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A New and Vegetatively Unique, Small-flowered *Cyrtochilum* (Orchidaceae, Oncidiinae), from Peru

Stig Dalström

Orchid Identification Center, Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, FL 34236, USA. Email: sdalstrom@selby.org

Abstract. A distinctive small-flowered *Cyrtochilum* (Orchidaceae; Oncidiinae) from Peru is described, illustrated, and compared with similar species.

Key words: Orchidaceae Epidendroideæ, Cymbidieæ, Oncidiinæ, Cyrtochilum, Bolivia, Peru, taxonomy

Introduction

The first record of this species that I am aware of were some flowers submitted by Sheila Anstall of Salt Lake City, Utah, to the Orchid Identification Center (OIC) in November of 1976. They were subsequently identified as *Oncidium cimiciferum* (Rchb.f.) Beer (*OIC 1150* = *Cyrtochilum cimiciferum* (Rchb.f.) Dalström). During my first visit to Selby Gardens in 1981, I encountered this specimen, drew a flower and was struck by the odd morphology, not corresponding to that of *C. cimiciferum* at all. I was unable to find another name for it, however, and put it away in my miscellaneous Oncidiinae file as an unidentified species.

At the time, I was occupied with trying to make some sense out of the rather generous mixture of taxa that had been lumped together in the genus *Odontoglossum* Kunth. It was already well established among taxonomists that the genus consisted of many different types of plants, some of which did not seem closely related at all. Eventually, among many other taxonomic transfers, one large group of plants was placed in the genus *Cyrtochilum* based on a combination of morphological features and molecular evidence (Dalström 2001). This particular project got me sidetracked from *Odontoglossum,* and I found myself fully occupied with the equally complex and confusing members of the genus *Cyrtochilum.* I decided to try and make some taxonomic sense out of them while still relatively fresh in my mind, rather than just dumping them along the scientific "roadside" and continuing with *Odontoglossum.*

During this work I visited the owner of the Peruflora orchid nursery, Manuel Arias and his family in Lima, Peru, where I discovered some blooming plants of a very odd looking *Cyrtochilum.* The plants were nameless at the time and differed from all other species in the genus that I had ever seen. The pseudobulbs were very dark green, similar to the pseudobulbs of an *Anguloa,* and the leaves were just as deep green but with a purplish hue, particularly along the edges, and also covered by a strange glaucuous surface. Somehow, however, the flowers seemed oddly familiar to me. On my return to the United States I went back to my files of unidentified species and found the drawing of OIC-1150 from 1981, and they matched very well. I concluded that it must be a new species, but procrastinated doing anything about it. During an expedition to southern Peru in 2002 with Jan Sönnemark of Halmstad, Sweden, and in collaboration with a group of orchid students from the Cusco University, led by Luis Valenzuela, our group discovered additional plants of this unusual *Cyrtochilum.* The plants grew in dense and shady cloudforest along the road from Cusco to Quillabamba, on the eastern slopes of the Andes. It was a pleasant surprise to have finally a valid locality and to learn about the natural habitat of this interesting species.

Taxonomic Treatment

Cyrtochilum sharoniae Dalström, sp. nov. TYPE: Peru, without specific locality, collected by the staff at the Peruflora orchid nursery and flowered in cultivation, Dec. 2001, Dalström 2638 (SEL). Figure 1.

Inter species generis Cyrtochili, species haec foliis purpureoviridibus glaucis, floribus relative parvis brunneopurpurascentibus, et columna lilacina differt.

Plant epiphytic. **Pseudobulbs** distant on a creeping, bracteate rhizome, surrounded basally and partially hidden by 3 to 5 distichous, foliaceous sheaths, narrowly ovoid to almost broadly linear, dark green, ca. 7–8 × 1–1.5 cm, bifoliate. **Leaves** subpetiolate, conduplicate, obovate, obtuse, acuminate, apically canaliculate, dark green with a purplish hue, particularly along the edges, and covered by a bluish-greyish, waxy-appearing surface, 38–50 × 3–5 cm. **Inflorescence** axillary, from the uppermost sheath, erect,

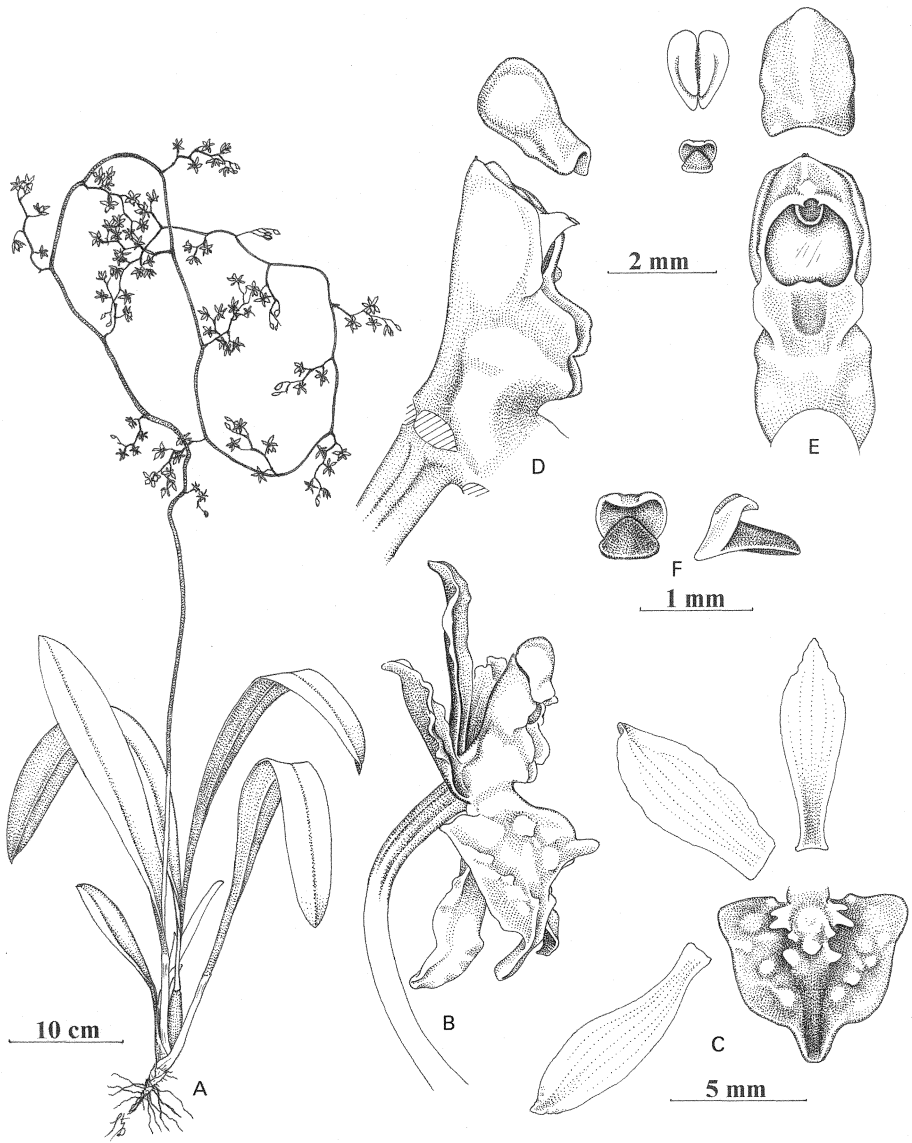

FIGURE 1. *Cyrtochilum sharoniae* Dalström. **A:** Plant habit (*Dalström 2638*; SEL). **B:** Flower lateral view. **C:** Dissected flower. **D:** Column and anthercap lateral view. **E:** Column ventral view, anthercap dorsal view and pollinarium. **F:** Stipe and viscidium reverse and lateral views. Drawing by author.

then wiry, 130–300 cm long panicle, with many, 7–10 cm distantly placed, flexuous to irregularly fractiflex, few- to many-flowered side-branches. Floral bracts inconspicuous, acute, appressed and scale-like, to ca. 2 mm long. Pedicel with an ovary triangular in cross-section, 10–15 mm long. **Flower** stellate to having the sepals and petals more or less reflexed; **dorsal sepal** pale straw- to greenish yellow, almost completely covered by dark purplish brown blotches, except for occasional transverse bands and apex, unguiculate to narrowly spathulate, then elliptic to obovate, acute, more or less undulate, 8–10 × 2.5–3 mm; **lateral sepals** similar in color, spathulate, narrowly ovate to obovate, apically canaliculate, acute, variably undulate, slightly oblique, 9–11 × 2.5–3 mm; **petals** similar in color but with less yellow, almost sessile, then linear to slightly spathulate, then ovate to obovate, apically canaliculate, more or less obliquely acute, 8–9 × 3–4 mm; **lip** with a chestnut lamina, turning purplish beyond the

callus and with a yellowish apex, rigidly attached to the base of the column, then diverging downwards in a circa 90° angle, cordate, trilobed, with rounded to obtuse lateral lobes, and a convex, almost rectangular to broadly rounded, irregularly tuberoid lamina, and an abruptly narrowed, ligulate, distinctly canaliculate, acute, recurved frontlobe, circa 7 × 7–8 mm; **callus** of a basal, central, longitudinal, fleshy ridge, extending to ca. half the length of the lamina, basally slightly flattened dorsally, then raised, and gradually laterally flattened, terminating in a variable, digitate or nose-like keel, with several series of lateral, spreading, irregular denticulate keels and knobs; **column** basally bright lilac, then turning reddish, stout, erect, almost straight, with a ventral, fleshy structure consisting of a pair of bilobed, longitudinal, ventral ridges, creating a cavity below the stigmatic surface, with or without minute, irregularly denticulate ridges on each side, and a broadly obtuse to broadly acute apex, ca. 5 mm long; **anthercap** honey yellow with some red markings, campanulate, dorsally lobulate, ventrally truncate to slightly tubate; **pollinarium** of two obovoid, cleft pollinia on a broadly elliptic, convex, ca. 0.8 mm high stipe, on a broadly elliptic, pulvinate viscidium.

DISTRIBUTION: Reported from southern Peru and Bolivia.

ETYMOLOGY: Named with great pleasure in honor of Sharon Stephens, who, together with her husband Russell, founded the Friends of Orchid Research Fund (FOR), administrated by the Community Foundation of Sarasota.

PARATYPES: **Bolivia.** Without specific locality, flowered in cultivation and submitted for identification by Sheila Anstall of Salt Lake City, Utah, 11 Nov. 1976, OIC 1150 (SEL). **Peru.** Dept. of Cusco, along road Cusco–Quillabamba, in dense montane forest, 2500–2900 m, 6 Dec. 2002, Dalström 2658 (SEL; color transparency).

Cyrtochilum sharoniae differs from all other species in this otherwise diverse genus by the large and creeping foliaceous plant, with a dark, slightly purplish-green coloration. The leaves have a glaucuous surface, which is unique in the genus and similar to some pendent, unrelated orchid species such as *Ida dyeriana* (Sander ex Rolfe) Oakeley and *Masdevallia caesia* Roezl. The vegetative habit of *Cyrtochilum sharoniae,* however, is similar to most other species in the genus, with an erect growth and arching leaves. The significance of the glaucuous surface is unknown. The coloration of the flower is also distinctive, being dark purplish brown and with a clear lilac column, making it a rather attractive species in a modest way. The number of flowers on the up to 3 m long, wiry inflorescence well make up for their small size.

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LITERATURE CITED

Dalström, S. 2001. A synopsis of the genus *Cyrtochilum* (Orchidaceae; Oncidiinae): taxonomic re-evaluation and new combinations. Lindleyana 16(2): 56–80.