Stanhopea avicula, a New Twin-flowered Species from Eastern Panama

he genus *Stanhopea* includes some of the most distinctive and striking orchids of tropical America. While most species have large and complex flowers, others have smaller and simpler flowers. The species with smaller flowers appear to be the most primitive members of the genus. These small-flowered Stanhopea species typically have paired flowers and, in most cases, lack the "horns" so characteristic of their large-flowered relatives. As distinctive as these twin-flowered species are, there is no sharp line setting them off from their relatives. They usually lack horns, but S. cirrhata has rudimentary horns. The Ecuadorian S. connata is almost diagrammatically intermediate between S. cirrhata and the larger "toritos" such as S. oculata and S. wardii. The twin-flowered species, including S. connata, typically have a very thick column, but the new species to be described here has a slender column, more like that of S. oculata.

Dr. Kenneth Reading is a geologist by profession, but he is interested in a wide range of subjects, including orchids and freshwater plankton. In 1980 he and Dr. Ronald R. Tasker visited Darién, climbed Cerro Tacarcuna and brought back a number of interesting orchids. They kindly permitted me to pick out material for study, before they arranged an export permit and had the rest of their material sent to Canada. Their material included *Cattleya dowiana*, *Gon*-

gora atropurpurea, the very attractive Maxillaria endresii, and a distinctive (probably unnamed) Maxillaria with fleshy leaves like those of Maxillaria uncata. Much to my surprise, a Stanhopea from about 1,500 meters in elevation grew very well in the garden near sea level, although other Stanhopea plants from lower elevations grew poorly there.

The plant in question formed two inflorescences early in 1982, and it was soon obvious that it would be one of the twinflowered species. At first, I thought it might be Stanhopea pulla, which is frequent on the Caribbean coast of central Panama, but the buds became too long and narrow to be S. pulla. As the buds grew larger, I decided that they were too narrow to be S. ecornuta and the wrong shape to be S. cirrhata. This left only S. annulata, which is known from the Pacific coast of Colombia and Ecuador, so I expected only a "new record" for Panama when the buds opened. However, the Tacarcuna plant proved to be a distinctive new species closely allied to S. annulata.

Stanhopea avicula, sp. nov.

Pseudobulbi aggregati. late ovoidei. monophylli. Folia petiolata, elliptica. Inflorescentia pendens, biflora. Flores non resupinati. Sepala anguste deltoidea. Petala anguste deltoidea, reflexa. Labellum carnohypochilium subglobosum, extus paulo supra medium incrassatione transversali annuliformi circundatum; epichilium porrectum, anguste conicum, oblique ascendens. Columna gracilis, leviter arcuata, parte superiore alata.

Pseudobulbs clustered, conic-sub-

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Stanhopea avicula (left), photographed by Kerry Dressler, may be distinguished from Stanhopea annulata (right) by its longer, slender column and by the narrow, tapering epichile of the lip. Stanhopea avicula takes its specific name, meaning ''little bird,'' from the apex of the epichile, which resembles a bird's head in profile.

globose, 2.5-3 cm long, 2-2.5 cm wide; petiole 2.5-4 cm long; leaf blade elliptic, 17-27 cm long, 7-10 cm wide; inflorescence pendent, 2-flowered; peduncle 2.5-3 cm long, with about 5 broad conduplicate bracts up to 3 cm long, 4 cm wide; floral bracts 5-5.2 cm long, 4.5-4.6 cm wide; ovary and pedicel 3.5 to 4.5 cm long; sepals and petals vellowish ivory, sepals vellowish basally, petals brownish basally; sepals narrowly triangular, obtuse, dorsal 3.8 cm long, 2-2.2 cm wide, laterals basally oblique, concave, 4 cm long from point of attachment (4.7 cm including basal lobe), about 2.5 dm wide; petals narrowly triangular, obtuse, abruptly reflexed near base, 3 cm long, 1.4 cm wide; lip 2.5-2.6 cm long, the hypochile (including ring) apricot-yellow, with some red within, subglobose, deeply saccate, the opening subquadrate, ca. 4 mm long, 5 mm wide, with a raised, fleshy ring encircling the hypochile at the level of the opening; epichile ivory, shading to yellow at base, narrowly conic, weakly triangular in section, apically somewhat sigmoid (rather like the head and neck of a bird in profile), the apex oblique, with one side higher than the other; column pale green with some red marks above and beneath, 2.5 cm long, basally slender, above about 6 mm wide, weakly winged; anther flattened, 4 mm long, 3 mm wide; rostellum with 3 bristles, the median bristle much longer than the laterals; viscidium cordate-sagittate, 2 mm long, 1.5 mm wide; stipe fleshy, ca. 0.6 mm long; pollinia 2, oblanceolate, 3 mm long, 1 mm wide.

HOLOTYPE: PANAMA: Darién, Cerro Tacarcuna, elev. about 1500 m; Feb. 1980; flowered in cult. 13 Feb. 1982; sepals and petals pale cream-yellow, petals reddish at base, lip orange basally, cream above, column green with purple spots; *K. R. Reading* and *R. R. Tasker s.n.* (MO, isotype FLAS).

This new species is obviously a close relative of S. annulata, with which it shares the fleshy ring about the hypochile. It is at once distinct from S. annulata by the longer, slender column and the narrow, tapering epichile. Indeed, the lateral view of the lip is much like that of S. annulata, but from above or beneath the epichile is seen to be much narrower. The pollinia of *S. avicula* are distinctly smaller than those of S. annulata, the stipe is narrower toward the viscidium, and both the viscidium and the lobe at each side of the stipe are narrower. The epithet avicula, or "little bird," refers to the apex of the epichile, which resembles the head of a bird in profile. Cerro Tacarcuna is on the border between Panama and Colombia, and S. avicula surely occurs on the Colombian side of the mountain, if not much farther south. Although the plant grew well near sea level in Panama, the division that was sent to Gainesville has grown very poorly. The division that remained in Panama was stolen soon after I moved to Florida. Stanhopea avicula is rare in herbaria and even rarer in living collections, but it may be common in to inaccessible mountains of eastern Panama and northwestern Colombia.