

The genus *Stenotyla*

FRANCO PUPULIN

provides a genus description, a list of specimens examined, additional line drawings and illustrations

Stenotyla Dressler

Lankesteriana 5 (2): 96 (2005).

Type species: *Chondrorhyncha lendyana* Rchb.f. [= *Stenotyla lendyana* (Rchb.f.) Dressler]

Description

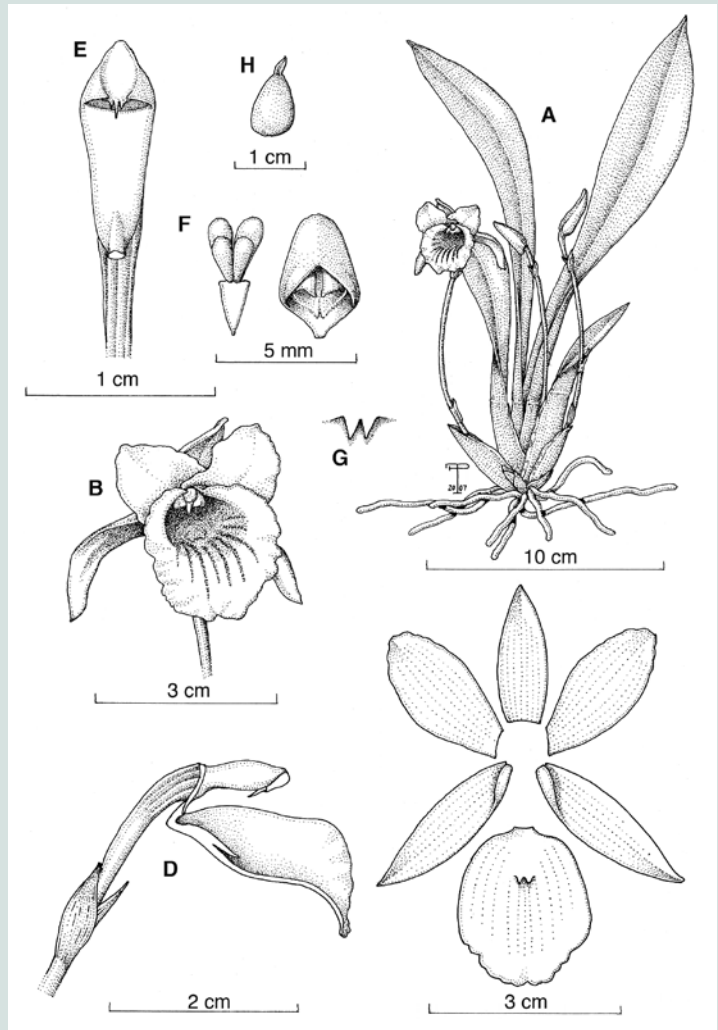
Epiphytic, caespitose herbs with rudimentary pseudobulbs. **Roots** terete, thick. **Pseudobulb** small, aphyllous or provided with a scale-like leaf, enclosed by several imbricating sheaths, the upper ones



From Fowlie 1971

STENOTYLA HELLERI Fowlie (Pupulin)

1



A Habit **B** Flower **C** Dissected perianth **D** Column and lip, lateral view (lip sectioned) **E** Column, ventral view **F** Pollinarium and anther cap **G** Callus **H** Pseudobulb and apical leaf A, C-H redrawn from the type illustration; B from the photograph of a flower of the holotype. Drawn by Franco Pupulin

Right The flower of *Stenotyla helleri*, from the plant that served as the holotype

foliaceous. **Leaves** conduplicate, articulate, membranaceous, abaxially keeled, narrowed at the base into a conduplicate petiole. **Inflorescence** lateral, stout, single-flowered, spreading to erect, produced from the axil of the lower sheaths; floral bract double, conduplicate, shorter than pedicellate ovary. **Flowers** resupinate, comparatively large. **Dorsal sepal** free, porrect. **Lateral sepals** often falcate, spreading to reflexed, sometimes becoming suberect, strongly inrolled-folded toward the base. **Petals** usually gently revolute at apex. **Lip** articulate with the column foot, entire to obscurely 3-lobed, cymbiform, the base shortly cordate to form a short chin, the distal margins undulate, the proximal margins flanking the column; callus laminar, short, narrow, in the proximal third of the blade, apically 2- to 4-toothed, sometimes provided with indistinct, low lateral keels. **Column** straight, with a distinct foot, the stigma transverse, narrow. **Anther cap** cucullate, 2-celled. **Pollinia** 4, in 2 pairs of different size, on a obtriangular-elliptic stipe scarcely distinct from the ventral viscidium.

Specimens examined

1 *Stenotyla helleri* (Fowlie)

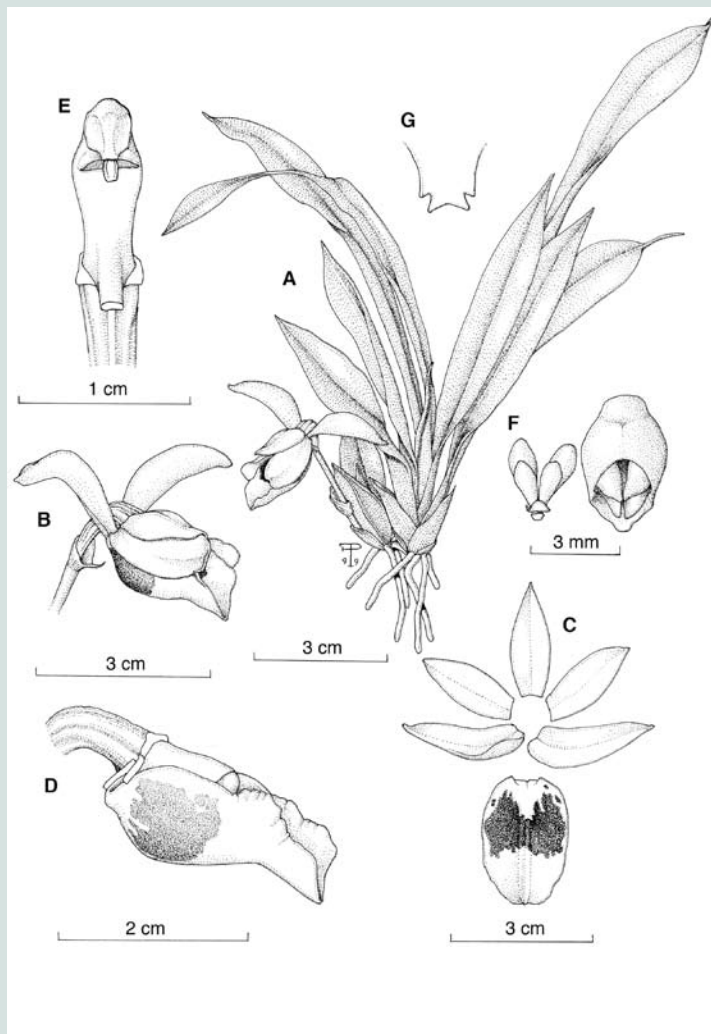
Pupulin

Distribution: Known only from Nicaragua.

NICARAGUA: Jinotega, Mt. Kilambe, hill East Santa Maria de Ostuma, 4,600ft [1,400m], April 1966, *AH Heller 10097* (the type, LA); same locality, *AH Heller s.n.* (AMES 91118!), *AH Heller s.n.* (AMES 106748, sterile!); Cerro Saslaya, 20km al Oeste de Sinua, 1,100–1,400m, 5 May 1977, *D Neill 1850* (HNMN 05979!); Zelaya, along new road from Río Blanco to Río Copalar,



STENOTYLA LANKESTERIANA Pupulin (Dressler)



A Habit **B** Flower **C** Dissected perianth **D** Column and lip, lateral view **E** Column **F** Pollinarium and anther cap **G** Callus
Drawn from the holotype by Franco Pupulin

- 2 *Stenotyla lankesteriana*, from a plant collected in Costa Rica in the vicinity of Tapantí National Park (J Aguilar 3). Watercolour by Sylvia Strigari.





Franco Pupulin

Stenotyla lendyana. This was a confiscated plant, originally collected in Guatemala and growing at Lankester Botanic Garden (Pupulin 6417)

c.31km east of Río Blanco, approx. 12°50–55'N 85°00–05'W, 200–400m, 13 February 1979, *W Douglas Stevens 12097* (HNMN 03788, sterile!). Without specific locality, cult. Ex Hort. Bot. Basilensis 15801 (BAS, digital image!).

2 *Stenotyla lankesteriana* (Pupulin)

Distribution: Costa Rica and Panama.

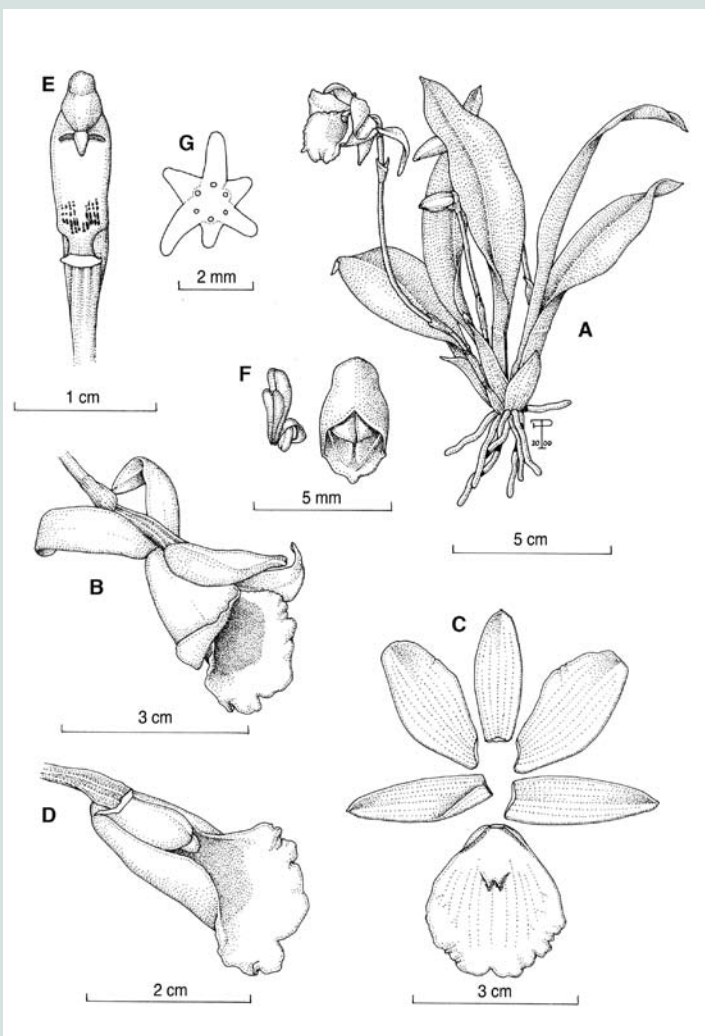
COSTA RICA: Cartago, Paraíso, Orosi, Tapantí National Park, Oropéndola trail, along the Río Grande de Orosi, 1,160m, epiphytic on fallen tree on the river shore, premontane rainforest, secondary mature vegetation with remnants of primary vegetation, 27 May 2001, *F Pupulin 3142*, E Salas & RL Dressler (JBL-Spirit); Parque Nacional Tapantí, orillas del camino principal, 100m antes de El Mirador, 9°44'13.5"N 83°46'49.6" W, 1,376m, 24 August 2004, *D Bogarín 932*, H León-Páez & E Hoppe (JBL-Spirit); Orosi, Tapantí, vicinity of Tapantí National Park, shores of Río Grande, March 2004, *J Aguilar 3* (JBL-Spirit); Orosi, south of coffee plantations, collected by E Viquez & J Andón,



Stenotyla lendyana (3) and *S. panamensis* (4)

STENOTYLA LENDYANA (Lindl.)

3



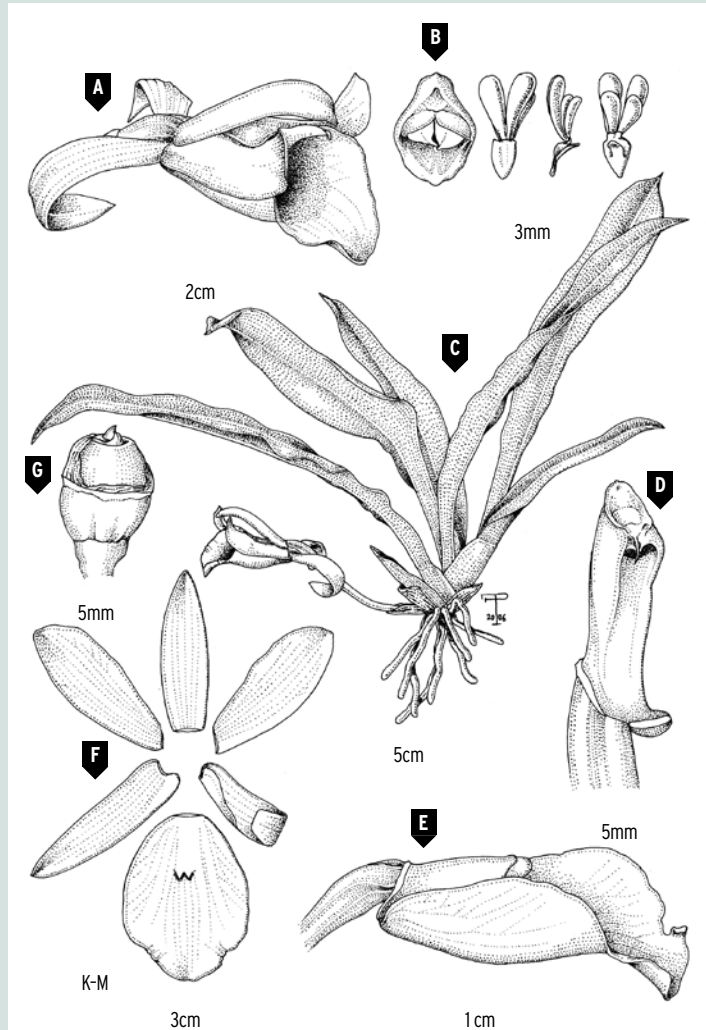
A Habit **B** Flower **C** Dissected perianth **D** Column and lip, lateral view **E** Column **F** Anther cap and pollinarium **G** Transverse section through the ovary Drawn by the author from *F Pupulin 2426*



Frontal view of the flower of *Stenotyla panamensis* (F Pupulin 5867) showing the red markings in the throat

STENOTYLA PANAMENSIS Pupulin

4



A Flower **B** Anther cap, pollinarium (three views) **C** Habit **D** Column **E** Column and lip, lateral view **F** Dissected perianth **G** Pseudobulb and apical leaf Drawn from the holotype by Franco Pupulin

October 1999, flowered in cultivation in the collection of E Viquez, 18 March 2001, *F Pupulin 3105* (JBL-Spirit); Orosi, Purisil, collected by J Calvo, January 1999, flowered in cultivation 16 April 2001, *F Pupulin 3123* (JBL-Spirit). Without collecting data. Flowered in cultivation at Lankester Botanic Garden, 31 March 2000, *F Pupulin 2255* (JBL-Spirit); flowered in cultivation at Lankester Botanic Garden, *F Pupulin 2810* (USJ); flowered in cultivation at Lankester Botanic Garden, accession no. JBL-01651, 27 March 2006, *F Pupulin 5991* (JBL-Spirit).

3 *Stenotyla lendyana* (Lindl.)

Distribution: From Mexico to El Salvador.

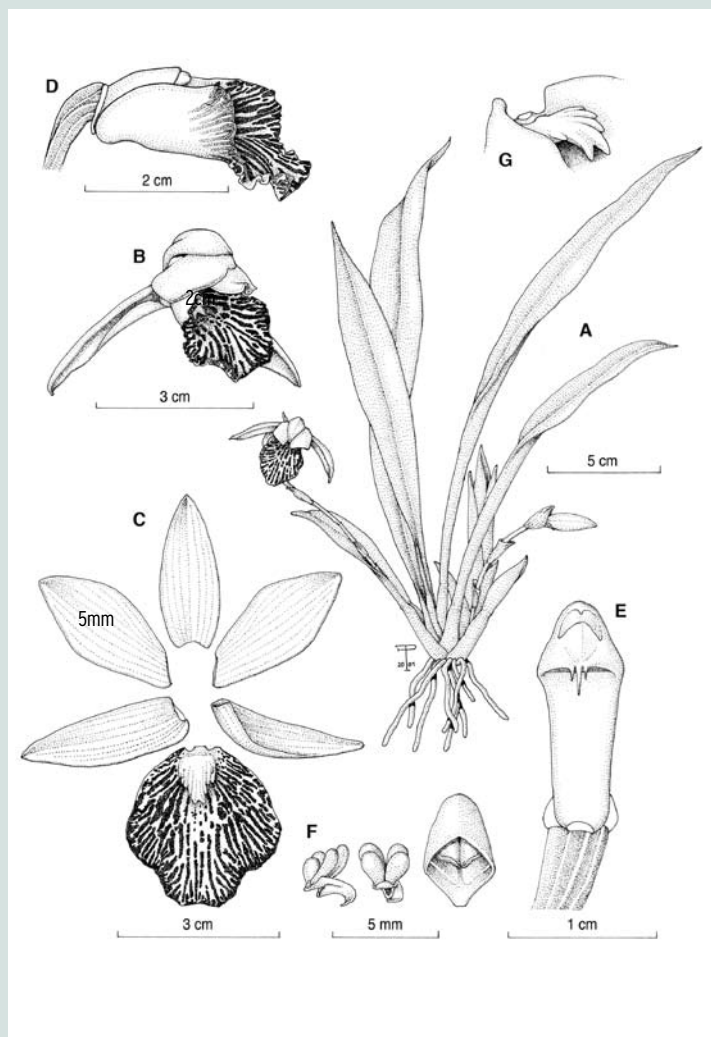
MEXICO: Chiapas, 1,170m, 16°06'00"N 091°33'00"W, 15 August 1981, *DE Breedlove 52291* (CAS); Chiapas, 1,700m, 13 July 1972, *DE Breedlove 26052* (AMES); Chiapas, 15°24'36"N 092°36'36"W, 14 November 1945, *E Matuda 6196* (F); Chiapas: 900–1,000m, 16°16'48"N 091°27'00"W, 31 March 1936, *O Nagel 5578* (MO, US). GUATEMALA: Alta Verapaz, Cobán, 1,300m, 23 March–19 April 1941, *PC Standley 92820* (F); Cobán, 1,350m, July 1912, *Türckheim 1830* (W); Cobán, 4,500–5,000ft [1,370–1,525m], June–August 1882, *Türckheim s.n.* (W-R); Baja Verapaz, Niño Perdido, 15°10'56"N 090°09'12"W, 31 May 1977, *CL Lundell & E Contreras 21033* (LL); Huehuetenango, Maxbal, 1500m, 15 July 1942, *Julian A Steyermark 48878* (F). Without locality, flowered in cultivation at Lankester Botanic Garden, 13 June 2000, *F Pupulin 2422* (USJ). Flowered in cultivation at Lankester Botanic Garden, 23 June 2000, *F Pupulin 2426* (USJ). EL SALVADOR: Santa Ana, Cerro Montecristo, 2,200m, cloud forest, *Hamer 840* (SEL).



Stenotyla picta. A plant originally collected on the northern slopes of Poas volcano in Costa Rica (F Pupulin 3027)

STENOTYLA PICTA (Rchb.f.) Dressler

5



A Habit **B** Flower **C** Dissected perianth **D** Column and lip, lateral view **E** Column **F** Pollinarium (two views) and anther cap **G** Callus
Drawn by Franco Pupulin from F Pupulin 4702

4 *Stenotyla panamensis*
Pupulin, sp. nov.

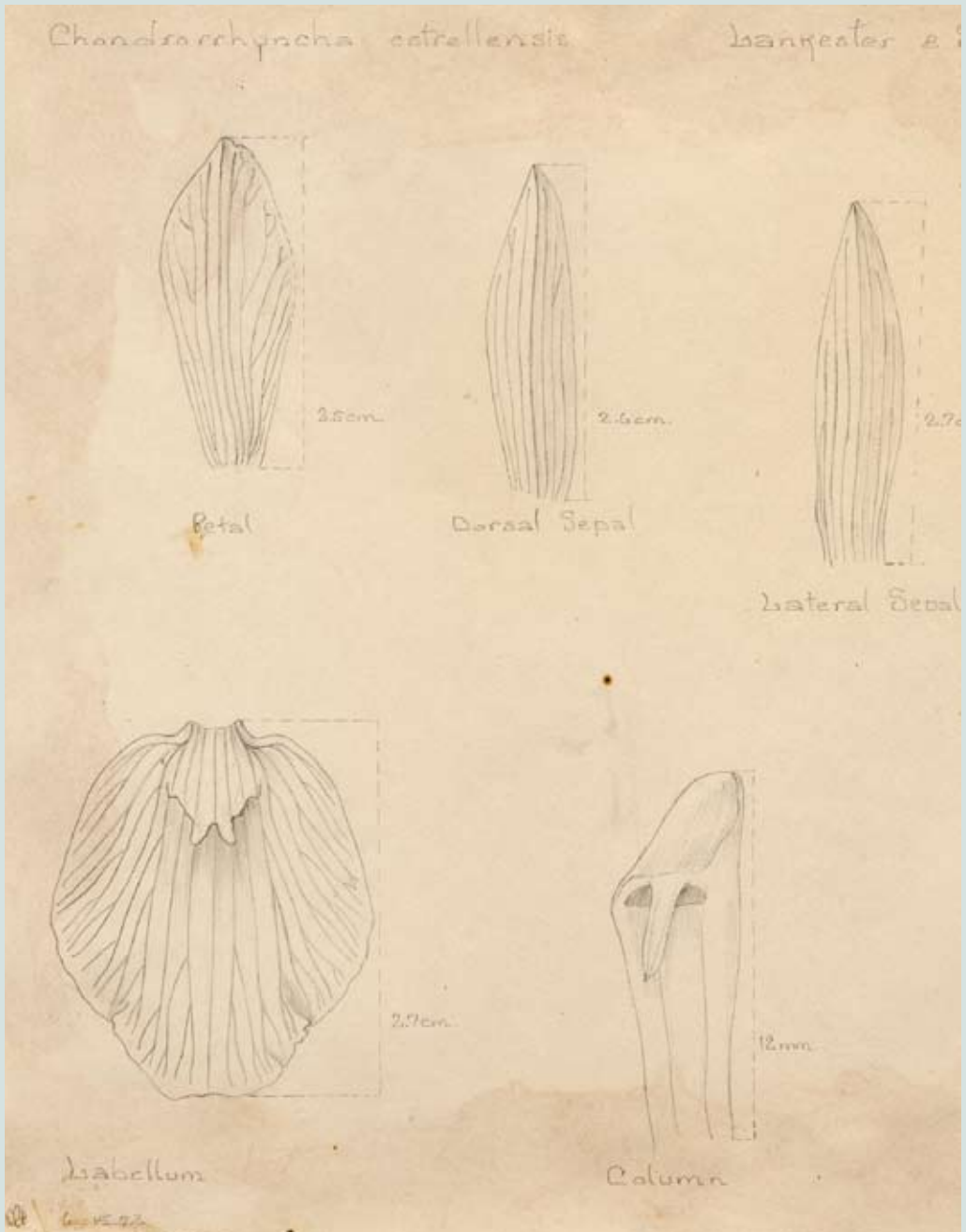
F Pupulin 5867 (holotype, PMA; isotype, Lankester Botanical Garden, Spirit).

5 *Stenotyla picta* (Rchb.f.)

Distribution: Costa Rica and western Panama.

COSTA RICA: Alajuela, 15km northwest of San Ramón by air. Cerro Azahar, headwaters of Río San Pedro, 10°09'30N 84°34'35"W, 1,400–1,500m, 14 May 1983, *R Liesner et al. 15562* (CR!); Cartago, El Guarco, La Cima de Dota, collected by E Quirós, October 2000, *F Pupulin 2439* (USJ!); *F Pupulin 2440* (USJ!); Cartago, 4930', *Hübsch s.n.* (W-R!); Cartago, 1885(?), *Hübsch s.n.* (W-R!); San José, La Hondura, September 1935, *J Valerio R 1184* (CR!); La Palma, 16 August 1932, *M Valerio (Serie de varios colectores 141)* (CR!); La Palma, 1,500m, 20 September 1938, *M Valerio 2659* (AMES!); Cerro de Zurquí, on ridges and steep slopes along the Río Vara Blanca (Pacific drainage), 10°03'N 84°01'W, 1,600–1,800m, 21 October 1975, *W Burger, R Baker & J Utley 9324* (CR!). Without specific locality. *Hübsch 2* (W-R!); Cultivado en San José, 27 October 1938, *E Span 7* (CR!); A confiscated plant flowered at Lankester Botanic Garden, 25 January 2001, *F Pupulin 2949* (USJ-Spirit!). Without collecting data, *Endres 575* (W-R!); *Endres s.n.* (W-R, drawings!); *Lankester 1073* (AMES-Spirit!). **PANAMA:** Chiriquí, *R Pfau s.n.* (W-R). ■

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Drawing of the type specimen of *Chondrorhyncha estrellensis* (AMES 26867) [now *Stenotyla picta*]
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Drawing of *Warczewiczella caloglossa* (Pittier 3214) [now *Stenotyla picta*], prepared under Schlechter's supervision, conserved at the Oakes Ames Orchid Herbarium (AMES 26811). Reproduced with permission of the Director, Harvard University Herbaria