Excerpt from:
W. R. Anderson. 2006.
Eight Segregates from the Neotropical Genus *Mascagnia* (Malpighiaceae)
Novon 16: 168–204. [*Christianella* on pages 190–191]

VI. Christianella W. R. Anderson, gen. nov. TYPE: *Christianella mesoamericana* (W. R. Anderson) W. R. Anderson.

Lianae lignosae vel frutices; lamina eglandulosa vel in dimidio proximali aliquot glandulis parvis marginalibus instructa; stipulae parvae prope basim petioli portatae; bracteae bracteolaeque eglandulosae vel glandulis parvis marginalibus instructae; bracteolae apice pedunculi portatae; sepala aliquot glandulis parvis marginalibus instructa, his sessilibus, subsessilibus, vel stipitatis; petala lutea, abaxialiter tomentosa; filamenta valde heteromorpha; samara membranacea, alis lateralibus apice distinctis, basi continuis vel usque ad nucem incisis.

Woody vines, or shrubby in open habitats. Petiole eglandular or bearing 2–10 large to small glands in 2 rows; lamina eglandular or bearing several small sessile glands on margin on proximal half; stipules very small, triangular, borne on petiole near base. Inflorescence with flowers decussate to irregularly inserted in short to elongated pseudoracemes, terminal or lateral, single or (usually) grouped in panicles; bracts and bracteoles eglandular or bearing several subsessile to long-stalked, clavate or capitate marginal glands; floriferous peduncle well developed; bracteoles borne at apex of peduncle. Sepals elongated but separating to expose petals during enlargement of bud, appressed to spreading in anthesis, the lateral 4 bearing large paired abaxial glands, all 5 bearing a row of small sessile or subsessile to long-stalked, clavate or capitate marginal glands; corolla bilaterally symmetrical, the posterior petal with a longer and thicker claw than the lateral 4; petals yellow, abaxially densely tomentose, adaxially glabrous; androecium bilaterally symmetrical; stamens 10, all fertile, glabrous; filaments connate at base, straight, strongly heteromorphic, longest and much thickened opposite the 2 posterior-lateral petals, usually long but slender opposite the anterior sepal, shortest opposite the posterior petal; anthers subequal or larger on longer filaments; gynoecium bilaterally symmetrical; carpels very shortly connate in ovary; anterior style straight and shorter than the others, the posterior 2 straight or bowed from the base; apex of styles dorsally truncate to short-hooked, the stigma internal. Fruit dry, breaking apart into samaras separating from a short obscure pyramidal torus; samara suborbicular to butterfly-shaped, the lateral wing(s) dominant, membranous with reticulate-anastomosing venation, cleft to nut at apex, continuous at base or cleft to nut, bearing stiff, usually basifixed or sub-basifixed hairs inserted at dark spots, the margin undulate or coarsely dentate; dorsal wing small, extended forward at apex through gap in lateral wing, distinct at base or confluent with lateral wing; intermediate winglets mostly lacking, rarely 1, narrow; ventral areole circular or broadly ovate.

It gives me great pleasure to name this genus in honor of Christiane Eva Seidenschnur Anderson (b. 1944). Christiane's excellent revisions in the Malpighiaceae and her achievements as editor of *Systematic Botany Monographs* have made her an important figure in our generation of plant taxonomists.

Christianella is distinguished by the small glands found on the margin of the sepals, and in most species on the margin of the bracteoles and sometimes the bracts. Such marginal glands are found in a few other genera of Malpighiaceae, but not in any of the other groups included in *Mascagnia* by Niedenzu. This group of species is also notable for the marginal leaf glands, the yellow abaxially tomentose petals, the heteromorphic filaments, and the membranous samaras with the lateral wings cleft to the nut at the apex and continuous or cleft at the base. The stiff hairs on the samara wings are usually inserted at characteristic dark spots. *Christianella* has not been included in any published molecular study.

Christianella consists of five species of Central and South America.

KEY TO THE SPECIES OF *CHRISTIANELLA*

1a. Lamina sericeous to soon glabrate, the hairs sessile and straight.
  2a. Bracts and bracteoles 2–3 mm long, eglandular or with several tiny sessile or subsessile marginal glands; marginal glands of sepals sessile or subsessile; southwestern Brazil . . . . . 4. *C. paludicola*
  2b. Bracts and bracteoles 3–7 mm long, with many long-stalked marginal glands; marginal glands of sepals long-stalked.
    3a. Bracts caducous; petiole of larger leaves 11–15 mm long; lamina of larger leaves 5–7.2 cm wide; samaras orbicular, 35–60 mm wide, the lateral wing continuous at base, cleft to nut at apex; western Amazonia . . . . . 1. *C. glandulifera*
    3b. Bracts persistent or deciduous in fruit; petiole of larger leaves 2–8 mm long; lamina of larger leaves 2.5–5 cm wide; samaras butterfly-shaped, 22–42 mm wide, the lateral wing cleft to nut at base and apex; southeastern Mexico to Panama . . . . . 2. *C. mesoamericana*
1b. Lamina densely and persistently tomentose, velutinous, or woolly, especially abaxially, the hairs stalked.
  4a. Peduncle and pedicel very deeply woolly, 1–1.5 mm or more diam. including vesture; hairs so dense on abaxial leaf surface as to make it difficult to distinguish the crosspiece of any given hair; bracteoles abaxially very densely spreading-woolly, adaxially tomentose, at least on the distal half; sepals abaxially deeply spreading-woolly; petals abaxially densely

woolly; southern Bolivia, northern Paraguay, and southern Brazil . . . 3. *C. multiglandulosa*

4b. Peduncle and pedicel densely tomentose or velutinous but only 0.4–0.7 mm diam. including vesture; leaf hairs much less dense, the crosspieces of individual hairs easily distinguished; bracteoles abaxially appressed-tomentose, adaxially glabrous or tomentose only at very apex; sepals abaxially appressed-tomentose or subsericeous; petals abaxially moderately appressed-tomentose; Amazonian South America . . . 5. *C. surinamensis*

1. **Christianella glandulifera** (Cuatrecasas) W. R. Anderson, comb. nov. Basionym: *Mascagnia glandulifera* Cuatrecasas, Webbia 13: 365. 1958. TYPE: Colombia. Amazonas-Vaupés: Río Apaporis, *R. E. Schultes & I. Cabrera 13208* (holotype, US; isotypes, GH, NY).

2. **Christianella mesoamericana** (W. R. Anderson) W. R. Anderson, comb. nov. Basionym: *Mascagnia mesoamericana* W. R. Anderson, Contr. Univ. Michigan Herb. 16: 105. 1987. TYPE: Guatemala. Retalhuleu: Between Retalhuleu and Nueva Linda, *P. C. Standley 87301* (holotype, F; isotype, US).

This species is known from southeastern Mexico, Guatemala, and Panama (Anderson, 1987: 105), and has recently been found in Costa Rica (*Acosta 803*, INB).

3. **Christianella multiglandulosa** (Niedenzu in Chodat & Hassler) W. R. Anderson, comb. nov. Basionym: *Mascagnia multiglandulosa* Niedenzu in Chodat & Hassler, Bull. Herb. Boissier, Sér. 2, 7: 284. 1907. TYPE: Paraguay. Near Valenzuela, *E. Hassler 6998* (lectotype, designated here, G; isotypes, A, G, K, MO, NY).

The holotype sheet of *Hassler 6998* was destroyed at B. There are four isotypes at G; the lectotype is the isotype that was annotated lectotype by W. R. Anderson in 1993.

This species is known from Paraguay and southern Brazil (Anderson 1990b: 53) and southern Bolivia (*Gutiérrez et al. 1170*, MICH).

4. **Christianella paludicola** (W. R. Anderson) W. R. Anderson, comb. nov. Basionym: *Mascagnia paludicola* W. R. Anderson, Contr. Univ. Michigan Herb. 16: 106. 1987. TYPE: Brazil. Amazonas: Rio Purús, Rio Ituxi, *G. T. Prance et al. 13918* (holotype, INPA; isotypes, K, MICH, MO, NY, U, US, VEN).

5. **Christianella surinamensis** (Kostermans) W. R. Anderson, comb. nov. Basionym: *Mascagnia multiglandulosa* var. *surinamensis* Kostermans, Meded. Bot. Mus. Herb. Rijksuniv. Utrecht 25: 5. 1936. *Mascagnia surinamensis* (Kostermans) W. R. Anderson, Contr. Univ. Michigan Herb. 17: 53. 1990. TYPE: Suriname. Brownsberg, 23 Sep. 1931, *W. C. v. Emden* (holotype, U; isotypes, K, MICH). Figure 8.

This species is widespread in Amazonian South America, including Guyana and Suriname (Anderson 1990b: 53).