

Excerpt from:

B. Maguire. 1969.

The Botany of the Guayana Highland—Part VIII,

Mem. New York Bot. Gard. 18: 1–290. [Malpighiaceae on pages 43–54]

MALPIGHIACEAE¹³

More than a decade ago (Mem. N. Y. Bot. Gard. **8**: 124. 1953.), based upon generously ample collections, I proposed the genus *Sipapoa* as distinct from *Diacidia*. Now, with four more species since discovered, the separation of *Sipapoa* and *Diacidia* is reconfirmed.

¹² By Leandro Aristeguieta, Instituto Botanico, Apartado 2156, Caracas, Venezuela.

¹³ By Bassett Maguire, The New York Botanical Garden.

←

the internal divisions of the endosperm, $\times 1.25$ (60738); L–O, Stamens, male plant, $\times 12.5$ (60189): L, distal stamen; M, N, intermediate stamens; O, basal stamen; P, stamen of hermaphrodite flower, $\times 12.5$ (60683).

Key separating *Diacidia* and *Sipapoa*

1. Stipules not at all or hardly connate, hence not vaginate; anthers commonly barbellate; sepals not becoming ampliate; microphyllous shrubs to 1.5 m high; on low-altitude granitic outcrops, Ríos Negro and Vaupés drainages, Venezuela and Colombia. *Diacidia*.
 1. Stipules strongly connate, hence conspicuously vaginate; anthers glabrous; sepals becoming prominently ampliate; macrophyllous trees (except *S. cordata*) to 20 m high; on sandstone mesas at high altitudes, western Edo. Bolívar and Terr. Amazonas, Venezuela.
- Sipapoa.*

Diacidia Grisebach, Fl. Bras. **12**(1): 120. 1858.

Key to the Species of *Diacidia*

1. Leaves commonly 4–8 cm long, 2.0–4.5 cm broad; pedicels often 1.5 cm long; erect shrubs to 1.5 m high; granite outcrops, Ríos Negro and Vaupés, Colombia and Venezuela.
2. Leaves oblong-elliptic, ca 2 cm broad, the base and apex acute or acuminate; petioles 2–4 mm long; petals subequal.
 1. *D. galphimioides*.
 2. Leaves ovate, 3.5–4.5 cm broad, base obtuse, apex subacute, apiculate; petioles ca 10 mm long; petals unequal, the fifth twice the length of the smaller. *D. duckeana*.
1. Leaves commonly 2–3 cm long, 1.2–1.8 cm broad; pedicels filiform, 1.0 cm long; depressed wiry subshrub; sandstone outcrops, Río Vaupés drainage, Colombia. *D. parvifolia*.

1. Diacidia galphimioides Grisebach, Fl. Bras. **12**(1): 120. 1858, ex discr.

Type. Casiquiare, Amazonas, Spruce 2966 (K, 2 sheets).

2. Diacidia duckeana Maguire, Mem. N. Y. Bot. Gard. **8**: 124. 1953. Fig. 15, A-D.

Type. Cerro Cocuy, 22 Sep 1935, A. Ducke 34633 (holotype US).

Additional specimens have now come to hand: COLOMBIA. Vaupés: Cerro Mitú, Maguire et al 44091 (NY, US, F, COL), 44100 (NY, US, VEN, IAN); opposite Piedra de Cocui, Schultes & Lopez 9891; San Felipe, Schultes et al 18096. VENEZUELA. Amazonas: Cerro Cocuy, Río Negro, Maguire & Wurdack 34921, 34943; Cerro Nunca, Río Negro, Maguire & Wurdack 34953.

Diacidia duckeana most probably represents the common expression of a variable species which would include the types of the original *D. galphimioides*. Nomenclatural adjustment would better await the accumulation of sufficient material to interpret properly the amplitude of the species. Its pollen is 3-colporate, prolate sphaeroidal, ca 22 × 24 μ .

3. Diacidia parvifolia Cuatrecasas, Webbia **13**: 632. 1958.

Type. Sufrútex reptante, terrenos cuarcíticos sabana, San José del Guaviare, Vaupés, Colombia, 12 Nov 1939, J. Cuatrecasas 7703 (holotype US). COLOMBIA. Vaupés: Cerro Cañenda, Río Kubiyú, 800–900 ft, 10 Nov 1952, Schultes & Cabrera 18307, 18395; Yapobodá, Río Kuduyarí, 900–1000 ft, Schultes et al 20049.

Diacidia parvifolia seems to be adequately set off from *D. galphimioides*, although it may represent a diminutive extreme. However, since both geographically and ecologically it is separated from the latter, *D. parvifolia* will probably be found to maintain its distinctness.

Sipapoa Maguire, Mem. N. Y. Bot. Gard. **8**: 124. 1953.

Key to the Species of *Sipapoa*

1. Inflorescence paniculate, thyrsoid.
2. Shrub to 1.5 m high; leaves elliptic, obtuse, 4–6 cm long, 2–3 cm broad, glaucous beneath, cordate; stipule lobes free; known only from the rim of Cañon Grande, Cerro Neblina, Amazonas, Venezuela.
 1. *S. cordata*.
2. Trees to 20 m high; leaves 10 cm or more long; stipules foliar, the lobes connate, intrapetiolar, exceeding 6 cm long; Cerro Neblina, Amazonas and Brazil,

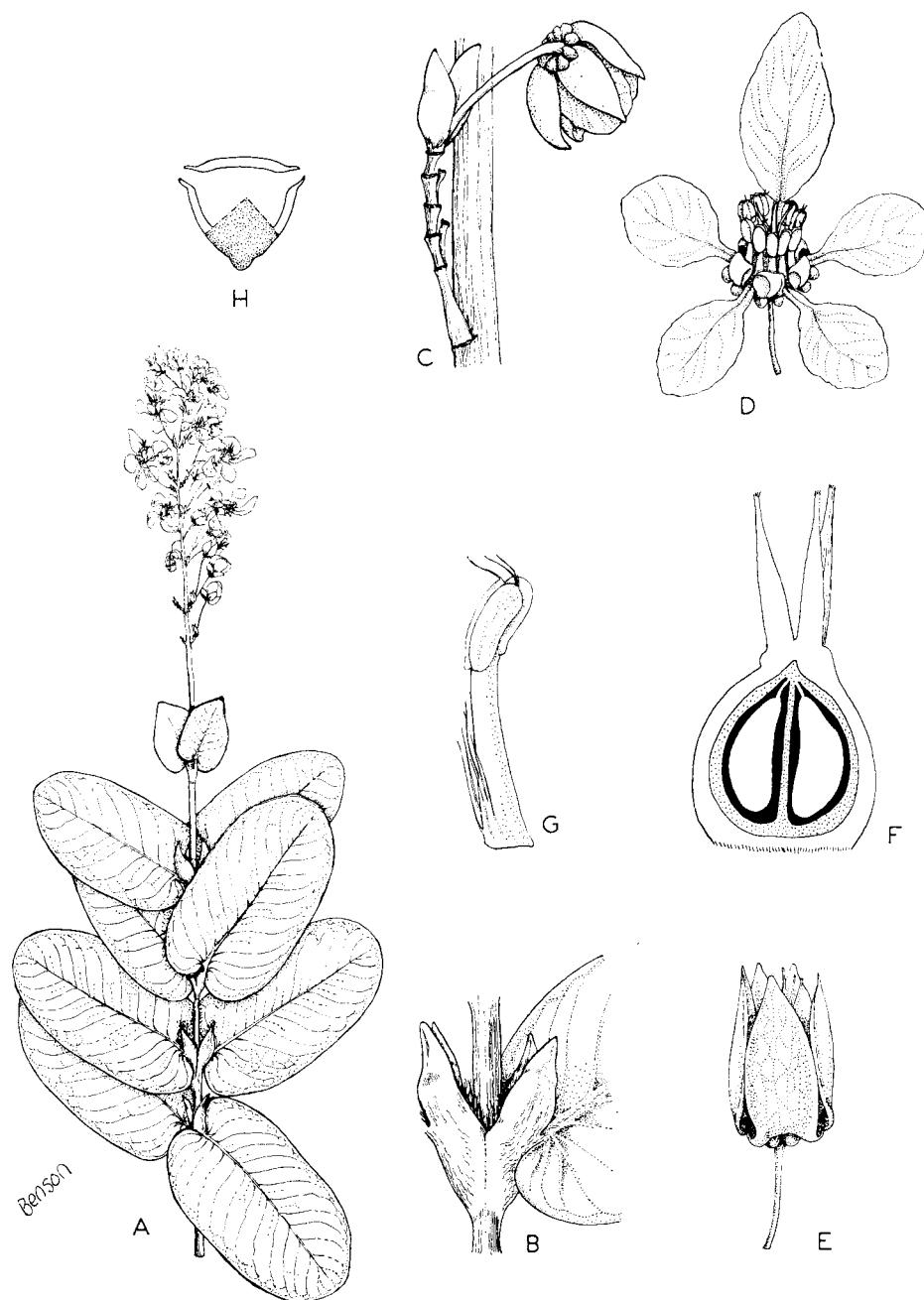


FIG. 11. *Sipapoa cordata* (Maguire et al 42537D, type): A, habit, $\times 1$; B, detail of paired, connate stipules, showing free stipule lobes, $\times 5$; C, detail, ultimate branch of inflorescence, bracteoles, pedicel, opening flower bud, $\times 10$; D, expanded flower, $\times 10$; E, mature pistil, $\times 10$; F, near median section, maturing ovary, $\times 20$; G, stamen, $\times 20$; pollen, diagram polar view, $\times 1000$.

and adjacent Serra Pirapucú, Amazonas, Brazil.

- 3. Leaves strongly rufus-tomentose beneath. *S. rufa*.
- 3. Leaves glaucous only beneath. *S. glaucifolia*.

- 1. Inflorescence racemose, trees to 20 m high.
- 4. Inflorescence glabrous, glaucous; leaves glabrous; stipules foliar, intrapetiolar, exceeding 2 cm in length; mature sepals lanceolate, entire. *S. stipularis*.
- 4. Inflorescence strongly pubescent; stipules not foliar.
- 5. Leaves glabrous on the upper surface; stipules tardily if at all separating.
- 6. Mature sepals oblong or lanceolate.
 - 7. Leaves broadly elliptic to suborbicular, glabrous and glaucous beneath except for the sparsely pilose nerves and conspicuously ciliate margins; stipule lobes connate, intrapetiolar; sepals denticulate. *S. kunhardtii*.
 - 7. Leaves elliptic, membranous, densely sericeous beneath, the nerves obscured, margins not ciliate; stipule lobes free; sepals entire. *S. hypoleuca*.
- 6. Mature sepals ovate-cordate, margins ciliolate, bractlets 4-angled, densely red-hirsute; leaves coriaceous, oblong-elliptic 4–6 cm long, 1–2 cm broad, stipules soon separating, lobes free. *S. ferruginea*.
- 5. Leaves densely pubescent on the upper surface; stipules soon separating, lobes free.
- 8. Tomentum of undersurface of leaf lanate, underlying glaucescence pulvinate-squamulose; sepals strongly ampliate, to 12 mm long. *S. vestita*.
- 8. Tomentum of undersurface of leaf appressed-sericeous, underlying glaucescence densely cretaceous, mature sepals moderately ampliate, 5–6 mm long. *S. steyermarkii*.

1. *Sipapoa cordata* Maguire, sp nov.

Fig. 11, A-G.

Frutex ad 1.5 m altus. Rami teretes tenues, mox glaucescentes; internodiis 2–4 cm longis. Folia opposita; laminis oblongis vel late oblongo-ovatis, vulgo 4–6 cm longis, 2–3 cm latis, glabris, subitus glaucis, rubritinctis; apicibus rotundatis vel obtuse acutiusculis, basibus cordatis. Petioli 6–10 mm longi, 4–6 mm connato-vaginati, extus glabri, glauci, intus dense longi-fusco-pilos; lobis stipulis jugatis, deltoideis, lanceolatis, acutis, 5–7 cm longis, liberis; petiolulo supra libero deficiente; costa prominenta, rubra; venis lateralibus 10–12-jugis, prominulis. Inflorescentiae terminales anguste thyrsoidae; rhachidibus 5–10 cm longis, cymosis; ramulis 1–3 cm longis, secundis, rubritinctis, 3–5-floribus; pedicellis tenuibus, 8–20 mm longis, articulatis; bracteis bracteolisque ovatis, obtusis, glabris, glaucis, 3–7 mm longis, caducis. Flores zygomorphi; sepalis 5, lanceolatis, acutiusculis, cordatis, integris, apicibus, recurvatis, ca 3 mm longis, glabris, venatis, ad basim duobus rotate glandibus recurvatis, ca 1 mm longis instructis; sepalis in mature ampliatis 6–8 mm longis; petalis 5, ca 5 mm longis, laminis ovato-orbicularibus, 3.0–3.5 mm diam, suberose marginatis, venatis, unguibus 1.0–1.5 mm longis, tenuibus, trigonis, sulcatis; petalo quinto majori, ca 10 mm longo, lamina elliptico-obovata; staminibus 8–10, ca 3 mm longis, petalo quinto opposito longiori; filamentis teretibus, introrsis; antheris glabris, bilocularibus, oblongis, ca 0.7–0.9 mm longis, thecis 1–2-spinuloso-aristatis, aristis 0.4–0.6 mm longis, introrse nectantibus, connectivo crasso, thecis excedente. Grana pollina 3-colporata, prolati-sphaeroidea, 30–33 × 28–30 μ ; sporoderma minute vermiformi-rugulosa vel reticulata. Ovarium globosum glabrum biloculare, tristylare; stylis subulatis ca 2.0–2.5 mm longis; stigmatibus minutis introrse subterminalibus; ovlis suspensio. Fructus non-visus.

Type. Branched, several-stemmed shrub 1 m high, petals yellow, calyx greenish, infrequent, rim of Cañon Grande east of Cumbre Camp, elev 1800 m, Cerro de la Neblina, Río Yatúa, Territorio de Amazonas, Venezuela, 23 Dec 1957, Bassett Maguire, John J. Wurdack & Celia K. Maguire 42537D (holotype NY).

Distribution. VENEZUELA. Amazonas: Cerro de la Neblina, wandlike shrub 0.5–1.5 m high, leaves glaucous, red-edged, occasional around exposed sandstone outcrops, south slope toward Cañon Grande, alt 1500–1700 m, 16 Jan 1954, Maguire et al

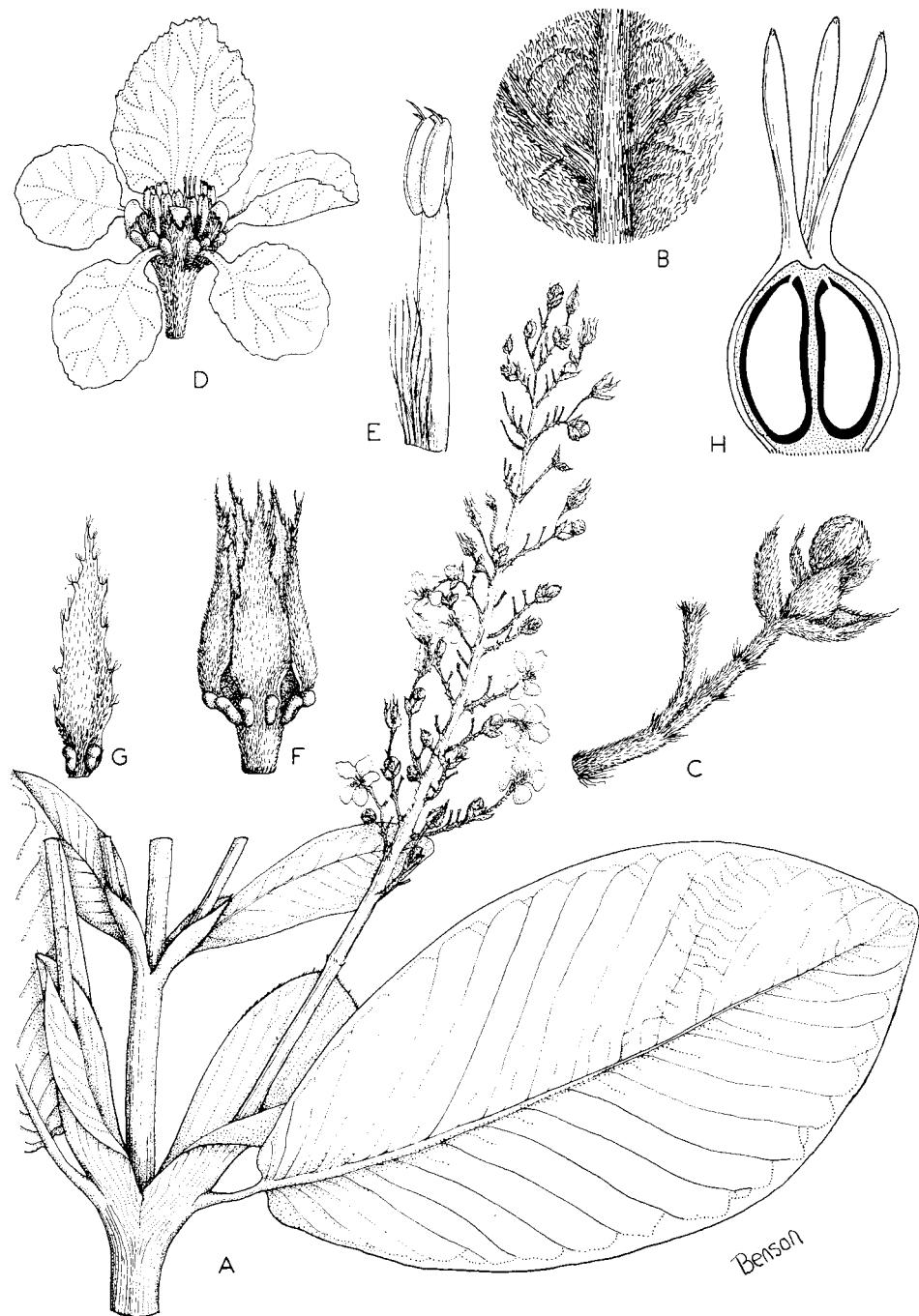


FIG. 12. *Sipapoa rufa* (Maguire et al 42036, type): A, habit, $\times 1$; B, underside of leaf, $\times 10$; C, ultimate branch of inflorescence, showing pedicel, bracteoles, flower bud, $\times 10$; D, expanded flower, $\times 10$; E, stamen, $\times 20$; F, mature calyx, $\times 10$; G, mature sepal, $\times 10$; H, near median long section, maturing pistil, $\times 10$.

37320 (paratype); Cañon Grande, 23 Dec 1957, *Maguire et al* 42537D (holotype NY; isotypes NY, COL, F, US, S, P, L, UC, IAN, U).

2. *Sipapoa rufa* Maguire, sp nov.

Fig. 12, A-H; Fig. 16, H-K.

Arbores parvae, ad 20 m altae. Rami teretes, 7–10 mm crassi, glabri; internodiis 3–6 cm longis. Folia opposita; laminis late oblongo-ovatis, vulgo 15–20 cm longis, vulgo (8) 10–15 cm latis, obtusis, supra glabris, subtus dense rufo-appresso-tomentosis, tomento subter dense glauco; costa nervisque lateralibus densioribus tomentosis, supra prominentibus, vulgo 14–15-jugis. Petioli 15–20 mm longi, vaginati, connati, intus dense pilosi; stipulis intrapetiolaribus, connatis, conspicue foliaribus ob lanceolatis, glabris, vulgo 6–8 cm longis; petiolulo supra libero ca 10–12 mm longo. Inflorescentiae terminales thyrsoidae; rhachidibus ad 30 cm longis cymosis, rufo-tomentosis; ramulis ad 3 cm longis, 3–7-floribus; pedicellis 6–10 mm longis, articulatis; bracteis deltoideo-ovatis, 3–5 mm longis, caducis. Flores zygomorphi; sepals 5, anguste lanceolatis, vulgo acuminatis, evidenter serrato-dentatis, ca 5 mm longis, apicibus recurvatis, demum ampliatis 8–10 mm longis, valde reticulato-nervosis, ad basim duobus glandibus oblongis subtendentibus; petalis 5, ca 5–6 mm longis; laminis ovato-orbicularibus, 4–5 mm diam, suberose marginatis, venatis, unguibus 1.0–1.5 mm longis, tenuibus, trigonis, sulcatis; petalo quinto marjori, ca 10–12 mm longo, lamina elliptico-ovata; staminibus 8–10, introrsis, petalo quinto opposito longiori; filamentis teretibus, introrsis, antheris, glabris, bilocularibus, oblongis, ca 0.8–1.0 mm longis, thecis 1–2 spinuloso-aristatis, aristis 0.5–0.7 mm longis introrse nectantibus; connectivo crasso. Grana pollina 3-colporata, prolati-sphaeroidea, 20–22 × 19–20 μ ; sporoderma minute reticulata. Ovarium biloculare, globosum; stylis subulatis ca 2–3 mm longis, stigmatibus minutis introrse subterminalibus; ovulis suspensis. Pyrene ovata, bilobata, ca 2 mm longa, valde reticulata nervata.

Type. Tree 4–8 m high, flowers yellow, occasional on escarpment slopes above Camp 3, elev 1600–1700 m, Cerro de la Neblina, Río Yatúa, Territorio Amazonas, Venezuela, 17 Nov 1957, Bassett Maguire, John J. Wurdack & Celia K. Maguire 42036 (holotype NY; isotypes F, IAN, US, VEN).

Distribution. VENEZUELA. Amazonas: Cerro de la Neblina, Río Yatúa, tree 5–10 m high, frequent on upper escarpment slopes, alt 1600–1700 m, 27 Dec 1953, *Maguire et al* 36917 (NY, US, VEN, F, K); tree 5–10 m high, frequent on escarpment, alt 1650–1750 m, 30 Dec 1953, *Maguire et al* 36991 (NY); small tree 3–8 m high, leaves silky brown-pubescent beneath, stipules connate at base, glaucous, inflorescence tawny, flowers yellow, frequent on low bush slopes near Cumbre Camp, alt 1800 m, 4 Jan 1954, *Maguire et al* 37034 (paratypes NY, B, COL, VEN, IAN, GH, F); tree 5–10 m high, locally frequent on northwest escarpment, alt 1700–1800 m, 10 Jan 1954, *Maguire et al* 37152 (NY, K, S, MO); tree 5–12 m high, frequent at alt 1800 m, 18 Jan 1954, *Maguire et al* 37348 (NY); open tree to 10 m, on lower escarpment slopes at alt 1600 m, 24 Jan 1954, *Maguire et al* 37378 (NY, UC, P); tree 4–8 m high, on escarpment slopes at alt 1600–1700 m alt, 17 Nov 1957, *Maguire et al* 42036 (holotype NY; isotypes F, IAN, US, VEN); small tree along rim of Cañon Grande at alt 1800 m, 23 Dec 1957, *Maguire et al* 42461 (NY, MICH). BRAZIL. Amazonas: 2 m high, 2 cm diam, in low humid catinga forest at alt 1300–1700 m, Serra Pirapucú, Rio Maturacá, 27 Jan 1966, Silva & Brazão 60930 (paratypes NY, IAN, F, US).

3. *Sipapoa glaucifolia* Maguire, sp nov.

Fig. 13; Fig. 16, E-G.

A *S. rufa* Mag. affinis et similis, sed foliis glabris, subtus dealbatis, farinoso-squamulosis; inflorescentiis paucipubescentiis differt.

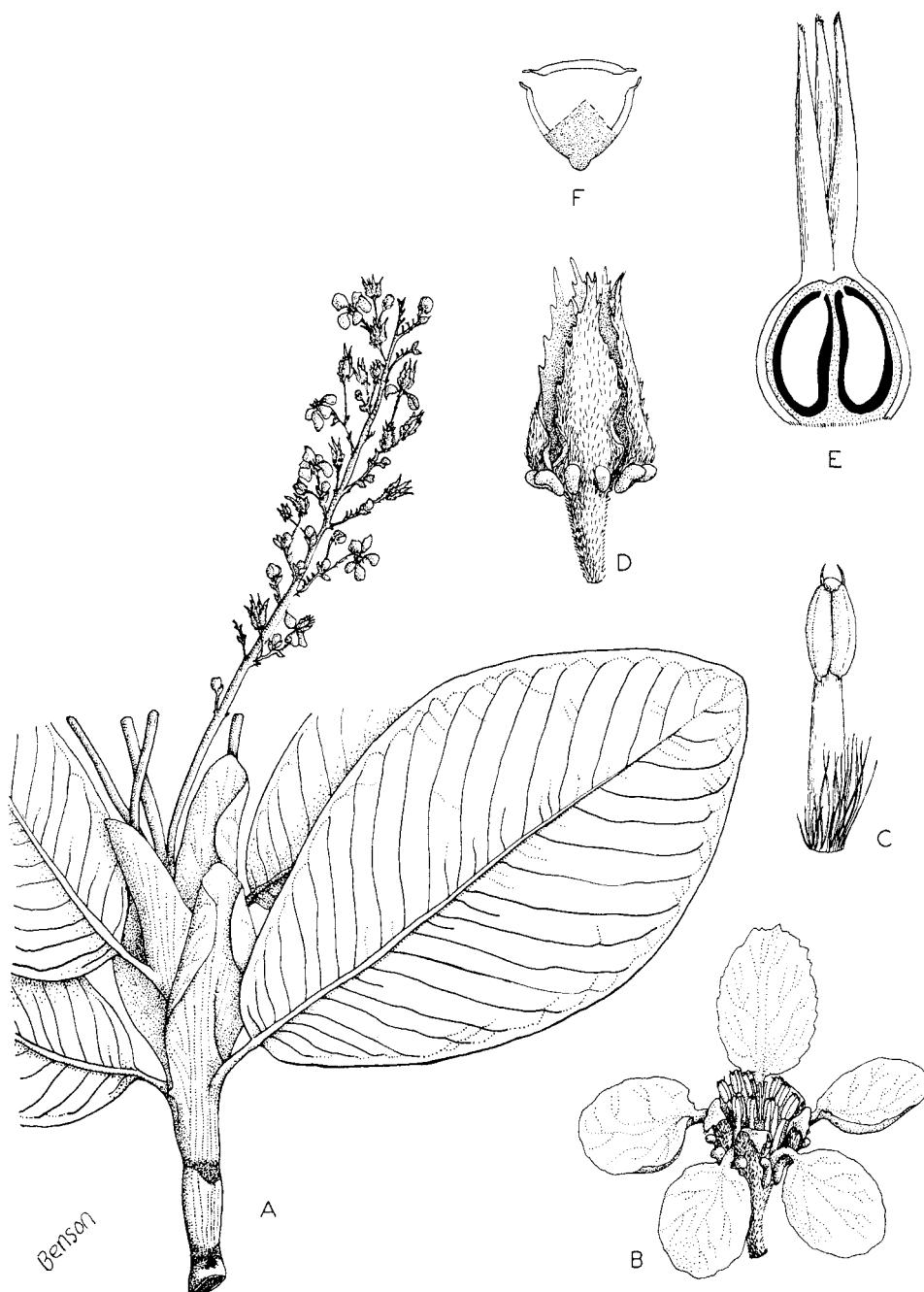


FIG. 13. *Sipapoa glaucifolia* (Maguire et al 42057, type): A, habit, $\times 1$; B, expanded flower, $\times 10$; C, stamen, $\times 20$; D, mature calyx, $\times 10$; E, near median long section, maturing pistil, $\times 10$; F, pollen, diagram of polar view, $\times 1000$.

Type. Tree 8 m high, adult leaves waxy-glaucous beneath, flowers yellow, shoots from lower trunk, frequent in *Clusia* tangle just south of Camp 3, lowland and slope forests, alt 700 m, Cerro de la Neblina, Río Yatúa, Territorio de Amazonas, Venezuela, 14–16 Nov 1957, Bassett Maguire, John J. Wurdack & Celia K. Maguire 42057 (holotype NY; isotypes NY, US, VEN, F, K, GH, UC).

Distribution. VENEZUELA. Amazonas: Cerro de la Neblina, Río Yatúa, tree 6–15 m high, leaves highly glaucous beneath, in *Clusia* "moss-forest," alt 650–700 m, 23 Dec 1953, Maguire et al 36821 (NY, W, UC, GH, M); in *Clusia* "moss-forest," alt 650 m, 29 Dec 1953, Maguire et al 36968 (paratypes NY, US, VEN, K, S, COL, F, P, B); tree to 15 m, frequent in *Clusia* tangle in slope forest, alt 650 m, 23 Jan 1954, Maguire et al 37362 (NY, US, VEN, LL, IAN); tree 8 m high, adult leaves waxy-glaucous beneath, frequent in *Clusia* tangle, alt 700 m, 14–16 Nov 1957, Maguire et al 42057 (holotype NY; isotypes NY, US, VEN, F, K, GH, UC); tree 8 m high, adult leaves waxy-glaucous beneath, frequent in *Clusia* tangle, alt 700 m, 14–16 Nov 1957, Maguire et al 42057A (VEN, NY, US); Maguire et al 42057B (NY, US, VEN, F); tree 5–10 m high, leaves waxy-glaucous beneath, along banks of Cañon Grande, alt 1100 m, 24 Nov 1957, Maguire et al 42216 (NY, US, VEN, RIO). BRAZIL. Amazonas: Tree 8 m high, 5 cm diam, intrapetiolar stipule large, between Missão Salesiana and Serra Pirapucú, alt 800–1000 m, Rio Maturacá, 23 Jan 1966, Silva & Brazão 60867 (paratypes NY, IAN, US, F, S, K, GH, UC, COL, RIO).

4. *Sipapoa stipularis* Maguire & Phelps, Mem. N. Y. Bot. Gard. **8**: 127. 1953.

Type. Cerro Parú, Río Ventuari, Amazonas, Venezuela, 2 Feb 1951, Cowan & Wurdack 31200 (holotype NY). Known only from the cumbre of Cerro Parú: Phelps & Hitchcock 471; Cowan & Wurdack 31112, 31168, 31292.

5. *Sipapoa kunhardtii* Maguire, Mem. N. Y. Bot. Gard. **8**: 125. 1953.

Type. Cerro Sipapo, Río Orinoco, Amazonas, Venezuela, 15 Dec 1948, Maguire & Politi 27677 (holotype NY). Known only from the cumbre drainage of Caño Negro, Cerro Sipapo: Maguire & Politi 27622, 28105.

6. *Sipapoa hypoleuca* Maguire, Mem. N. Y. Bot. Gard. **8**: 125. 1953.

Type. Cerro Yapacana, Río Negro, Amazonas, Venezuela, 3 Jan 1951, Maguire, Cowan & Wurdack 30704 (holotype NY). Known only from the cumbre of Cerro Yapacana: Holt & Blake 707; Maguire et al 30672, 30635, 30708, 30710.

7. *Sipapoa ferruginea* Maguire & Phelps, Mem. N. Y. Bot. Gard. **8**: 126. 1953.

Type. Cerro Parú, Río Ventuari, Amazonas, Venezuela, 4 Feb 1951, Cowan & Wurdack 31233 (holotype NY). Known only from the cumbre of Cerro Parú: Phelps & Hitchcock 516; Cowan & Wurdack 31066, 31079, 31080, 31081, 31150, 31171.

8. *Sipapoa vestita* (Bentham) Maguire, Mem. N. Y. Bot. Gard. **8**: 127. 1953.

Type. "Mountains of British Guiana, Schomburgk s n" (holotype K).

Sipapoa vestita has not since been collected in "British Guiana." It is probable that the original was collected by Schomburgk in Venezuelan Amazonas and on the label erroneously ascribed to "British Guiana." VENEZUELA. Amazonas: Cerro Duida, Tate 563; Cerro Huachamacari, Maguire et al 29806, 29858, 29869, 30091, 30111, 30221, 30252.

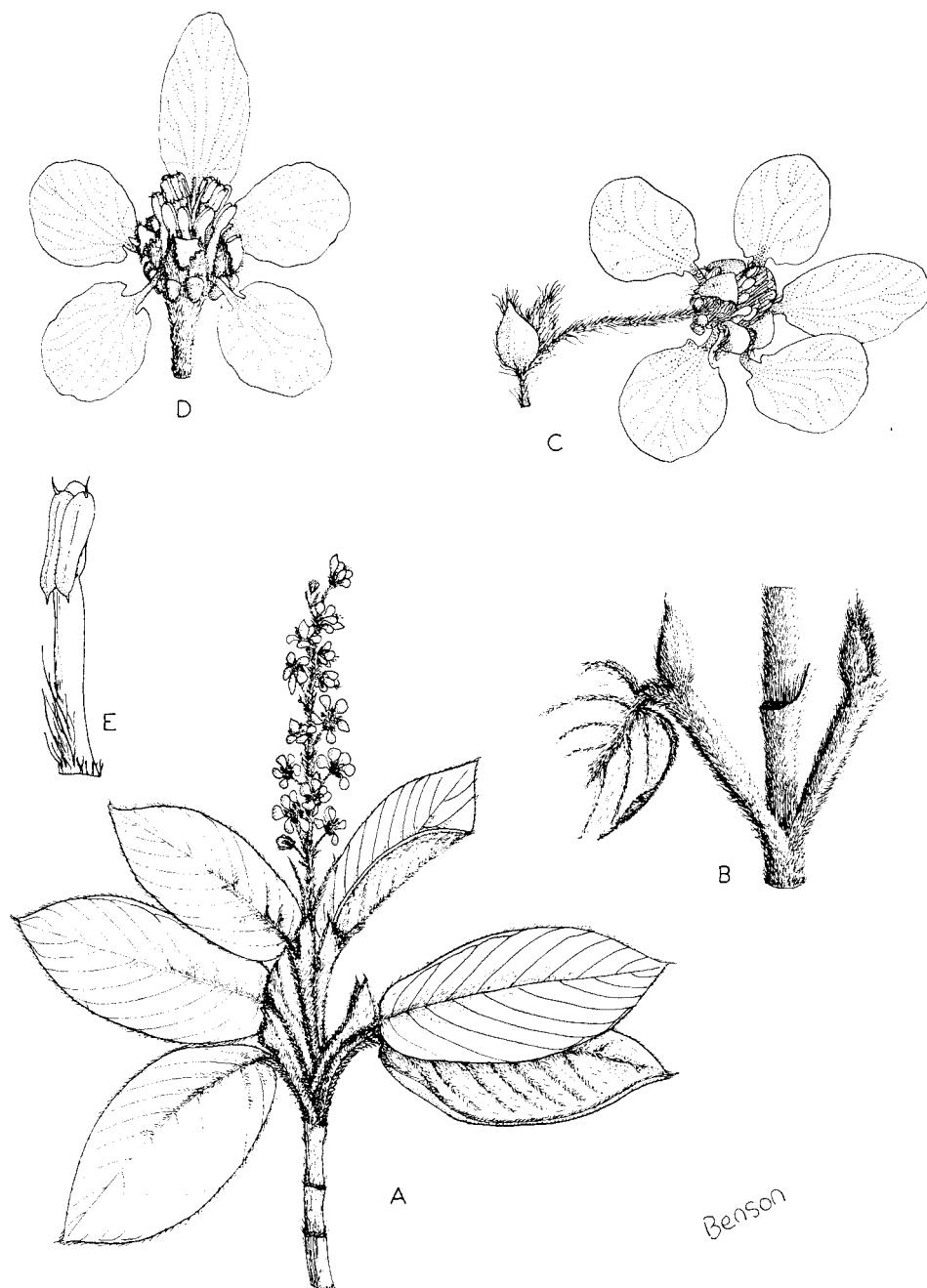


FIG. 14. *Sipapoa steyermarkii* (Steyermark 98016, holotype): A, habit, $\times 1$; B, detail showing separated stipules with free lobes at the summit, $\times 2$; C, flower and petioles with paired bracteoles at base, $\times 10$; D, flower, $\times 10$; E, stamen, $\times 20$.

Benson

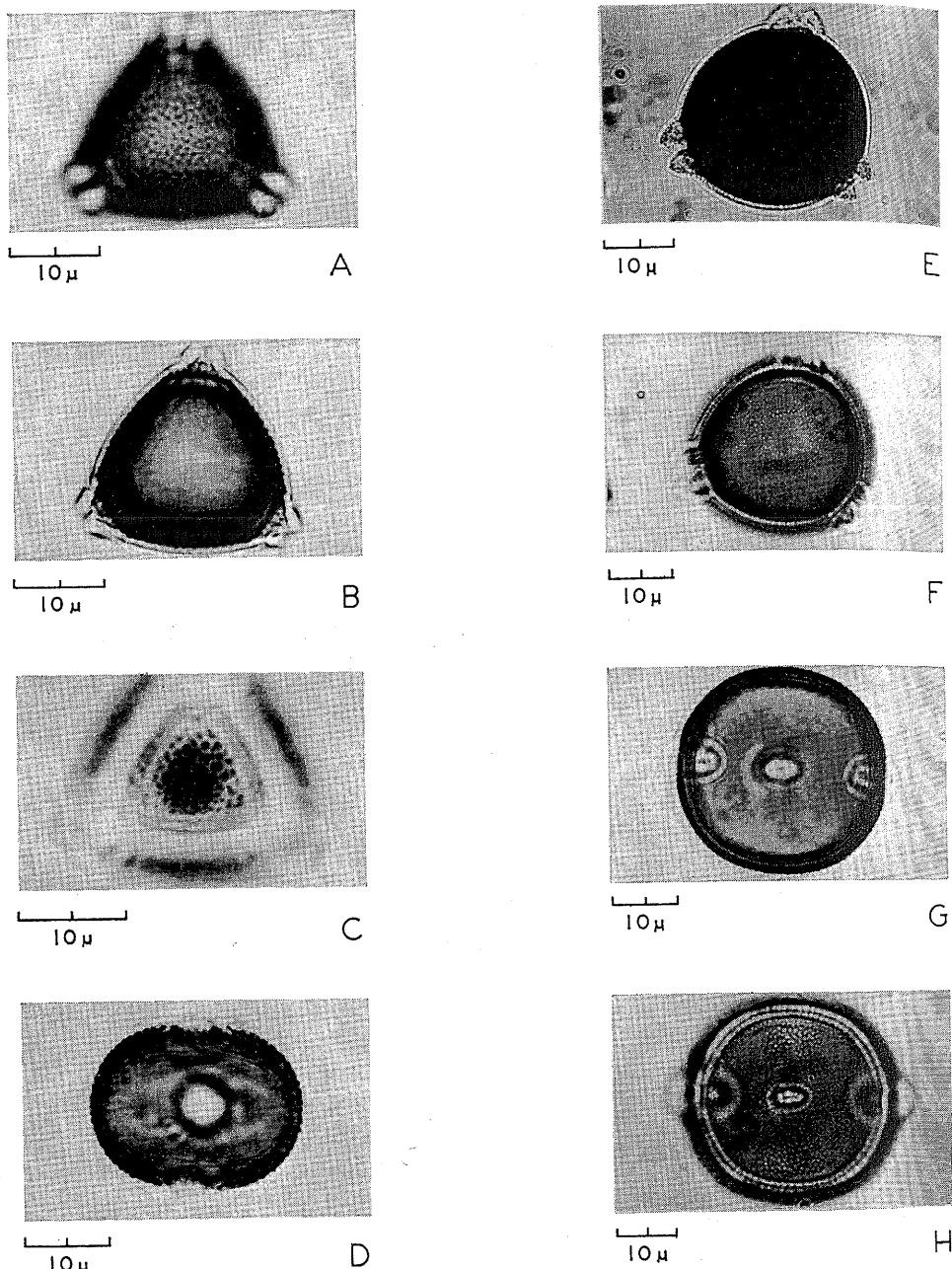


FIG. 15. A-D, *Diacidia duckeana* (Maguire et al 44091): A,B, polar views, $\times 2000$; C, sporoderm pattern, negative phase-contrast, $\times 2500$; D, equatorial view, $\times 2000$. E-H, *Sipapoa cordata* (Maguire et al 37320): E,F, polar views, $\times 2000$; G,H, equatorial views, $\times 2000$.

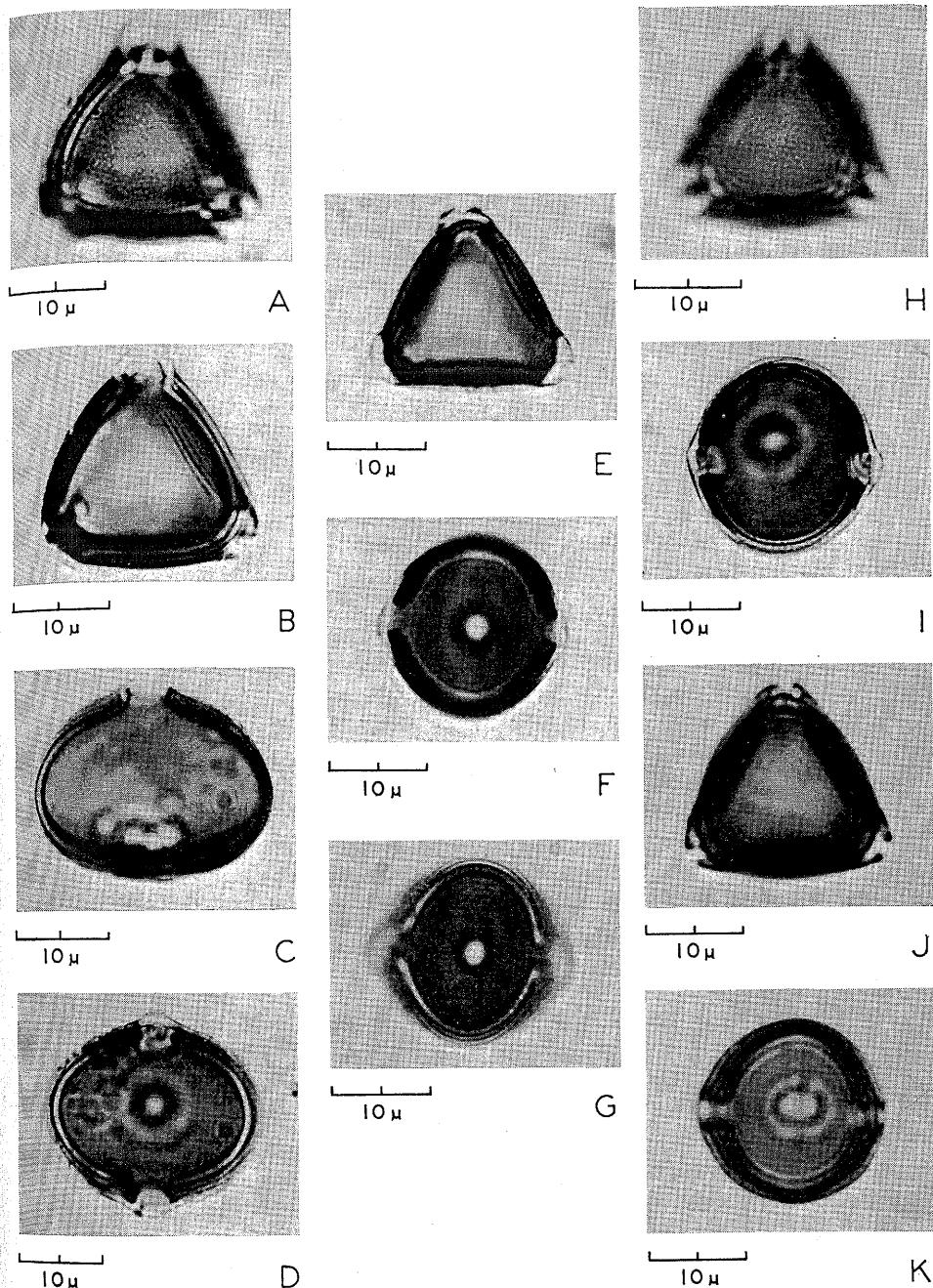


FIG. 16. A-D, *Sipapoa steyermarkii* (Steyermark 98106, type): A,B, polar views, $\times 2000$; C,D, equatorial views, $\times 2000$. E-G, *Sipapoa glaucifolia* (Maguire et al 42057, type): E, polar view, $\times 2000$; F, equatorial view, $\times 2000$. H-K, *Sipapoa rufa* (Maguire et al 37152): H, polar view, $\times 2000$; I, equatorial view, $\times 2000$; J, polar view, $\times 2000$; K, equatorial view, $\times 2000$.

9. *Sipapoa steyermarkii* Maguire, sp nov. Fig. 14, A-E; Fig. 16, A-D.

A *S. vestitae* Bentham valde affinis, sed laminis cordatis et pubescentiis densioribus, nervis magis prominentibus, differt.

Arbor parva 4-5 m alta. Rami teretes dense cinereo-pilosohirsuti mox glabrescentes; internodiis 1.5-2.0 cm apartis. Folia opposita; laminis ellipticis vel lanci-ellipticis, 6-7 cm longis, 3.0-4.5 cm latis, cum 7-9-jugis nervorum primariorum lateralium, supra tenuiter puberulis, nervis impressis, subtus densissimis cinereo-pilosohirsutis, pilis valde stellato-pustulatis; nervis prominentibus; apicibus obtusiusculis, caespitulis; basibus cordatis; marginibus aliquantum involutis. Petioli 2.0-3.5 cm longi, partibus liberis 7-10 mm longis, ad basim ca 1-2 cm connatis; vaginis dense pilosis intus; stipulis lobis liberis, ovatis vel lanceolatis, acutis vel acuminatis, 12-15 cm longis, glabris intus. Inflorescentiae 10-15 cm longae, racemosae, dense piloso-hirsutae; pedicellis tenuibus, 10-12 cm longis, bibracteolatis, bracteolis ca 1.5 mm longis, caducis; floribus flavis 12-14 mm diam; sepalis 5, lanceolatis, acutis, ca 4 mm longis, valde hirsutis, glandibus oblongis ca 1.2 mm longis; petalis 5, flavis, subaequalibus, 6-8 mm longis, unguibus ca 1.5 mm longis, laminis orbiculariovatis, 4-5 mm longis ca 4 mm latis, irregulariter erose crenulatis, ad basim cordatis, petalo quinto 7-8 mm longo, lamina ovata; staminibus 8-9, ca 3.5-4.3 mm longis, posterioribus longioribus, filamentis teretibus, ad basim intus pauci-longipilosis, connectivo prominenti obtuso 0.1-0.2 mm projecto, antheris 2-thecis oblongis ca 0.2 mm longis, introrsis, apice 2-spinuloso-aristato, aristis nectantibus. Grana pollina 3-colporata, prolati-sphaeroidea, 22-23 × 20-22 μ , sporoderma granulari. Ovarium globosum 2-loculare, glabrum, 3-stylare; loculis 1-ovulatis, ovoides dependentibus; stylis subulatis, divergentibus, 2.5 mm longis, acutis. Fructus non-visus.

Type. Tree 4-5 m with erect branches, leaves subcoriaceous, rich green with impressed nerves above, sericeous-buff below, alt 1900-2100 m, Cerro Jaua, Río Kanarakuni, Río Caura, Edo. Bolívar, Venezuela, 22-27 Mar 1967, Julian A. Steyermark 98016 (holotype NY; isotype VEN). Known only by the type collection.

This handsome tree, clearly allied to *Sipapoa vestita*, is represented only by the type collection. It is readily distinguished from *S. vestita* by its cordate leaves, denser pubescence, and more prominent nerves, which are impressed in the upper surface. As is characteristic of its immediate congener, the connate stipules soon separate.

Pollen

Pollen grains of *Diacidia* and *Sipapoa* are similar, and conform to the general pattern of malpighiaceous pollens, viz., 3-colporate, prolate sphaeroidal (20-33 × 19-31 μ), with finely reticulate sporoderms.