

PASSIFLORA CERASINA, A NEW SPECIES OF
PASSIFLORA SUBGENUS *PASSIFLORA*
(PASSIFLORACEAE) FROM FRENCH GUIANA

HILAIRE ANNONAY

"Le Ramses," 5 Avenue Desambrois
06000 Nice, FRANCE

CHRISTIAN FEUILLET

Department of Botany, MRC-166
Smithsonian Institution
Washington, DC 20560-0166, U.S.A.

ABSTRACT

Passiflora cerasina, sp. nov., is newly described and placed in *Passiflora* subgenus *Passiflora*. This species has been found in northeastern French Guiana on Montagne de Kaw, and in Surinam on Mt. Brownsberg. *Passiflora cerasina* belongs in the *P. laurifolia* group, more precisely among the few species that have the first row of corona filaments shorter than the second row.

RÉSUMÉ

Passiflora cerasina, esp. nouv., est décrite et placée dans *Passiflora* sous-genre *Passiflora*. Cette espèce a été trouvée dans le nord-est de la Guyane française sur la Montagne de Kaw, et au Surinam sur le Mont Brownsberg. *Passiflora cerasina* appartient au groupe de *P. laurifolia*, où elle est proche des espèces dont la couronne a les filaments du rang externe plus courts que ceux du second rang.

A new species *Passiflora cerasina* has been collected by the senior author on Montagne de Kaw (type) in the NE region of French Guiana. Montagne de Kaw (Kaw Mountain), French Guiana, is a narrow table mountain, with a lateritic crust on top. It is about 35 miles long and is a locality rich in species of *Passiflora* (Feuillet 1989, 1994), now with 19 known species. The new species has been discovered, though not collected, in Surinam on Mont Brownsberg at an elevation of about 500 m (30 Dec 1996).

Passiflora cerasina H. Annonay & C. Feuillet, sp. nov. (Fig. 1). TYPE: FRENCH GUIANA. Montagne de Kaw, road from Roura to Kaw, PK 6.3, 30 km SE of Cayenne, 4°60'N, 52°30'W, 75–100 m, 21 Apr 1997, H. Annonay 1 (HOLOTYPE: US).

Species haec in subgen. *Passiflora* pertinens; folia integerrima; stipulae linearia; bractae involucratae librae integrae foliaceae rubrae glandulosae; sepala et petala rubra; mesocarpium crassum, endocarpium rubrum, placentae candidae.

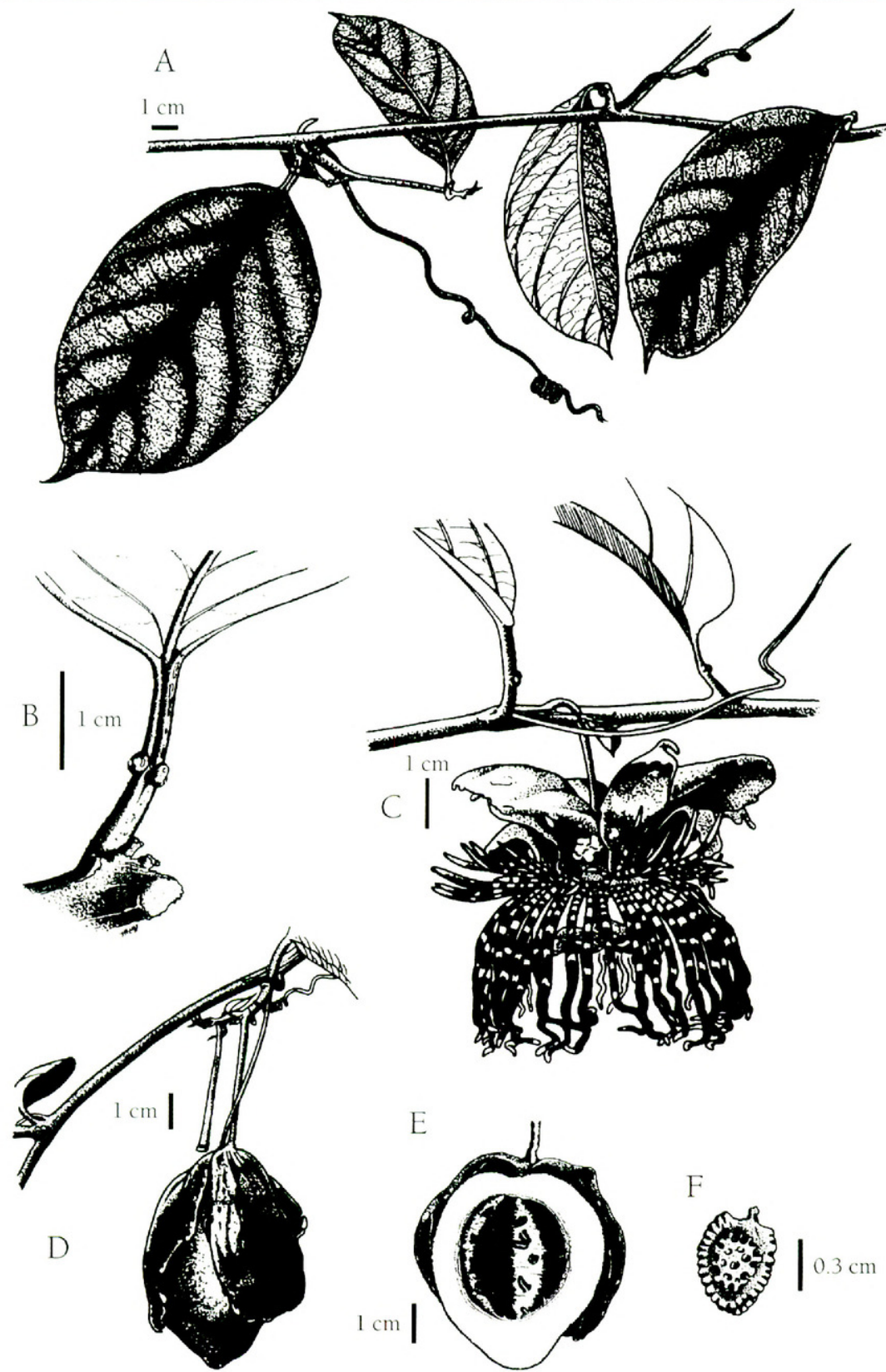


FIG. 1 – *Passiflora cerasina* Annonay & Feuillet, sp. nov.: a. Leaves. b. Petiole. c. Flower. d. Fruit. e. Longitudinal cut of the fruit. f. Seed. Scale: a–e. 1 cm. f. 0.3 cm (after the type).

Semiwoody climber with tendrils, glabrous throughout. Leaves simple, alternate; stipules linear, 3–5 mm long, pale green, early deciduous; petiole 2.0–2.2 cm long, canaliculate, bearing one pair of sessile glands near the middle, glands hemispherical-elongate, $2 \times 2 \times 2$ mm, green; lamina elliptic, $13\text{--}15 \times 8.0\text{--}8.5$ cm, upper surface dark green and shiny, margin entire, darker or somewhat reddish, rounded to cuneate at base, apex acuminate, acumen slightly curved, venation brachidodrome (looped), with 6–8 pairs of secondary veins, these prominent above and beneath, at lamina base the 1st pair marginal, the 2nd pair 3 mm from the margin, in the basal half of the lamina the minor lateral veins are perpendicular to the midrib. Flowers hanging, one per leaf axil, fragrant; peduncle ca. 2.2 cm long (elongating to about 5 cm in fruit), bearing three bracts; bracts ovate, verticillate, sessile, with marginal, yellow, sessile glands, $4.2\text{--}4.8 \times 2.2\text{--}2.9$ cm, apex rounded in flower, emarginate in fruit, cherry-red in flower, dark brownish violet speckled with dark green and with medium green margin in fruit; floral tube wider than long; sepals cherry-red, ca. $4 \times 0.8\text{--}1.2$ cm, bearing a curved, subterminal, yellowish awn, 0.7 cm long; petals cherry-red, ca. $4 \times 0.4\text{--}0.6$ cm wide; corona in several rows, the 2 outer rows of thick filaments, outermost row of filaments mostly white, with violet banding in the basal two thirds, curved upward, 2.0–2.5 cm long, the second outer row of filaments longer than the outermost row, 4.7–5.2 cm long, mostly violet with white banding in the basal half, curved downward forming a bell-shaped shade around the androgynophore, inner rows much shorter; stamen filaments flat, perpendicular to the androgynophore, yellowish white with light purple at apex, anthers dorsifixed, perpendicular to the filament and to the androgynophore, when the anther opens the whitish pollen is facing the throat of the floral tube (up on a hanging flower); ovary yellowish white, with 3 clavate apical styles, styles yellowish striped with light purple, stigmas whitish. Fruit obovoid, looking like a small quince, $4.5\text{--}5.0 \times 3.9\text{--}4.2$ cm, green with yellowish markings when unripe, dark purple densely freckled with pale green when ripe, soft due to a spongy mesocarp about 0.5–1 cm thick, endocarp cherry-red, the 3 placental zones white and bearing red ovules; seeds elliptic, coarsely reticulate, ca. 6×5 mm, nearly flat, 1.5 mm thick the middle, canaliculate at margin, each half crenate at margin, brown, in a white, juicy aril.

Distribution.—*Passiflora cerasina* is documented only by the type collected on Montagne de Kaw, in the slope forest at an elevation of 75–100 m. It has also been observed by the senior author on top of Mt. Brownsberg in Surinam at about 500 m elevation. *Passiflora cerasina* is the fifth species of the *P. laurifolia* group to be found on Montagne de Kaw. The other species from Montagne de Kaw are *P. laurifolia* L. and *P. nitida* Kunth with distribution areas much broader than the Guianas, and *P. crenata* Feuillet &

Cremers and *P. rufostipulata* Feuillet found only in NE French Guiana. In addition, *P. acuminata* DC., of the same group, has been seen between Cayenne and Montagne de Kaw by the junior author. With six out of 21 species of the *P. laurifolia* group being known from NE French Guiana, three of them only known from the area, the coastal table mountains of NE French Guiana are the probable center of diversification for this species group.

Systematics.—*Passiflora cerasina* belongs to *Passiflora* subg. *Passiflora* (lectotype: *P. incarnata* L.) and is part of what Killip (1938) called “ser. *Laurifoliae*” (nom. nud.: without type and without Latin description). It can be inserted into Killip’s key between *P. capparidifolia* Killip (sp. # 209) and *P. laurifolia* (#213), among species with the outermost row of corona filaments shorter than the second row. In this group, *Passiflora cerasina* is characterized by the combination of its floral color pattern, fruit shape, and endocarp color. Within this group it differs also from *P. capparidifolia* (# 209) and *P. popenovii* Killip (# 210) by its broadly elliptic leaves, from *P. nigradenia* Rusby (# 211) by its shorter peduncles and larger bracts and flowers, from *P. ambigua* Hemsl. (# 212) by the marginal glands on its bracts, from *P. laurifolia* (# 213) by its larger leaves with very different venation, and from *P. rufostipulata* (described recently) by its colored, concave bracts and by the shape and color of the stipules. As is common in the *P. laurifolia* group, the end of lateral branches tend to be hanging and look like inflorescences with reduced leaves and shortened internodes.

Etymology.—The epithet “*cerasina*” (= cherry red) refers to the color of the bracts, sepals, petals, endocarp, and ovules of the new species. The cherry red floral parts contrasting with the corona filaments banded white and purple-violet are reminiscent of the Peruvian *P. phoenicia* Lindley in the closely related *P. quadrangularis* group.

REFERENCES

- FEUILLET, C. 1989. Diversity and distribution of Guianan Passifloraceae. In: L.B. HOLM-NIELSEN, I.C. NIELSEN and H. BALSLEV, eds. Tropical forests, botanical dynamics, speciation and diversity. London: Academic Press. Pp. 311–318.
- FEUILLET, C. 1994. Two new species of *Passiflora* (Passifloraceae) from French Guiana. *Novon* 4:236–241.
- KILLIP, E. P. 1938. The American species of Passifloraceae. Publ. Field Mus. Nat. Hist., Bot. Ser. 19:1–613.



Annonay, Hilaire and Feuillet, C. 1997. "PASSIFLORA CERASINA, A NEW SPECIES OF PASSIFLORA SUBGENUS PASSIFLORA (PASSIFLORACEAE) FROM FRENCH GUIANA." *SIDA, contributions to botany* 17, 551–554.

View This Item Online: <https://www.biodiversitylibrary.org/item/34588>

Permalink: <https://www.biodiversitylibrary.org/partpdf/162344>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.