herb. Roots produced along the rhizome, fleshy, thick, white, the growing apex violaceous purple. Stems forming somewhat thickened pseudobulbs, terete, short, covered by tubular, non-foliaceous sheaths. Leaves 1 or 2, (usually unifoliate), aggregate at the apex of the pseudobulb, erect, fleshy, thick, coriaceous, oblong, apex rounded, margin entire, dark green, mat. Inflorescence apical, racemose, sessile, erect, producing new racemes in time; peduncle very short, completely covered by 4 prominent, imbricating, tubular bracts. Floral bracts shorter than the ovary, widely triangular, acute, pink colored. Ovary terete, thin, not inflated, smooth. Flowers 4-5, successive, non-resupinate, lasting more than a month each, sepals and petals grayish pink to pale copper-pink, lip pink to creamy green, column creamy green with fuchsia spots dorsally at the base. Sepals free, acuminate, 3-veined, margin spreading and entire; the dorsal sepal spreading, triangular-lanceolate, the lateral sepals partly spreading, ovate-triangular, with a prominent dorsal keel, oblique. Petals spreading, free, oblong-lanceolate, acute, 1-veined, oblique, margin spreading, minutely papillose. Lip obliquely united to the column, slightly concave in natural position, entire, cordiform, the apex apiculate, margin spreading, papillose; ecallose, with a smooth, fleshy low keel originating at the middle of the lip and reaching the apex. Column thick, geniculate at the base with respect to the ovary and then arching upwards. Clinandrium-hood reduced, margin entire. Anther ovate, 4-celled. Pollinia 4, obovoid to pyriform, subequal; caudicles granulose, longer than the pollinia. Rostellum apical, slit. Nectary short, wide, smooth.

**OTHER SPECIMENS:** None seen.

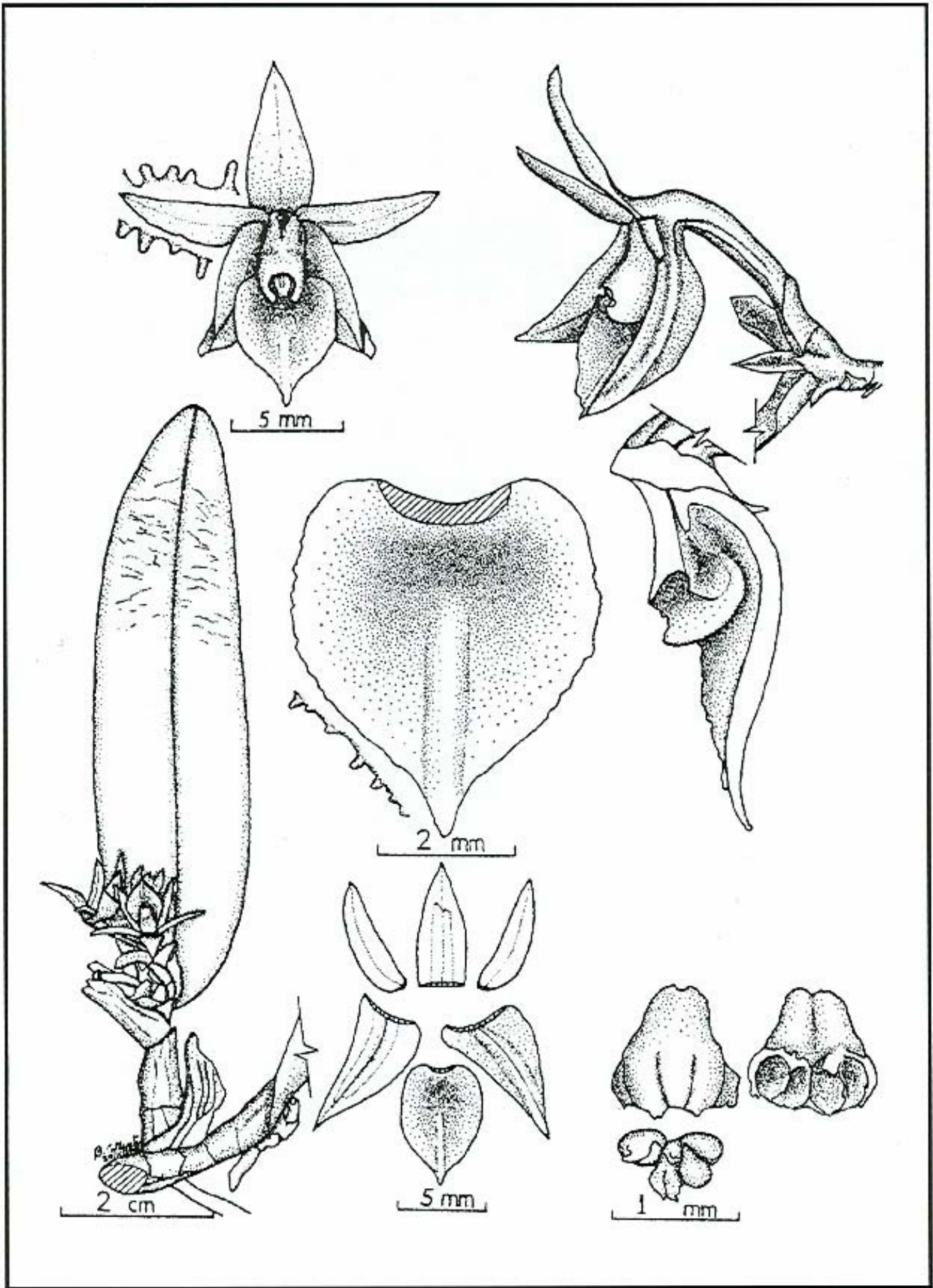
**DISTRIBUTION AND ECOLOGY:** Known only from the Machu Picchu Sanctuary, at 2900-3000 m altitude, epiphytic, in cloud forest. Flowering in August and September.



**RECOGNITION:** *Epidendrum pachacutecianum* belongs to the Kalopternix Group, Serpens Subgroup, characterized by reduced rhizomatous, aggregate pseudobulbous stems with one or few fleshy-coriaceous leaves, and an apical, sessile inflorescence without spatheous bracts, compact, star-shaped flowers, often burgundy red in color, lip entire, more or less cordiform. The species is recognized by the large, single, erect leaf per stem, the small, non-resupinate, successive flowers, sepals 6-8 mm long, the cordiform, acuminate, ecallose lip, the petals oblong-lanceolate, about half as wide as the sepals; the margin of the lip and petals is minutely papillose. It is somewhat similar to *Epidendrum serpens* which has a triquetrous capsule, smaller leaves, 32-37 x 10-12 mm, and somewhat smaller flowers the sepals 5.5-6 mm long, the margin of the lip is minutely dentate. *Epidendrum platyphylloserpens* Hágsater is smaller overall and pendent, leaves 32-47 x 17-22 mm, sepals 8.5 mm long, with the lip cordiform, rounded and short apiculate.

**CONSERVATION STATUS:** DD. Data deficient.

**ETYMOLOGY:** In honor of Pachacutec, the ninth Inca of the Hanan Dynasty, great legislator and monarch under whose reign Machu Picchu as well as the Qoricancha temple in Cusco were built.



EPIDENDRUM PACHACUTEQIANUM Hágsater & Collantes