New Species and Combinations in Costa Rican Orchids

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ABSTRACT. Four new species from Costa Rica are described and illustrated: *Oncidium imitans*, *Ornithocephalus grex-anserinus*, *Paphinia subclausa*, and *Scaphyglottis atwoodii*. The following new combinations are made: *Encyclia peraltensis* (Ames) Dressler, *Reichenbachanthus subulatus* (Schlechter) Dressler, *Stellilabium lankesteri* (Ames) Dressler, amd *Trichosalpinx rotundata* (C. Schweinfurth) Dressler.

As the orchid treatment for the *Manual de la Flora de Costa Rica* nears completion, several additional new species and combinations are needed. There remain a number of probable new species for which the available material is insufficient.

Oncidium imitans Dressler, sp. nov. TYPE: Costa Rica. San José: about 25 km N of San Isidro del General along the Interamerican Highway, 9°20′N, 83°41′W, 1800 m alt., tall wet evergreen forest on steep slopes, on roadside bank on moss-covered log, *W. Burger & R. Baker 10075a* (holotype, F). Figure 1.

O. obryzatoide similis sed bracteis longissimis tenuibus, sepalis lateralibus connatis, columna sine tabula infrastigmatica vel constrictione basali.

Caespitose, pseudobulbs ovoid, compressed, ca. 4 × 2 cm; leaves 1 apical, 2 sheathing, ligulate, narrowed basally, ca. 15 × 1.6 cm; inflorescence ca. 20 cm, simple, of 3–4 flowers; bracts long and narrow, thin, scape bracts 4.5–5 × 0.4–0.5 cm, floral bracts to 2.5 × 0.3–0.5 cm; sepals greenish yellow, callus white with red-brown spots, lip and petals yellow, with red on margins of isthmus and red spots on column wings; dorsal sepal elliptic, 9 × 2.5–3 mm, lateral sepals lance-elliptic, united for ca. 7 mm, together 9 × 4 mm; petals oblong-oblanceolate, obtuse, 10 × 4 mm; lip 15 × 16 mm, base with a 2-mm-wide thickening to callus, lateral lobes oblong, to 2.5 × 1.5 mm, isthmus subquadrate, 5 × 4 mm, callus 2.5 × 4 mm, 7-lobed, midlobe 6 × 15–16 mm, shallowly retuse; column 8 mm, trigonous-terete, without tabula infrastigmatica, wings ca. 1.5 × 3.5 mm.

I first encountered this species in the Jardín Lankester, where a plant from Santa María de Dota was labeled as *O. obryzatoides* Kraenzlin. My wife and I photographed the flowers and preserved a couple in liquid, without questioning the identification. When I later studied *O. obryzatoides*, it was immediately obvious that the plant from Santa María de Dota was distinct. The long bracts, the column without a tabula infrastigmatica, and the partially united lateral sepals all suggest *O. warscewiczii* Reichenbach f. *Oncidium imitans* may prove to be a natural hybrid of *O. warscewiczii*. It has been collected it two localities, in each case identified as *O. obryzatoides*. Though superficially similar to *O. obryzatoides*, the column without either tabula infrastigmatica or basal constriction and the connate lateral sepals at once distinguish *O. imitans*. The epithet, *imitans*, refers to its superficial similarity to *O. obryzatoides*.

Ornithocephalus grex-anserinus Dressler & Mora-Retana, sp. nov. TYPE: Costa Rica. Alajuela: dist. Sarapiquí, alrededores de Laguna María Aguilar, elev. 500–700 m, 10°18′N, 84°11′O, 5 mayo 1992, *D. E. Mora-Retana, F. Pupulin & A. Herrera s.n.* (holotype, USJ 49975). Figure 2.

Habitu genere, sepalis ovatis carinatis apiculatis, petalis cuneato-unguiculatis spathulato-flabellatis, labello pandurato-oblongo callo humili.

Plant psygmoid, leaves linear-lanceolate, subfalcate, acuminate, 4.2–8 × 0.3–0.5 cm, abscission layer ca. 5 mm from base; inflorescence lateral, 8–9 cm, rachis fractiflex, bracts triangular-ovate, cordate, acute, keeled, glandular-erose, 2–3 mm; ovary and pedicel 6–7 mm; sepals ovate, carinate, apiculate, laterals reflexed, 3–3.2 × 2–2.2 mm; petals cuneate-unguiculate, truncate-subspatulate, 6 × 5.6 mm; lip 9 × 3.2 mm, lateral margins recurved, callus 3 × 2.8 mm, cordate, ovate, distally continuous with surface of blade; shaft of column ca. 0.8 mm, anther with rostellar beak ca. 3 mm.

A single plant of this species was found by the

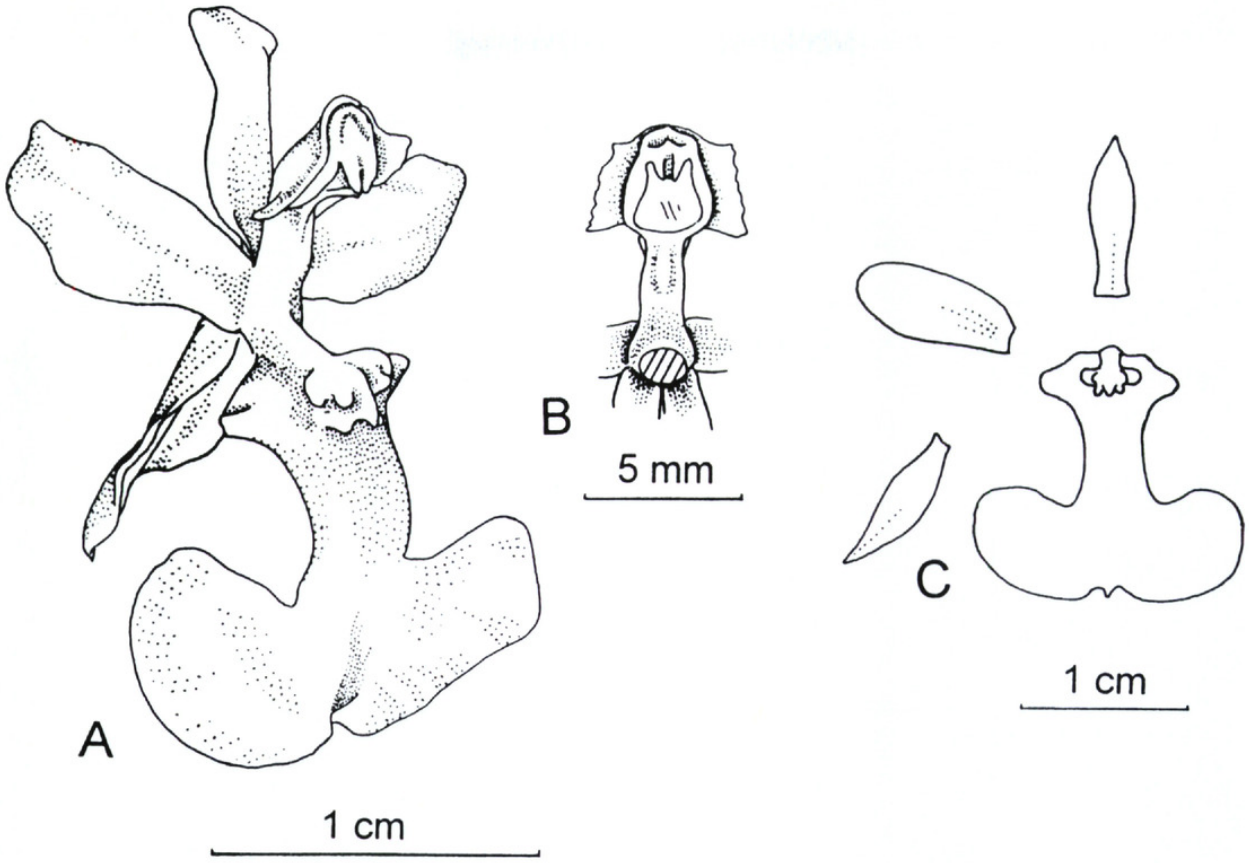

Figure 1. *Oncidium imitans* Dressler. —A. Lateral front view of flower. —B. Ventral view of column. —C. Perianth parts flattened. Based on liquid-preserved material of plant cultivated in Jardín Lankester (FLAS).

collectors when seeking *Macroclinium*. When the plant flowered in cultivation, it proved to be so unusual that we do not hesitate to describe it as a new species. To date, no other plants of this species have been found.

Ornithocephalus grex-anserinus is distinct in the spreading, subspatulate petals, the reflexed sepals, and the simple lip with the median surface of the callus continuous with the blade. The inflorescence with spreading wing-like petals reminds one of a flock of migrating geese, to which the epithet alludes.

Paphinia subclausa Dressler, sp. nov. TYPE: Costa Rica. Reserva Juan Castro Blanco, 900 m, sobre troncos grandes, ago. 1989, *Dora E. de Retana* (holotype, USJ). Figure 3.

P. rugosae similis sed pede columnae brevi, floribus albidis subclausis, lobo intermedio labello angustiore.

Caespitose, pseudobulbs ovoid, smooth, somewhat compressed, subtetragonous, 2.5–3.5 × 1.5–2 cm; leaves 2, thin, plicate, elliptic, subpetiolate, 17–22 × 2.7–6 cm; inflorescence pendent, 8–15 cm, with 3–6 flowers; floral bracts 12–14 × 6–8 mm; pedicel with ovary 4.5–5 cm; sepals lanceolate or elliptic-lanceolate, acuminate, 3.5–5 × 1.2–1.6 cm, petals similar, 3–3.7 × 1–1.3 cm; lip 3-lobed, cuneate, 2.5–3.7 × 1.2–1.5 cm, lateral lobes obliquely subquadrate (resembling a shark fin), antrorse, acute, 4–5 × 6–7 mm, midlobe 3-lobulate, 9–10 × 8–9 mm, widest across basal lobules, midlobule oblong, with few small, erect keels and 2 erect clavate appendages between lateral lobes, distally fimbriate with many clavate, verruculose appendages ca. 4 mm long; column 17–20 mm, arcuate, winged.

When C. H. Dodson and I found a white-flowered *Paphinia* between Turrialba and Siquirres in 1965, it was thought to be the plant described as *P. cristata* var. *modiglianiana* Reichenbach f. (Fowlie, 1964). Flowers were kept in fresh condition as long as possible to attract pollinators for photography and identification, so the flowers available for pressing were few and rather battered. The lack of an adequate type specimen was one reason that I treated *P. clausula* as a new name, based on *P. cristata* var. *modiglianiana*, rather than a new species. Now, both Jenny (1979) and Dodson and Neudecker (1990) have studied the European herbarium material and found that *P. cristata* var.

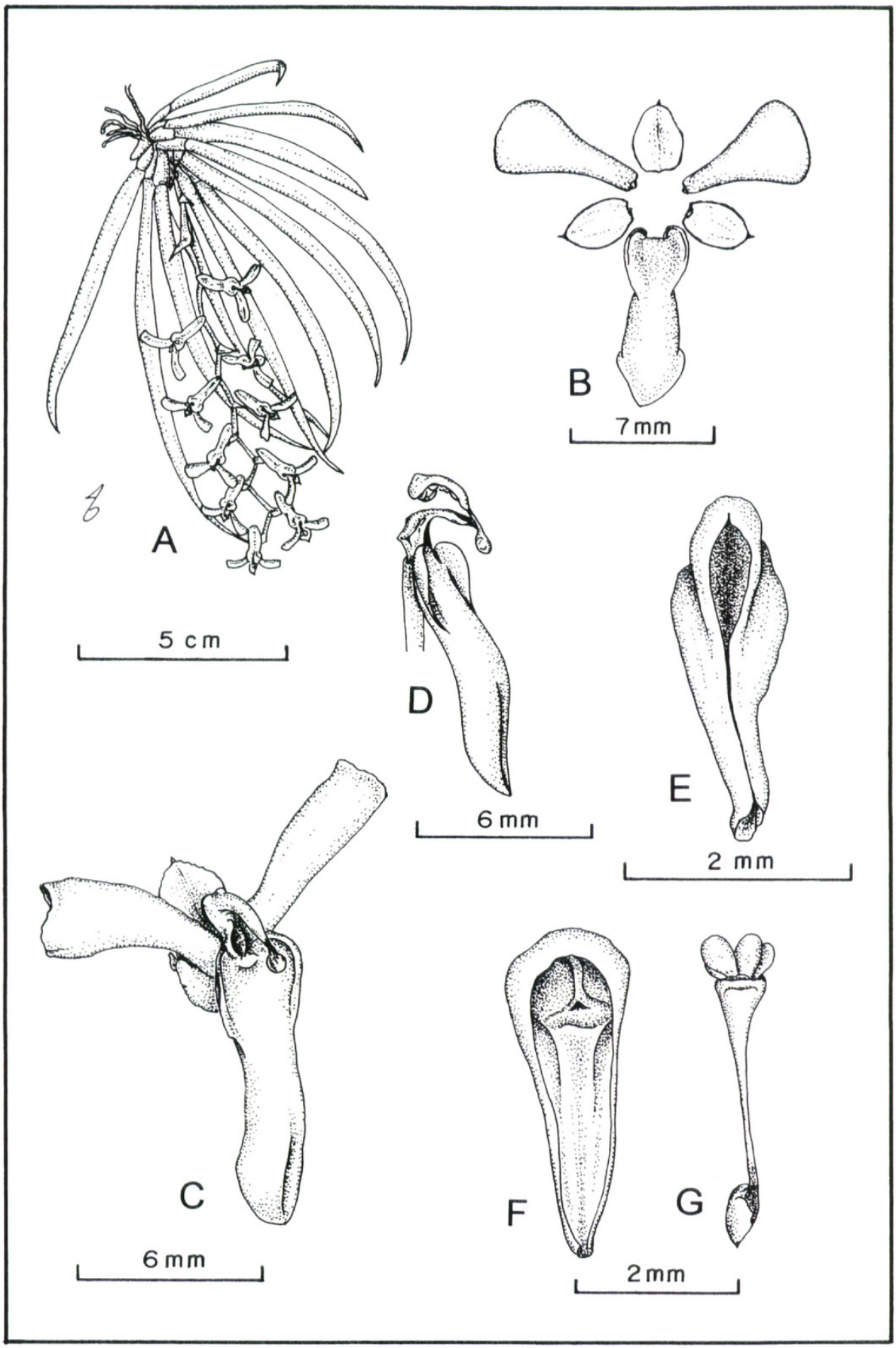

Figure 2. *Ornithocephalus grex-anserinus* Dressler & Mora-Retana. —A. Habit. —B. Perianth parts, spread. —C. Flower front view. —D. Lip and column. —E. Column, dorsal view. —F. Anther. —G. Pollinarium. Based on living material of type plant.

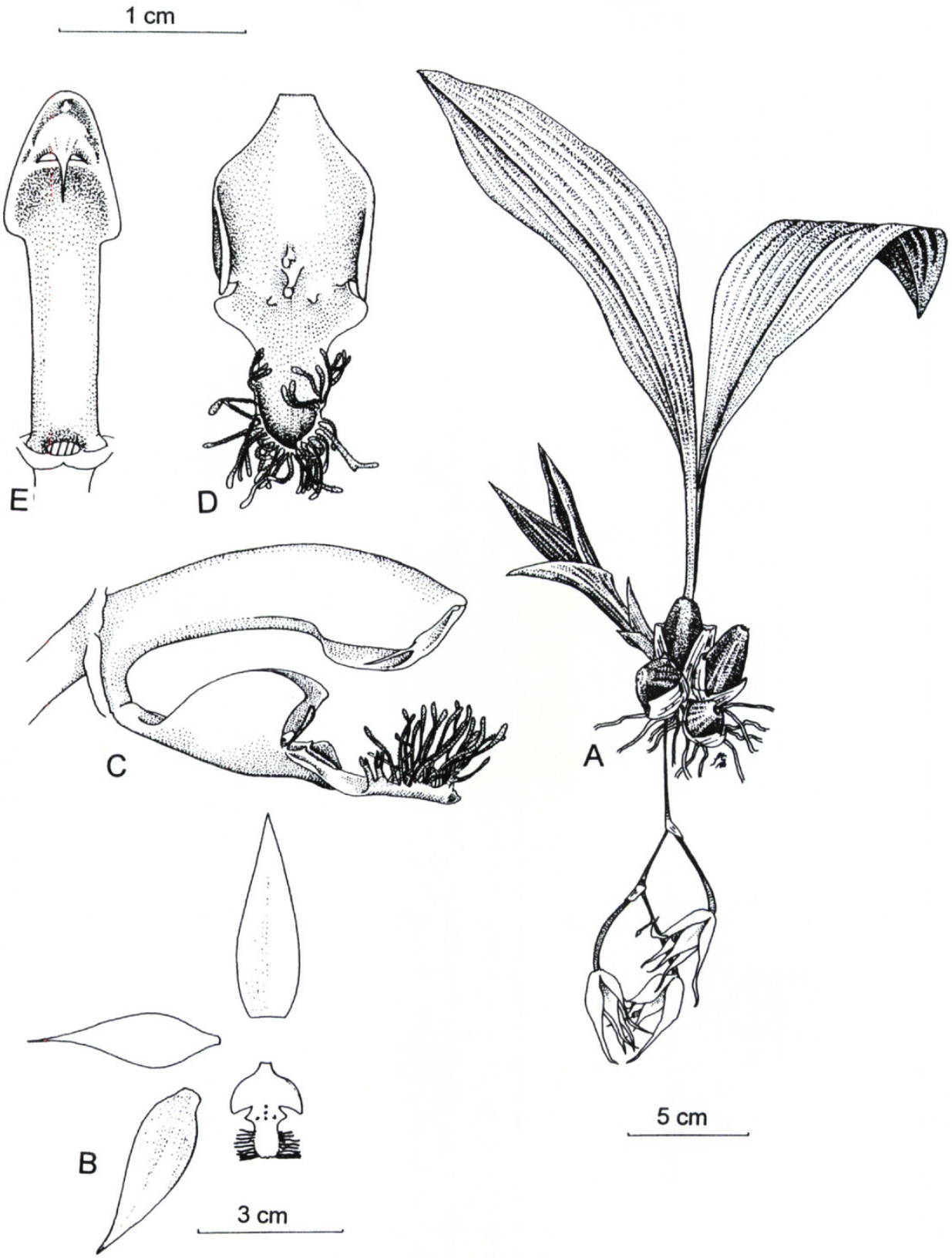

Figure 3. *Paphinia subclausa* Dressler. —A. Habit. —B. Perianth parts spread. —C. Lip and column, lateral view. —D. Lip in natural position. —E. Column, ventral view. Based on living and liquid-preserved material of a plant collected near Turrialba.

modiglianiana is, indeed, a white-flowered form of *P. cristata* from Brazil. As the name *P. clausula* is irrevocably tied to the type of *P. cristata* var. *modiglianiana*, the Costa Rican *Paphinia* must be described as new. Fortunately, an excellent type specimen is now available.

Paphinia subclausa is distinctive in the short column foot, lack of appendages or lobules at the base of the lip, and its white, half-closed flowers. These features suggest a close alliance with *P. rugosa* Reichenbach f. and *P. neudeckeri* Jenny, both species with pale forms in Colombia (Dodson & Neudecker, 1990).

Scaphyglottis atwoodii Dressler, sp. nov. *Scaphyglottis gracilis* sensu Atwood (Icones Plantarum Tropicarum 14: 1391. 1989), non Schlechter. TYPE: Costa Rica. Heredia: 3 km E of Puerto Viejo de Sarapiquí, Finca La Selva, 50–150 m, 27 Oct. 1979, *C. Todzia 962* (holotype, MO). Figure 4.

S. bilineatae similis sed base labello cum pede columnae minuto sigmoideo, lobo intermedio labello flabellato papilloso eroso-denticulato, apice columna leviter deflexa in media alis.

Stems slender, superposed, basal stems 6–20 cm, basally with sheaths bearing caducous, reduced leaf blades; leaves oblong or elliptic-oblong, 5.5–9.5 × 0.6–1.1 cm; flowers solitary or fascicled, bracts oblong, brown, conduplicate, 5–7 × 3–4 mm; sepals narrowly oblong, acute, 6 × 1.6–2 mm; petals ligulate, 6 × 0.7–1 mm; lip cuneate, 6 × 3.5–4 mm, shallowly 3-lobed, lateral lobes decurrent, 0.5 × 2 mm, midlobe subflabellate or transversely rhombic, verruculose, base of lip abruptly bent upward, paralleling column foot, and then forward; column ca. 6 mm, with prominent wings, bent at the wings.

Atwood identified these plants as *Scaphyglottis gracilis* Schlechter. Though the protologue shows none of the unique features of that species, Schlechter's drawing of the flower could be taken to represent *S. atwoodii*. A tracing of the plant (AMES), however, shows much narrower leaves, indicating that *S. gracilis* is a synonym of *S. prolifera* Cogniaux. *Scaphyglottis atwoodii* resembles *S. bilineata* (Reichenbach f.) Schlechter in most features but is easily separated by (1) the abruptly bent base of the lip, which, with the column foot appears to form a nectary, (2) the flabellate midlobe of the lip with papillose surface and erose-denticulate distal margin, and (3) the spoon-like column apex bent at the wings. The plants appear to be autogamous, flowering and setting fruits irregularly.

This species is known only from Finca La Selva, where there have been several collections. Plants collected in nearby Chilamate proved to be *S. bilineata*, a species not recorded from La Selva.

Paratypes. COSTA RICA. **Heredia:** all from Finca La Selva: *J. Folsom 8818* (DUKE), *9156* (DUKE), *10128* (DUKE), *C. Todzia 842* (CR), *1084* (DUKE).

NEW COMBINATIONS

Encyclia peraltensis (Ames) Dressler, comb. nov. Basionym: *Epidendrum peraltense* Ames, Sched. Orch. 1: 46. 1922. TYPE: *C. H. Lankester & A. Sancho 378* (holotype, AMES).

This may prove to be a natural hybrid, of which only a few collections have been made from the Atlantic slope of Costa Rica. Until its parentage can be determined, it should at least be treated with the rest of its congeners, in *Encyclia*.

Reichenbachanthus subulatus (Schlechter) Dressler, comb. nov. Basionym: *Scaphyglottis subulata* Schlechter, Repert. Spec. Nov. Regni Veg. 8: 454. 1910. TYPE: *A. Biolley 1367* (holotype, B presumably destroyed).

The drawing, supposedly of this species, that was published (Repert. Spec. Nov. Regni Veg. Beih. 59: t. 44) proves to be a drawing of *S. brachiata* Schlechter (= *S. stellata* Loddiges ex Lindley). There is, however, a photograph of the type in the Ames Herbarium, and this is clearly what was described as *Hexisea lankesteri* Ames, for which the combination *Reichenbachanthus lankesteri* (Ames) Mora-Retana & J. García was only recently published. *Scaphyglottis subulata*, however, is earlier by a number of years, and so the epithet *subulatus* must be used for this species.

Stellilabium lankesteri (Ames) Dressler, comb. nov. Basionym: *Telipogon lankesteri* Ames, Sched. Orch. 3: 23. 1923. TYPE: *C. H. Lankester 361* (holotype, AMES).

Unfortunately, the number of type specimens of *Stellilabium* is not much less than the total number of specimens available. Each, however, appears to be distinct and thus this new combination is needed.

Trichosalpinx rotundata (C. Schweinfurth) Dressler, comb. nov. Basionym: *Pleurothallis rotundata* C. Schweinfurth, Bot. Mus. Leafl. 4: 115. 1937. TYPE: *A. A. Hunter & P. H. Allen 561* (holotype, AMES).

I had no intention of poaching in Carl Luer's

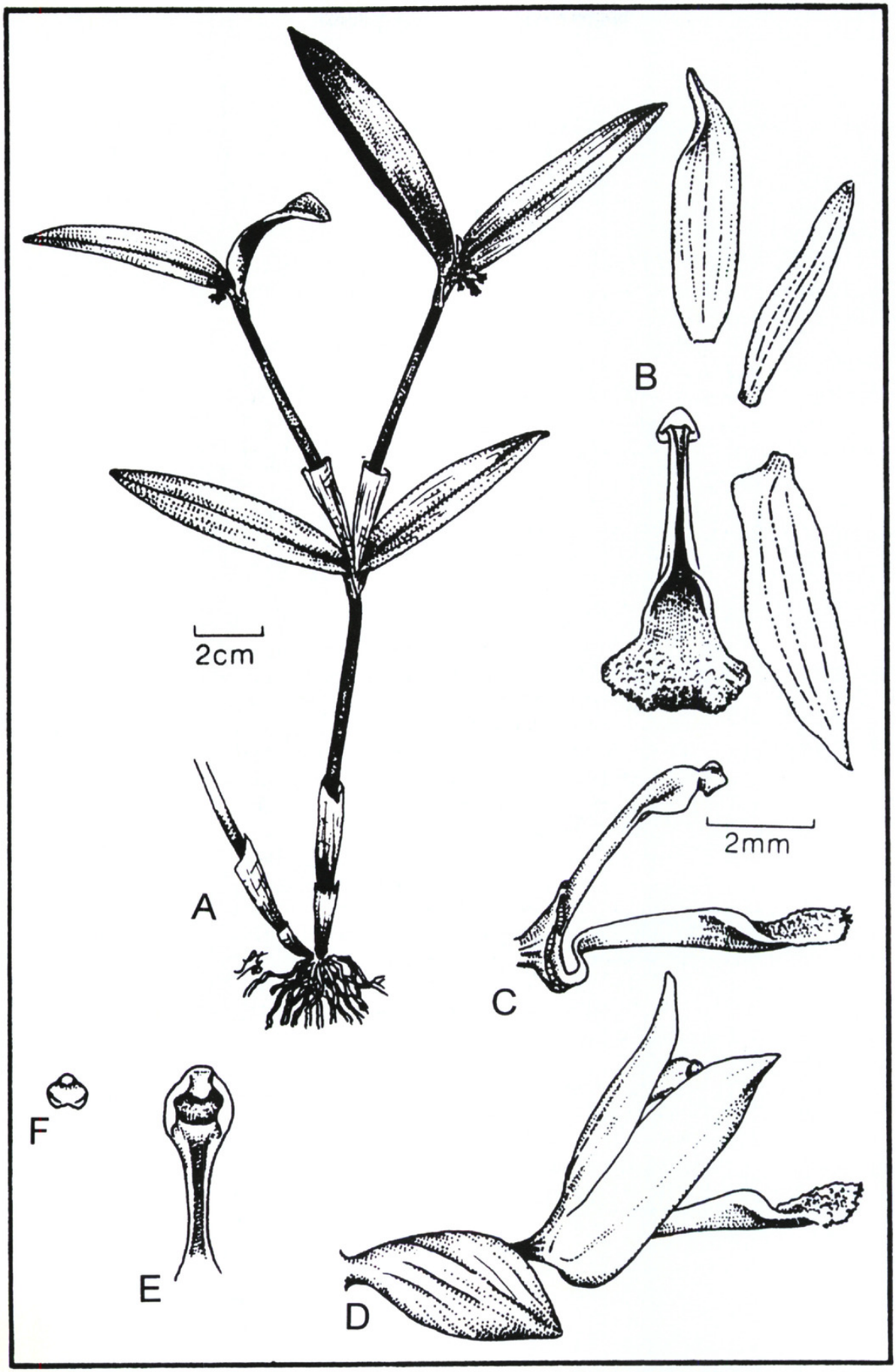

Figure 4. *Scaphyglottis atwoodii* Dressler. —A. Habit. —B. Perianth parts. —C. Lip and column, lateral view. —D. Flower and bract. —E. Column, ventral view. —F. Anther. Based on *Folsom 9156* and *Todzia 1084*.

area, but he somehow thought I would publish this combination and so left it to me.

Acknowledgments. I am indebted to Stig Dalström and Omar Achí for the preparation of the drawings used here and to John Atwood for permission to use the drawing of *Scaphyglottis atwoodii.* Recent fieldwork has been supported by the National Science Foundation and the Office of Forestry, Environment and Natural Resources, Bureau of Science and Technology, of the U.S. Agency for International Development under NSF Grant DEB-9200812 (to John Atwood).

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