

*Seegeriella crothersii* Pupulin & H. Medina, sp. nov. TYPE: Ecuador—Morona-Santiago: Patuca, ca. 600 m, collected by H. Medina & S. Crothers, 2001, flowered in cultivation in the collection of Ecuagenera at Gualaceo, 21 June 2008, *H. Medina* 68 (HOLOTYPE: QCA—Spirit). FIGURES 1–2.

*A Seegeriella pinifolia* Sengh. *foliis lateraliter complanatis, inflorescentia paniculata terminationibus bifloribus, labello dimidio minore, lobulis lateralibus triangularibus abbreviatis, sepalis petalisque viridiflavis recedit.*

**Herb** epiphytic, pseudobulbous, erect, caespitose-repent, to about 6 cm tall. **Roots** terete, flexuous, less than 1 mm in diameter, produced from the short rhizome. **Pseudobulb** narrowly elliptic-ovate, 7 mm long, 2 mm wide, 1- to 2-leaved at apex, partially covered by 3–4 conduplicate, rectangular, scarious leaf-sheaths, 4–9 mm long, 2 mm wide, provided with hyaline, scarious margins. **Leaves** articulate with the sheaths or apical on the pseudobulb, laterally flattened, linear-subfalcate, acuminate, 10–50 mm long, 1–2

mm wide. **Inflorescence** lateral, arising from the upper leaf-sheaths, beginning erect and then arching, a few-flowered, successive, paniculate raceme to 4.5 cm long, provided with primary branches to 2 cm long and secondary, (1-) to 2-flowered branches to 0.5 cm long; peduncle terete, 1.5 cm long, provided with 1–2 loose, ovate, acute-acuminate, membranaceous bracts to 3 mm long. **Floral bracts** triangular-ovate, acuminate, 1–2 mm long, ca. 1 mm wide. Pedicellate **ovary** terete, slightly clavate at apex, 3 mm long including the pedicel. **Flowers** spreading, small, hyaline-membranaceous, to 1 cm in diameter, with sepals and petals pale greenish-yellow, the lip white, the column white, the anther cream. **Sepals** subsimilar, oblanceolate, obtuse, the *dorsal sepal* erect, deeply concave at apex, 5.2 mm long, 0.8 mm wide; the *lateral sepals* slightly asymmetrical-subfalcate, 5.2 cm long, 1 mm wide. **Petals** subsimilar, oblanceolate-subfalcate, acute, gently incurved at apex, 4.8 mm long, 0.5 mm wide. **Lip** adnate to the base of the column for about 1 mm, the blade emerging from the underside of the column, 3-lobed, hastate, 2.5 mm long, 2.5 mm wide across the lateral lobes; lateral lobes narrowly triangular, acute, falcate-retrorse; midlobe triangular-ovate, acute; disc with a high, rounded, flattened keel running to the base of the midlobe. **Column** slender, terete-subclavate, to 4 mm long, apically provided with 2 distinct, subquadrate, rounded wings. **Anther cap** cucullate, ovate, minutely papillose, 2-celled. **Pollinia** 2, obtriangular-obovate, strongly flattened, on a narrowly oblanceolate-ligulate, hyaline stripe; viscidium elliptic, brown. **Fruit** not seen.

**Distribution and ecology.** The species has been only found in the Amazonian watershed of central Ecuador, where it occurs in tropical wet forests at around 600 meters of elevation. Plants of *S. crothersii* grow in the open shadow of the middle canopy, and they have been observed only in secondary vegetation, rooting among lichens and mosses.

**Phenology.** Flowering has been recorded at least in November–December and in June.

**Etymology.** Named after Samuel Crothers, of Allentown, Pennsylvania, USA, who participated in the collection of the type specimen. As a rainforest guide and researcher, Sam climbed for the first time the impervious Pan de Azucar mountain, in western Ecuador, exploring for orchids on the slopes and summit of this enchanted peak.

**Comments.** *Seegeriella crothersii* mainly differ from *S. pinifolia* by the laterally flattened, “equitant” leaves (vs. subulate), the paniculate

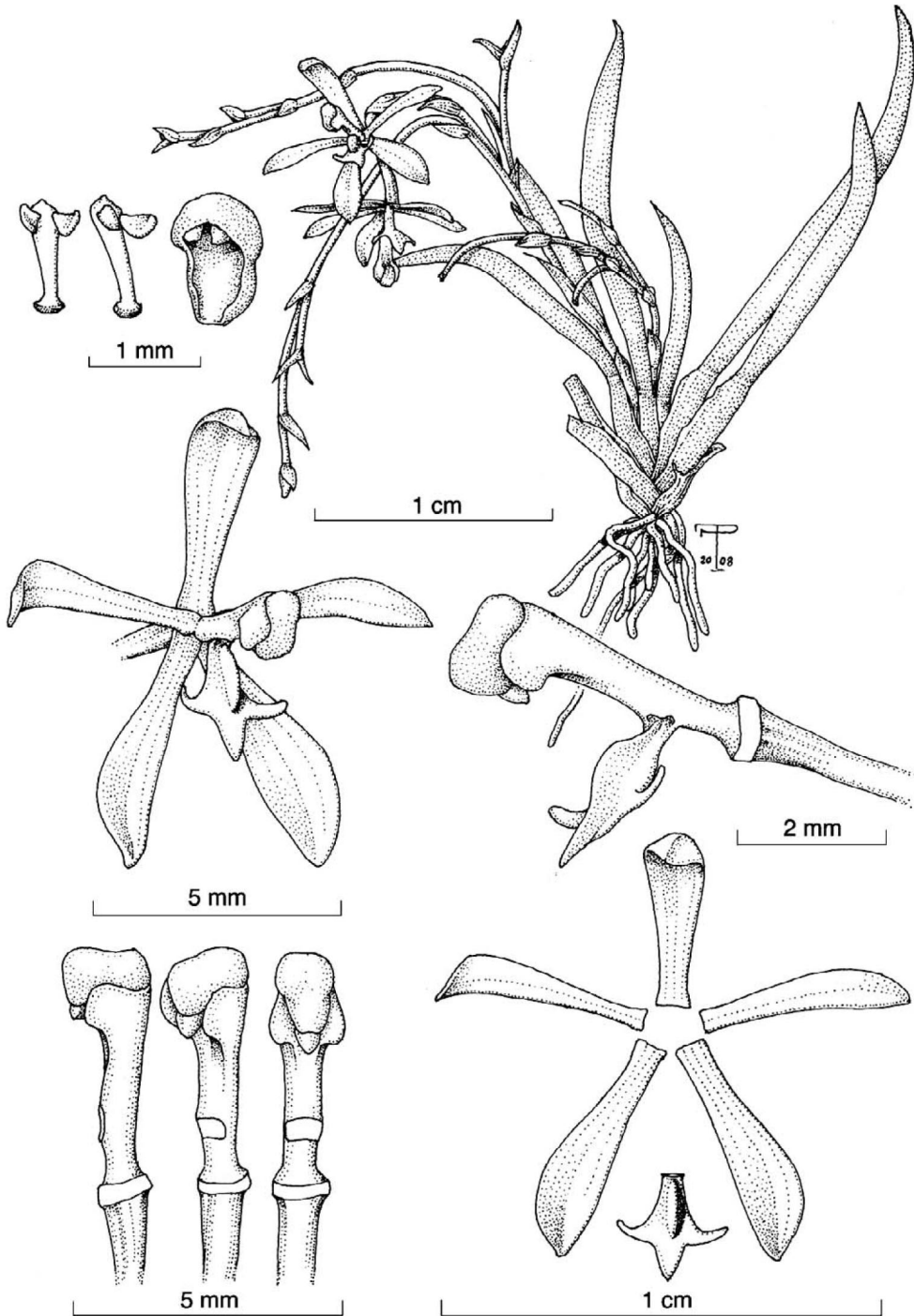


FIGURE 1. *Seegeriella crothersii*. **A.** Habit. **B.** Flower. **C.** Floral dissection. **D.** Column and lip, lateral view. **E.** Column, ventral and lateral views. **F.** Pollinarium (two views) and anther cap. (Drawn from the type by F. Pupulin).

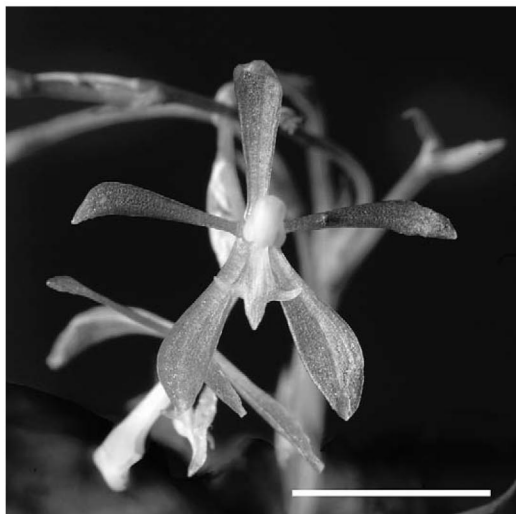


FIGURE 2. *Seegeriella crothersii*. Photo of the flowers from the plant that served as the holotype. Scale bar = 5 mm. Photo by F. Pupulin.

inflorescence, provided with short secondary, apically 2-flowered branches (vs. simple, sub-umbellate, few-flowered in *S. pinifolia*), the diminutive size of the lip, approximately half of the length of the sepals and petals, provided with comparatively short lateral lobes (vs. subequal to the sepals, the lateral lobes long), and the color of the perianth, provided with greenish yellow sepals and white lip (vs. concolorous white).