

The Genus *Telipogon*

Delightful Andean Dwarfs with New Species from Panama

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THE GENUS *TELIPOGON* IS MADE up of small plants with relatively large flowers that grow at higher elevations in the Andes and southern Central America. I had thought the only way to grow them was to live high on a tropical mountain, but they are now cultivated in parts of the United States with considerable success.

At first glance, the flowers of *Telipogon* do not look much like orchids. They typically have three small sepals that hide behind the petals and lip, and the flowers are usually flat or bowl-shaped. The petals are similar to the lip, but narrower. The flowers usually have the lip uppermost (non-resupinate), but a few species are consistently resupinate. The column is typically rather bristly, and it appears that these flowers simulate the females of bristly tachinid flies and are pollinated by males that mistake the flower, or its column, for a female fly. I am not sure that anyone has seen it happen, but we do find their pollinia hooked on the legs of male tachinid flies. They are charming plants, but they are not easy to identify. The flowers are rather delicate and, while they can be pressed and dried as museum specimens, they lose a lot in the process.

The first revision of the genus was published by Kraenzlin, in 1919. Nearly everyone who has tried to use any of Kraenzlin's papers is convinced that he should have consulted an ophthalmologist. His study of *Telipogon* included a new species, *Telipogon buenaventurae*. Buenaventura is near sea level and close to the equator, not a promising place to look for a *Telipogon*. In fact, the plant described as *T. buenaventurae* is a *Dimerandra* with definite pseudobulbs and, in every way, quite unlike a *Telipogon*. Garay and Romero (1998) list some 15 such "taxonomic misfires" in Kraenzlin's generic target practice. In short, Kraenzlin's revision of *Telipogon* does little to help us identify *Telipogons*.

Telipogon is characteristic of the

Andes, but there are a surprising number of species in Costa Rica and Panama. We were in Costa Rica in 1984, when Rodrigo Escobar came from Colombia to study the Costa Rican species. He explained that there were about a dozen species known from Costa Rica, but he had not seen all of them and wanted to get photographs of the two or three species that were lacking so he could publish and illustrate an article on the species of Costa Rica. More often than not, he returned from a day in the field to say, "I didn't find the one I was looking for, but I found two others that are new." In effect, the dozen species known from Costa Rica were nearly two dozen when Escobar finished. His paper with Calaway Dodson (1987) lists 22 species for Costa Rica.

A few years later, Dodson and Escobar published on the *Telipogon* species of Panama (1993), but this study was based on museum specimens and listed only six species, two of them apparently species previously described from Costa Rica. It is not easy to study *Telipogon* as dried museum specimens. We see the problem in two species described from Panama. The drawing of *Telipogon seibertii* shows a wider column than the drawing of *Telipogon butcheri*, so the Panamanian aficionados identified a species with a wide column as *T. seibertii*, but, in fact, the species with a wide, bowl-like column is *T. butcheri*, a distinctive species unlike any other. These same aficionados tried to use the paper on the species of neighboring Costa Rica to identify plants from Panama, but many of the species of Panama are quite distinct from those of Costa Rica.

In recent years, Andrew Maduro has taken a special interest in *Telipogon*. His Finca Dracula, at about 6,000 feet (2,000 m) elevation in western Panama, is well situated for *Telipogon* culture, and he has many species growing there. He grows some of them from seed, and he and his friends seem determined to find more



OPPOSITE TOP *Telipogon butcheri*, cultivated at Finca Dracula, has already been named. It is sometimes confused with *Telipogon seibertii* because of deceptive drawings made from dried specimens.

OPPOSITE MIDDLE *Telipogon seibertii*, cultivated at Finca Dracula.

OPPOSITE BELOW *Telipogon storkii* var. *magnificus*, one of the most attractive species in Costa Rica, cultivated at Finca Dracula in Panama. A thick callus can be seen above the column.

ABOVE *Telipogon bombiformis*, cultivated by Ron Griesbeck.

RIGHT *Telipogon biolleyi*, photographed in San Ramon, Costa Rica, is the commonest species in Costa Rica, where it often grows at relatively low elevations. Note the bubblelike "callus" on the lip.

species of *Telipogon* in Panama than are known in Costa Rica. At the moment, it is a close race, with nearly two dozen species known in each country, but many of the Panamanian species are still without validly published names. Maduro and I planned to do a





revision of the genus for Panama sometime in the next couple of years, but some of the species are already in cultivation. They are being judged and sometimes awarded, so they need names as soon as possible. Here, I will describe four of the Panamanian species that are grown in the United States and causing headaches for the judges and the Orchid Identification Center at the Marie Selby Botanical Gardens. That still leaves at least 10 other new Panamanian species to name, but it will take a while to finish the revision, even if Maduro stops finding new species.

***Telipogon bombiformis* Dressler, sp. nov.**

Holotype Panama. Chiriquí: Cerro Punta, Bajo Grande, 2,300 m, 10 dic. 2001, A. Maduro and E. Olmos s.n. (MO).

Species *Telipogoni biolleyi* Schltr. similis, sed floribus multo majoribus callo labelli cavo latiore quam longiore.

Plant epiphytic, caespitose or creeping; roots $\frac{5}{16}$ – $\frac{3}{8}$ inch (0.7–1.5 mm) in diameter, rhizome $\frac{1}{4}$ – $\frac{5}{16}$ inch (5–8 mm) between shoots; stem less than $\frac{1}{4}$ inch (5 mm) long; leaves two to three per shoot, $\frac{3}{4}$ – $2\frac{1}{4}$ × $\frac{1}{8}$ –

$\frac{7}{16}$ inches (2–5.5 × 0.4–1.1 cm), elliptic or oblong-elliptic, acute, narrowed basally; inflorescence with one to three flowers, peduncle $\frac{15}{16}$ – $3\frac{5}{16}$ inches (2.5–8.5 cm), floral bracts $\frac{15}{16}$ – $\frac{1}{8}$ × $\frac{5}{8}$ – $\frac{3}{8}$ inch (2.5–4 × 1.5–2.5 mm), ovate, acuminate; ovary and pedicel $\frac{5}{8}$ – $1\frac{1}{8}$ inches (1.7–4 cm); apices of petals and lip yellow, rest with dark red veins and reticulations, flushed with red, callus and column dark red; sepals $\frac{7}{16}$ – $\frac{1}{2}$ × $\frac{5}{8}$ – $\frac{3}{8}$ inch (10–14 × 1.5–2.5 mm), lanceolate, carinate, acute; petals $\frac{3}{4}$ × $\frac{7}{16}$ – $\frac{1}{2}$ inch (20–21 × 11.5–14 mm), subunguiculate, rhombic, acuminate; lip $\frac{1}{2}$ – $\frac{15}{16}$ × $\frac{3}{4}$ – $\frac{13}{16}$ inch (13–23 × 17–22 mm), transversely rhombic-oblong, apiculate; hollow callus $\frac{1}{4}$ × $\frac{1}{2}$ inch (6–7 × 13 mm), transversely oblong, surface hispid, basally long-hispid; column about $\frac{1}{8}$ inch (3 mm) long, $\frac{1}{8}$ inch (3 mm) wide and $\frac{1}{8}$ inch (3–4 mm) thick (dorsoventrally), long-hispid; stigma subcircular, with slight chin below.

Etymology This species has been known as “the bumblebee” in Panama, thus the name *bombiformis*, or shaped like a bumblebee.

Like the common *Telipogon biolleyi* of Costa Rica (perhaps reported in Panama), the base of the lip has a hollow inflated “callus” raised above the surrounding lip. However, as the flowers age, this “swelling” shrinks to the point that an older lip may be quite flat. The flower of *T. bombiformis* is much larger than that of *Telipogon biolleyi*, and the swollen hollow callus is wider than it is long. Not exactly a beautiful flower, but definitely eye catching. Most Panamanian species of *Telipogon* flower mainly in August, September and October, but this one flowers from December to March, so I have not seen living flowers. Fortunately, the late Ron Griesbeck grew the species well and took excellent photographs.

Other Specimens Seen Same locality, 5 March 2000, P. Carrera and E. Olmos 203 (PMA).

***Telipogon caulescens* Dressler, sp. nov.**

Holotype Panamá. Chiriquí: Boquete, por la frontera con Bocas del Toro, 2,000 m, 30 jun. 2000, A. Maduro y E. Olmos 168 (MO!; Isotype, PMA).

Herba caulescens, caule usque ad 16 cm alto, floribus illis *Telipogoni gracilipedi* Schltr. similis sed columna colloque angustioribus.

Caulescent, plant 2–6 $\frac{5}{16}$ inches (5–16 cm) tall; roots $\frac{3}{8}$ inch (1.52 mm) in diameter; leaves 10 to 12, $\frac{1}{2}$ – 2 × $\frac{5}{16}$ –

$\frac{3}{4}$ inches (1.4–5 × 0.9–2 cm), broadly elliptic-oblong, acute; inflorescence terminal or axillary, peduncle $\frac{3}{4}$ –4 $\frac{1}{3}$ inches (2–11 cm); raceme 2 $\frac{1}{3}$ –3 $\frac{15}{16}$ inches (6–10 cm), with two to four flowers simultaneously; floral bracts $\frac{1}{8}$ × $\frac{1}{16}$ inch (2.5–4 × 1.5–2 mm), ovate, acuminate, carinate; ovary and pedicel $\frac{1}{2}$ – $\frac{5}{8}$ inch (12–17 mm); flowers nonresupinate, yellow with prominent red-brown veining, with reticulations on petals and basal half of lip, petals sometimes with green veins and reticulations, center dark red, dorsal bristles dark red; sepals $\frac{1}{2}$ × $\frac{1}{8}$ inch (12–13 × 4–5 mm), lanceolate, carinate; petals $\frac{3}{4}$ × $\frac{5}{8}$ inch (19–20 × 14–15 mm), ovate, acuminate, nine to 10 veined; lip 1 × $\frac{3}{4}$ – $\frac{3}{4}$ inch (24–25 × 16–19 mm), broadly ovate or transversely oblong, acute, 14–18 veined; column $\frac{1}{4}$ × $\frac{1}{8}$ × $\frac{1}{8}$ inch (5–6 × 2.5 × 3–3.5 mm), dorsal bristles to $\frac{1}{8}$ inch (3 mm), callus area hispid; stigma subcircular, with a prominent chin beneath.

Etymology This is one of the few caulescent species now known from Panama; that is, the stems continue to grow after flowering, so that the plants become much taller than in the short-stemmed caespitose species.

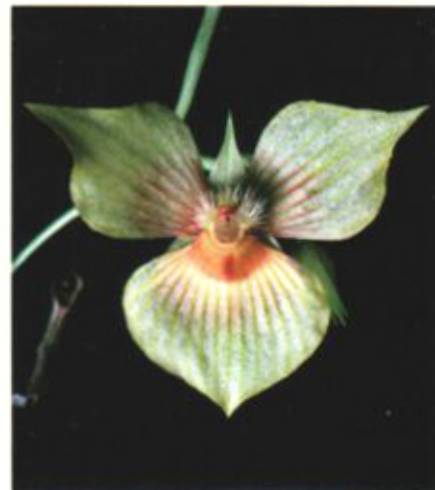
The flowers of *T. caulescens* are similar to those of the Costa Rican *Telipogon gracilipes* Schltr., but the column and the collar below the column are both distinctly narrower. The plants become quite large, and often have several or many flowers open at once, so they are one of the more attractive of the Panamanian species. The column of *T. caulescens* varies from densely bristly dorsally to nearly bald (as occurs also in *T. gracilipes*). Most plants have red-brown veins on both petals and lip, but some have only yellow-green veins on the petals. The intensity of the red-brown coloration also varies quite a bit.

***Telipogon griesbeckii* Dressler, sp. nov.**

Holotype Panamá. Chiriquí: Cerro Punta, Entre Ríos, 2,100–2,200 m, ago. 1993, A. Maduro y E. Olmos 169 (MO, Isotype, PMA).

Flores illis Telipogoni vampyri Braas et Horich similis sed omnino majores, segmentis latioribus labello columnaue minus setosis recedit.

Caespitose, plant 2 $\frac{1}{3}$ –2 $\frac{3}{4}$ inches (6–7 cm) tall; roots $\frac{1}{16}$ inch (0.7–1 mm) in diameter; leaves eight to 10, $\frac{5}{8}$ –2 $\frac{1}{8}$ × $\frac{1}{4}$ – $\frac{1}{2}$ inches (1.5–5.5 × 0.6–1.3 cm), elliptic or elliptic-oblong, acute;



OPPOSITE TOP *Telipogon caulescens*, showing its habit. Cultivated at Finca Dracula.

OPPOSITE BELOW The flowers of *Telipogon caulescens*.

TOP LEFT *Telipogon griesbeckii* cultivated at Finca Dracula.

TOP RIGHT The blond-flowered form of *Telipogon griesbeckii*, with little anthocyanin, cultivated at Finca Dracula.

ABOVE Habit of *Telipogon griesbeckii*, cultivated at Finca Dracula.



inflorescence terminal or axillary, peduncle $1\frac{3}{4}$ – $4\frac{3}{4}$ inches (4.5–12 cm), peduncle bract $\frac{1}{4} \times \frac{1}{8}$ inch (7×4 mm), acuminate; raceme $\frac{3}{4}$ – $2\frac{1}{3}$ inches (2–6 cm), with several flowers simultaneously; floral bracts $\frac{1}{8} \times \frac{1}{8}$ inch ($4\text{--}5 \times 2\text{--}3$ mm), ovate, acuminate, carinate; ovary and pedicel $\frac{5}{8}$ – $1\frac{1}{16}$ inch (15–27 mm); flowers resupinate, petals light yellow with red-purple veins and wide

yellow margins, column and callus area dark red; sepals $\frac{1}{2} \times \frac{1}{8}$ inch (12–13 \times 4–5 mm), lanceolate, carinate; petals $\frac{3}{4}$ – $1\frac{5}{16} \times \frac{5}{16}$ – $\frac{3}{4}$ inch (19–23 \times 10–19.5 mm), ovate or rhombic ovate, basally hispid for less than $\frac{1}{8}$ inch (2 mm), acuminate, eight to 10 veined; lip $\frac{1}{2}$ – $\frac{2}{3} \times \frac{3}{4}$ –1 inch (12–17 \times 19–25 mm), very broadly rhombic-ovate, acuminate, 13–17 veined; column $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{4}$ inch (3 \times 4 \times 5 mm), dorsal bristles $\frac{1}{8}$ inch (3–4 mm), column bristly throughout; stigma subcircular, with a distinct chin beneath.

Etymology This species is named in honor of the late Ron Griesbeck, who was dedicated to *Telipogon* and its allies. Griesbeck grew all of the new species here described, grew them beautifully, and took superlative photographs of the plants. I knew Griesbeck for only a short while and by correspondence, but his fascination with *Telipogon* was clear. I am sorry that our acquaintance was so short.

This species was identified as *T. vampyrus* Braas and Horich by the aficionados in Panama, and plants have been cultivated under that name, but *T. griesbeckii* is much less vampirish

in its aspect than is the Costa Rican *T. vampyrus*, which has smaller flowers, much narrower petals and very bristly column and callus area. *Telipogon griesbeckii* has also been misidentified as *T. panamensis* and even *T. costaricensis*, but then, it is understandably difficult to identify species that have no name. *Telipogon griesbeckii* is really similar to the Costa Rican *T. ampliflorus*. A well-grown *T. griesbeckii* is quite floriferous and puts on a nice display. There is also a good deal of variation in color. One plant at Finca Dracula is “blond,” or nearly lacking in anthocyanin pigments. It is pale yellow with light brown on the callus area and vein lines.

***Telipogon maduroi* Dressler, sp. nov.**

Holotype Panamá. Chiriquí: Cerro Punta, Altos de Respingo, 2,000–2,500 m, 6 jul. 2001, A. Maduro y E. Olmos 190 (MO, Isotype, PMA).

Herba epiphytica caespitosa floribus manifeste reticulato-venosis, venis viridiflavis et reticulo in intervenio rubro-castaneo, columna valde setosa setis rigidis sanguineis et callo rotundato ventraliter ornata.

LINKS

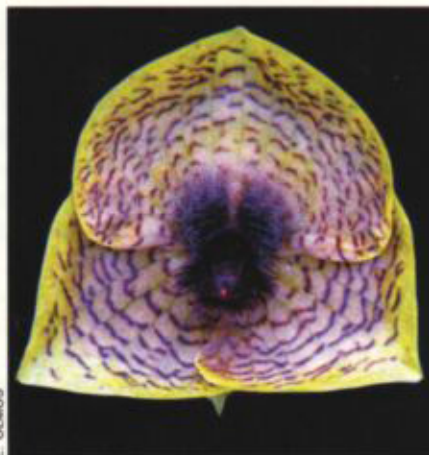
<http://community9.webshots.com/photo/40079070/40093845QDLewO>
(*Telipogon* photographs from A to M)

<http://community9.webshots.com/album/46581715lbPzbA>
(*Telipogon* photographs from N to Z)

Two of the many informative pages of the late Ron Griesbeck's Web sites feature beautiful close-ups of a wide variety of *Telipogon* species.

http://member.nifty.ne.jp/OrchidAddict/Telipogon_vampirus.html

“*Telipogon vampirus*,” a Web article by M.H. Herron, describes an easy-to-grow Panamanian species, providing cultural advice and a large, clear photograph of the plant in flower.



OPPOSITE LEFT TOP *Telipogon maduroi* showing the lateral view of the column.

OPPOSITE LEFT BELOW *Telipogon maduroi* 'Memoria Arlene Jean', CBR/AOS. Grower: Ron Griesbeck.

OPPOSITE RIGHT Flower of *Telipogon maduroi*, cultivated at Finca Dracula.

TOP LEFT *Telipogon costaricensis*, a species with long, lanky stems and large flowers.

TOP RIGHT *Telipogon ampliflorus*, one of the largest-flowered species of *Telipogon* native to Costa Rica, cultivated at Finca Dracula.

BELOW LEFT *Telipogon* "Guadalupe No. 3" is one of two new *Telipogon* species cultivated at Finca Dracula that will be named once there is better material to study.

LEFT A second unnamed species, *Telipogon* "Las Nubes," cultivated at Finca Dracula.

Caespitose, plant 1–2 inches (2.5–5 cm) tall; roots $\frac{1}{16}$ inch (0.5–1 mm) in diameter; leaves about 10, $\frac{5}{8}$ – $1\frac{3}{4}$ \times $\frac{1}{4}$ \times $\frac{1}{2}$ inches (1.5–4.5 \times 0.6 \times 1.3 cm), elliptic or elliptic-oblongate, acute; inflorescence terminal or axillary, peduncle 1– $6\frac{5}{8}$ inches (2.5–17 cm); raceme $\frac{7}{16}$ –2 inches (1–5 cm), with several successive flowers; floral bracts $\frac{1}{8}$ \times $\frac{1}{8}$ inch (2–4 \times 1.5–2 mm), ovate, acuminate, carinate; ovary and pedicel $\frac{1}{3}$ – $\frac{1}{2}$ inch (9–14 mm); flowers nonresupinate, petals and lip translucent, veins greenish yellow, reticulations red-brown, column and bristles very dark red; sepals $\frac{1}{3}$ \times $\frac{1}{8}$ – $\frac{1}{4}$ inch (9–11 \times 3–6 mm), lanceolate, carinate; petals $\frac{5}{8}$ \times $\frac{1}{3}$ – $\frac{1}{2}$ inch (14–15.5 \times 9–14.5 mm), rhombic ovate, acuminate, 6–7 veined; lip $\frac{7}{16}$ – $\frac{5}{8}$ \times $\frac{5}{8}$ – $\frac{3}{4}$ inch (11–16 \times 16–20 mm), broadly rhombic, apiculate, eight to 13 veined; column $\frac{1}{8}$ \times $\frac{1}{8}$ \times $\frac{1}{8}$ inch (5 \times 3 \times 4 mm), dorsal bristles $\frac{1}{8}$ inch (2–3 mm), column bristles throughout; callus $\frac{1}{8}$ \times $\frac{1}{8}$ inch (4 \times 4 mm), low, rounded beneath, papillose with fine bristles; stigma subcircular, with the lower margin projecting forward, swollen and hispid beneath.

Etymology It gives me great pleasure to name this species in honor of Andres Maduro, the first to cultivate the species, in recognition of his great and continuing contribution to our knowledge of Panamanian orchids.

At one time, Maduro found a striking *Telipogon* and showed photographs to Escobar, who assured him that it was a new species and tentatively called the plant *Telipogon maduroi*. Maduro's original plant had died, but he has since learned how to grow *Telipogon* at Finca Dracula. He sought the new *Telipogons* everywhere but could find no new plants. In his desperation, he offered a reward of 100 dollars to the person who found the missing species. I assume that he paid someone 100 dollars, because he now has a number of plants of this species in cultivation and has a new generation of seedlings flowering. A plant of *T. maduroi* recently received an award at an AOS judging, so it is clearly time to baptize the new species and give it a legal name.

As is common in the genus, *T. maduroi* has a bristly column, with stiff dark-red bristles. Its color pattern is dis-

tinctive. The veins are greenish yellow, but there are red-brown reticulations, or lines that cross the veins, giving the flower a netted appearance. The intensity of the red-brown reticulations varies greatly within the species, as does flower size. *Telipogon maduroi* is one of the most attractive species of Panama.

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