

## MESOAMERICAN ORCHID NOVELTIES 5, ONCIDIINAE

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**ABSTRACT.** The following new species have appeared during the preparation of the Flora Mesoamericana and are described and illustrated here: *Cischweinfia nana*, a very small-flowered species with rhombic lip; *Oncidium allenii* is closely allied to *O. klotzschianum* Rehb.f., but has the base of the lip orbicular, rather than broadly triangular; *Oncidium punctulatum* is distinguished by the finely spotted sepals and petals and the relatively small inflorescence; *Trichopilia olmosii* has very wide leaves, several-flowered inflorescences and a short, wide lip, with the basal half of the column adnate to the lip; while *Trichopilia similis* has several-flowered inflorescences and a rhombic lip with 2 branched keels and 2 shallow pits on the lip.

**Key words:** Oncidiinae, Mesoamerica, Orchidaceae

Several new species of Oncidiinae found in the process of preparing the manuscript of the Flora Mesoamericana are described below.

### *CISCHWEINFIA* DRESSLER & N.H. WILLIAMS

Some epithets in *Cischweinfia* seem strangely out of touch with current reality. When the genus was first recognized as distinct (Dressler & N.H. Williams 1970), it was made up of species that had been assigned to other genera. *Cischweinfia pusilla* (C. Schweinf.) Dressler & N.H. Williams received its specific epithet as *Aspasia pusilla* C. Schweinf., where it was much the smallest species known. *Cischweinfia parva* (C. Schweinf.) Dressler & N.H. Williams similarly had been described as *Miltonia parva* C. Schweinf. In *Cischweinfia*, however, *C. parva* is currently one of the largest-flowered species, while *C. pusilla* is about average. The species described here is one of the smallest, though only a bit smaller than *C. suarezii* Dodson.

***Cischweinfia nana*** Dressler, sp. nov. TYPE: Panama. Chiriquí: Camp Hornito, Fortuna dam site, 82°10'W, 8°44'N, elev. 1000–1200 m; 17 Sept. 1977; epiphyte; sepals and petals brown with green tips, fading to red-brown and pale yellow; lip cream; *R.L. Dressler 5700* (Holotype, MO; Isotype, PMA).

FIGURE 1A–C.

Herbae epiphyticae, pseudobulbis ovato-ellipticis, compressus, apice monophyllis; foliis oblanceolato-ellipticis, acutis vel apiculatis; pedunculo brevi, 2–4 floribus; sepalis oblongo-lanceolatis; petalis lanceolato-oblongis, acutis; labello rhombico-ovato, inferne bicalloso, obtuso, callis oblongis; columna breve, clinandrio breve cucullato.

Epiphytic, caespitose, pseudobulbs ovate-elliptic, compressed, 10–13 × 3–4 mm, with 3 or

4 sheathing leaves and 1 terminal leaf; sheaths 10–15 mm long, blades oblanceolate-elliptic, acute-apiculate, 13–55 × 4–4.8 mm; inflorescences lateral, 15–17 mm long, peduncle 10–12 mm, with 2–4 successive flowers; floral bracts triangular, conduplicate, carinate, acute, 3–5 × 2.5–3 mm; sepals and petals brown with green apices, fading to red-brown and pale yellow, lip cream; sepals narrowly oblong or lanceolate, obtuse or acute, 5–6 × 1–1.8 mm, lateral sepals carinate; petals lance-oblong, acute 4.8–5 × 1.2–1.4 mm; lip broadly unguiculate for ca. 1 mm, blade rhombic-ovate, obtuse, minutely apiculate, 5 × 4 mm, callus of 2 rounded ridges below middle, ca. 0.8 × 0.6–0.7 mm; column ca. 2.5 mm long, the clinandrium short cucullate, with denticulate-fimbriate margins; capsule ellipsoid, winged, ca. 12 × 8 mm.

*Cischeinfia nana* is distinguished by the rhombic lip and the small size of the plant and flowers, hence the epithet *nana*, or dwarf.

### *ONCIDIUM* SW.

*Oncidium* is a moderately-sized genus with disproportionate taxonomic problems because of the general similarity within the group and with closely allied groups. Current work with DNA sequences promises to clarify the limits of *Oncidium* (Williams et al. 2001), and the two species to be described here fall within *Oncidium* in the strict sense.

***Oncidium allenii*** Dressler, sp. nov. TYPE: Panama. Coclé: region north of El Valle de Antón, elev. ca. 1000 m, 20 Feb. 1942, *P.H. Allen* (Holotype, AMES; Isotypes, SEL, US). FIGURE 1D–F

Herbae epiphyticae, pseudobulbis uni- vel bifoliatis; inflorescentia erecta, ramosa; sepala unguiculata, oblanceolata, obtusa; petala late cuneata, apice subtruncata; labellum trilobatum, lobulis mediis lateralibus la-

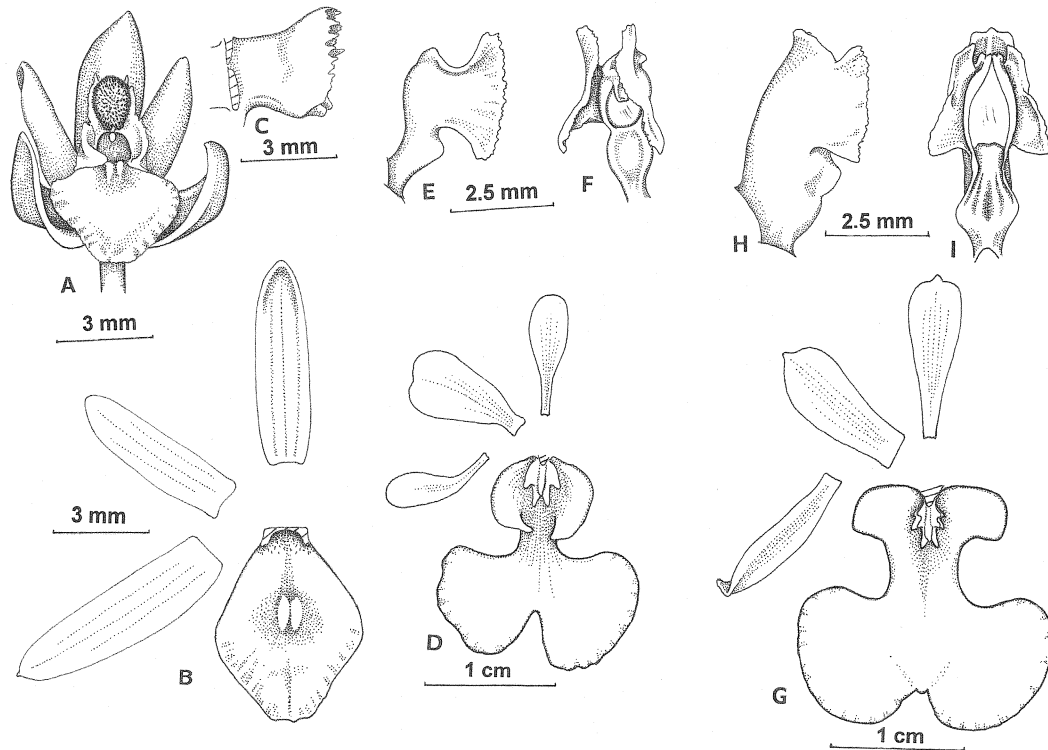


FIGURE 1. New species of *Cischweinfia* and *Oncidium*. A–C. *Cischweinfia nana*. A. Flower. B. Perianth, spread. C. Column lateral view. D–F. *Oncidium allenii*. D. Perianth, spread. E. Column, lateral view. F. Column, ventral view. G–I. *Oncidium punctulatum*. G. Perianth, spread. H. Column, lateral view. I. Column, ventral view. A–C, based on R.L. Dressler 5700, flowers in alcohol; D–F, based on P.H. Allen 2923; G–I, based on R.L. Dressler 6274.

tioris, bilobatis, lobis lateralibus communiter orbicularibus; columna bialata.

Epiphytic, caespitose, roots 0.5–1 mm in diameter, pseudobulbs ovoid, compressed, sulcate, 2.5–5 × 2–3 cm, with 1 or 2 apical leaves and 3–4 sheathing leaves; sheaths 2–4 cm long, blades oblanceolate or oblong-oblanceolate, obtuse, 6.5–30 × 1.7–3 cm, narrowed basally; inflorescences lateral, erect, branched, peduncle 15–25 cm, peduncle bracts tubular, acute, 4–8 mm long; floral bracts acuminate, 2–3 × 2–3 mm; flowers golden yellow with chestnut-brown blotches near base; dorsal sepal unguiculate, oblanceolate or spatulate, obtuse, 7–8.7 × 2.5–2.6 mm; lateral sepals unguiculate, oblanceolate, obtuse, 6–9 × 2–2.3 mm; petals broadly cuneate, obovate, subtruncate, 6.5–10 × 5–6 mm; lip 8.5–17 × 5–9.5 mm basally, 8–17 mm wide distally, base of lip (lateral lobes together) suborbicular, callus ca. 3.5 × 3.5 mm, of several small lobes and usually 3 longer distal lobes, isthmus 2.5–5 × 2–2.5 mm, midlobe transversely oblong-reniform, retuse, 6–9 × 8–17 mm; column

ca. 3 mm, wings 1–1.5 × 3 mm, acute basally and distally; tabula infrastigmatica 0.5 × 0.7 mm, rounded.

*Oncidium allenii* is clearly a close ally of *O. klotzschianum* Rchb.f., 1852 (*O. obryzatum* Rchb.f., 1854), but differs markedly in the suborbicular base of the lip. In *O. klotzschianum* the lip is much wider at the base and narrows to the isthmus. Though *O. allenii* is a close ally of *O. klotzschianum*, the closest populations of *O. klotzschianum*, both to the east and to the west, do not approach *O. allenii* in form. The epithet *allenii* honors Paul H. Allen, outstanding field botanist, who collected most of the material of this species.

PARATYPES: Panama. Coclé: region of El Valle de Antón, P.H. Allen 225 (MO), P.H. Allen 2923 (AMES), P.H. Allen 3424 (MO), R.L. Dressler, C. Luer, J. Luer & P. Taylor 762 (SEL). Panamá: Cerro Campana, K.J. Sytsma 3517 (MO).

***Oncidium punctulatum* Dressler, sp. nov.**  
TYPE: Panama. Chiriquí: Cerro Colorado, arriba de Chami, elev. 1300–1700 m,

bosque nuboso, 1 Nov. 1999, *R.L. Dressler & J.T. Atwood 6274* (Holotype, MO; Iso-type, PMA). FIGURE 1G–I.

Herbae epiphyticae, pseudobulbis bi- vel trifoliatis; inflorescentia erecta, simplex vel pauciramosa; sepala elliptica vel oblanceolata, apiculata; petala oblonga, apiculata; labellum trilobatum, lobulus medius magnus transverse reniformis, lobis lateralibus oblongis, parvis; columna bialata.

Epiphytic, caespitose, roots 0.5–1 mm in diameter, pseudobulbs ovoid, compressed, sulcate, purple-spotted, 2.5–6 × 1.5–2.2 cm, with 1 or 2 apical leaves and 2 or 3 sheathing leaves; sheaths 4–5 cm long, blades ligulate, subobtusate, narrowed basally, 12–30 × 1.3–2.6 cm; inflorescences lateral, peduncle 10–27 cm long, peduncle bracts 2.3–3 cm long, tubular, acute; raceme 3–20 cm long, occasionally with one branch; floral bracts oblong, acute, carinate, 10–21 × 3–6 mm; flowers yellow with small brown spots on sepals, petals and near callus; dorsal sepal cuneate, oblanceolate-obovate, apiculate, 9–15 × 4.5–6.5 mm; lateral sepals unguiculate, oblong or obovate-oblong, apiculate, carinate, 11–16 × 4–5 mm; petals oblong, apiculate, 11–15 × 3.5–7 mm; lip 20–22 × 11–13 mm basally, 24–28 mm wide distally, lateral lobes rounded, oblong or subtriangular, 4.5–5 × 4–5 mm, callus 4–5 × 3–3.5 mm, 1–1.5 mm tall, with a prominent median keel and 8–10 minor lobes, isthmus 3–7 × 6–8 mm, midlobe transversely reniform, retuse, 12–16 × 24–29 mm; column 5–5.5 mm, wings 0.6–1 × 3–4 mm; tabula infrastigmatica rounded, ca. 1.5 × 0.8 mm.

When I first saw that *Oncidium punctulatum* represented a distinct and unnamed species, I hoped to find more material, but there is a good bit of material already in herbaria, usually identified either as *O. bracteatum* Warsz. & Rchb.f. or *O. obryzatum* Rchb.f. (= *O. klotzschianum* Rchb.f.). Though *O. punctulatum* does have conspicuous peduncular and floral bracts, the larger bracts are only 1.5–2 cm long, as compared with ca. 3 cm long in *O. bracteatum*, and the bracts of *O. punctulatum* are thinner and less opaque. *Oncidium klotzschianum* is the most abundant and conspicuous species of *Oncidium* in the mountains of western Panama, and its petals are much wider and more truncate than those of *O. punctulatum*. Also, *O. klotzschianum* has large, many-flowered panicles, while *O. punctulatum* has either a raceme or a panicle with only one or two small, basal branches. In *Oncidium punctulatum* the many small spots on the sepals and petals contrast quite markedly with the larger blotches of *O. bracteatum*, *O. klotzschianum* and most other Central American species. The epithet *punctulatum* refers to these small spots.

PARATYPES: Panama. Chiriquí: Cerro Colorado, *T. Croat s.n.* (MO), *R.L. Dressler 5613* (FLAS), *J.P. Folsom & L. Collins 1760A* (MO), *C. Luer, J. Luer & R.L. Dressler 1414* (SEL), *1438* (SEL), *1438B* (SEL), *C. Luer, J. Luer, R.L. Dressler & K. Dressler 10550* (MO). Veraguas: Vicinity of Escuela Agrícola Alto Piedra, near Santa Fé, *T. Antonio 2935* (MO), *T. Croat 48945* (MO), *R.L. Dressler 5241* (FLAS), *5549* (MO), *S. Knapp & K. Sytsma 2567* (MO).

### TRICHOPILIA LINDL.

The genus *Trichopilia* has been one of the more difficult genera to identify, in part because the species are very similar in most features. *Trichopilia maculata* Rchb.f. was described from central Panama, but the name has been applied to plants in Costa Rica, El Salvador, and Guatemala. In Panama, *T. maculata* is very distinctive in the oblong-subquadrate pseudobulbs that are closely appressed to the substrate, rather like shingles, and the one-flowered inflorescence. *Trichopilia turialbae* Rchb.f. is quite distinctive in the connate lateral sepals and the markedly convex lower outline of the lip. There are at least two other species of *Trichopilia* with small white flowers in Panama that are distinct from both *T. maculata* and *T. turialbae*. Both are here described.

***Trichopilia olmosii* Dressler, sp. nov.** TYPE: Panama, Bocas del Toro: region of Culebra, 1000–1200 m, collected by Erick Olmos; flowered in cultivation 4 August 2000, flowers white, yellow within throat, *R.L. Dressler 6288* (Holotype, MO).

FIGURE 2A–C.

Herbae caespitosae, epiphyticae; pseudobulbae oblongo-ovatae, unifoliatae; folia late elliptica; sepala lanceolata, acuta; petala lanceolata, acuta; labellum late cuneatum, late obovatum, trilobatum.

Epiphytic, caespitose, roots 1–1.5 mm in diameter; pseudobulbs ovate-oblong, markedly compressed, 3–4.8 × 1.5–2 cm, monophyllous; petioles (folded, ca. 6 mm wide) 0.8–2 cm long; blades elliptic, ovate-elliptic or obovate-elliptic, abruptly acute, weakly keeled beneath, 12.5–19 × 3.8–5.8 cm; peduncles 2.5–3.5 cm, raceme ca. 3 cm, peduncle bracts 20 × 8 mm, sheathing; floral bracts ovate or elliptic-ovate, carinate, 15–19.5 × 10.5–12 mm; ovary and pedicel 3.5–3.7 cm; dorsal sepal lanceolate, short-acuminate, weakly carinate, 29 × 6.8 mm; lateral sepals similar, slightly arcuate, carinate, 27 × 5 mm, connate ca. 6.5 mm; petals elliptic-lanceolate, acute-apiculate, carinate distally, 28.5–29.5 × 5 mm; lip 3.2 × 2.7 cm, short-unguiculate, 3-lobed, with a distinct median keel ca. 8 mm

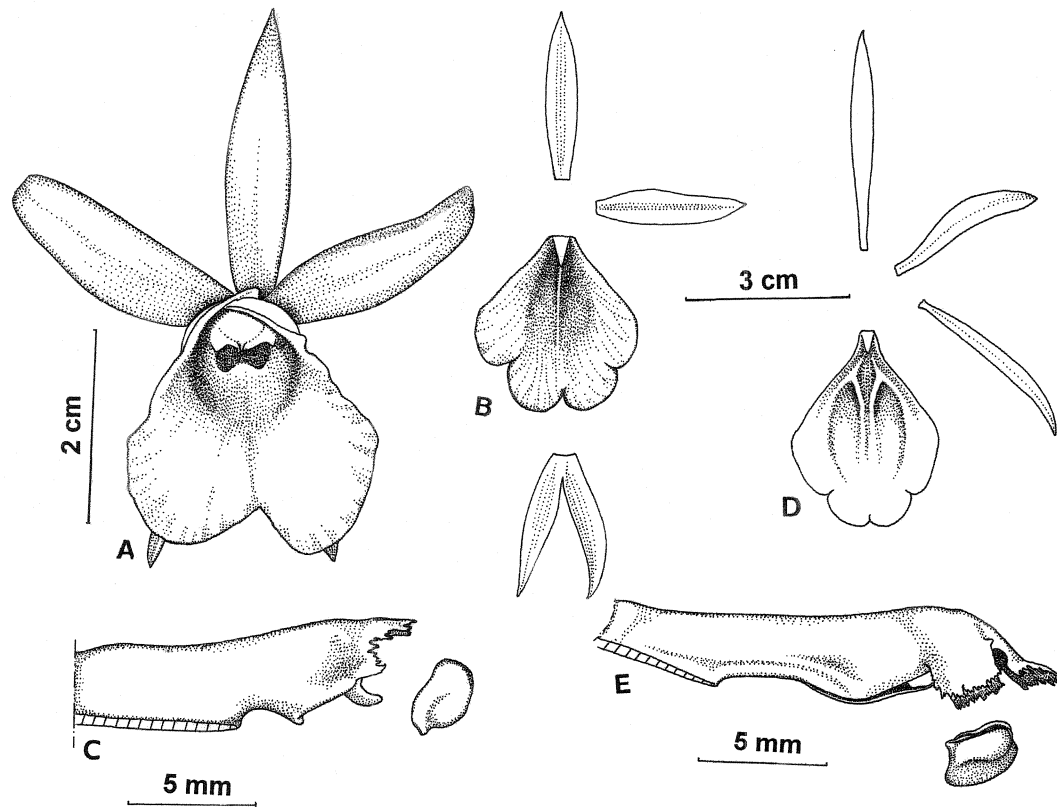


FIGURE 2. New species of *Trichopilia*. A–C. *Trichopilia olmosii*. A. Flower in natural position. B. Perianth, spread. C. Column and anther, lateral view. D, E. *Trichopilia similis*. D. Perianth, spread. E. Column and anther, lateral view. Both based on alcohol-preserved material from type localities.

long near base and two smaller, divergent, lateral keels; lateral lobes  $4 \times 10$  mm, rounded, decurrent; midlobe  $10 \times 17$  mm, transversely oblong, retuse; column 13–14 mm including lacerate wings ca. 3 mm long, adnate to lip for ca. 7 mm, stigma  $3 \times 5$  mm including rostellum.

*Trichopilia olmosii* is distinguished by the very wide leaf, the several-flowered inflorescence, the short, broadly cuneate lip and the column being half adnate to the lip. Though the flowers are small, they are quite elegant and well presented, making the species quite attractive. The species is named in honor of Erick Olmos, an extremely knowledgeable plantsman who has collected many interesting things in the region of Culebra.

***Trichopilia similis*** Dressler, sp. nov. TYPE: Panama. Panamá: Cerro Jefe, 800–900 m, 3 Dec. 1970, R.L. Dressler 3907 (Holotype, MO). FIGURE 2D, E.

Herbae caespitosae, epiphyticae; pseudobulbae oblongo-ovatae, unifoliatae; folia late elliptica; se-

pala lanceolata, acuta; petala lanceolata, acuta; labellum cuneatum, rhombico-obovatum, leviter 3-lobatum, emarginatum; columna brevis, basi labelli medio adnata.

Epiphytic, caespitose, roots ca. 1 mm in diameter; pseudobulbs narrowly ovate or ovate-oblong, erect, tapering distally, monophyllous,  $3-8 \times 1.5-2$  cm; leaves elliptic, acute, subpetiolate,  $13-18 \times 3.6-3.7$  cm; sheaths spotted; inflorescence lateral, peduncle 1.5–4.5 cm, peduncle bracts ca.  $2 \times 0.6-0.7$  cm; raceme 2–3 cm, with 1–3 flowers; ovary and pedicel 20–24 mm; flowers cream-white, yellow within; dorsal sepal linear-elliptic, acute,  $27 \times 3.8$  mm; lateral sepals similar,  $31 \times 4.2$  mm; petals similar,  $26 \times 4.6$  mm; lip unguiculate, broadly obovate,  $44 \times 28$  mm, 3-lobed distally, lateral lobes broadly rounded, enfolding column, midlobe transversely oblong, retuse,  $14 \times 28$  mm; column 22–23 mm, basal  $\frac{1}{4}$  adnate to lip.

Though confused with *Trichopilia maculata* in the past, this species is clearly distinct in

both the erect, tapering pseudobulbs and the usually 2- or 3-flowered inflorescence. The lip has 2 branched keels from the base, with distinct shallow pits enclosed by the branches. This feature is quite unlike either *T. maculata* Rchb.f. or *T. turialbae* Rchb.f., as I know them, but is clearly shown in the drawings of Salvadorian *T. "turialbae"* and Nicaraguan *T. "maculatum"* (Hamer 1974, 1975). I have been unable to study the specimens represented by these drawings, but it seems unlikely that *T. similis* will prove to be so widespread. The epithet, *similis*, or similar, refers to its general similarity to *T. maculata*, *T. turialbae*, and several south American species.

PARATYPES: Same locality as type, 20 Oct. 1967, *Dressler 3099* (SEL); La Eneida, region of Cerro Jefe, 26 Oct. 1969, *Dressler 3755* (PMA).

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