

A NEW SPECIES OF *TILLANDSIA* L. FROM MEXICO

*Sue Gardner\**

*Tillandsia chiapensis* S. Gardner, sp. nov. (Figure 1)

*T. carlsoniae* L. B. Smith verisimiliter affinis per bracteas imbricatas, dense lepidotas, roseolasque, sed per inflorescentias simplices differt.

Plant stemless, offsetting from the base, eventually forming large clumps. Leaves 3 dm long, numerous, in a spreading rosette; sheath 4.5 cm broad, suborbicular, pale castaneous; blades narrowly triangular, subinvolute, 2.5 cm broad at mid-blade, densely cinereous-lepidote. Inflorescence simple, about equal to the leaves, lanceolate, suberect, becoming decumbent after flowering, bracts imbricate, densely lepidote, pink; lower sterile bracts foliaceous, polystichous; upper fertile bracts distichous, elliptic, acute; sepals free, lance-elliptic, acute, coriaceous, 15 mm long; posterior sepals keeled; petals lanceolate, blue-violet; style and stamens exerted; scales coarse, about 0.5 mm long, suborbicular, a 4-8-16-32-128 cell arrangement pre-dominating.

TYPE: *MEXICO*: CHIAPAS: 17 km west of Ocozocautla. Saxicolous on canyon walls, approximately 600 m elevation, 3 Aug., 1977, *Gardner 211* (HOLOTYPE: SEL; ISOTYPES: US, MEXU, CAS).

DISTRIBUTION: *MEXICO*: CHIAPAS: known from type locality only.

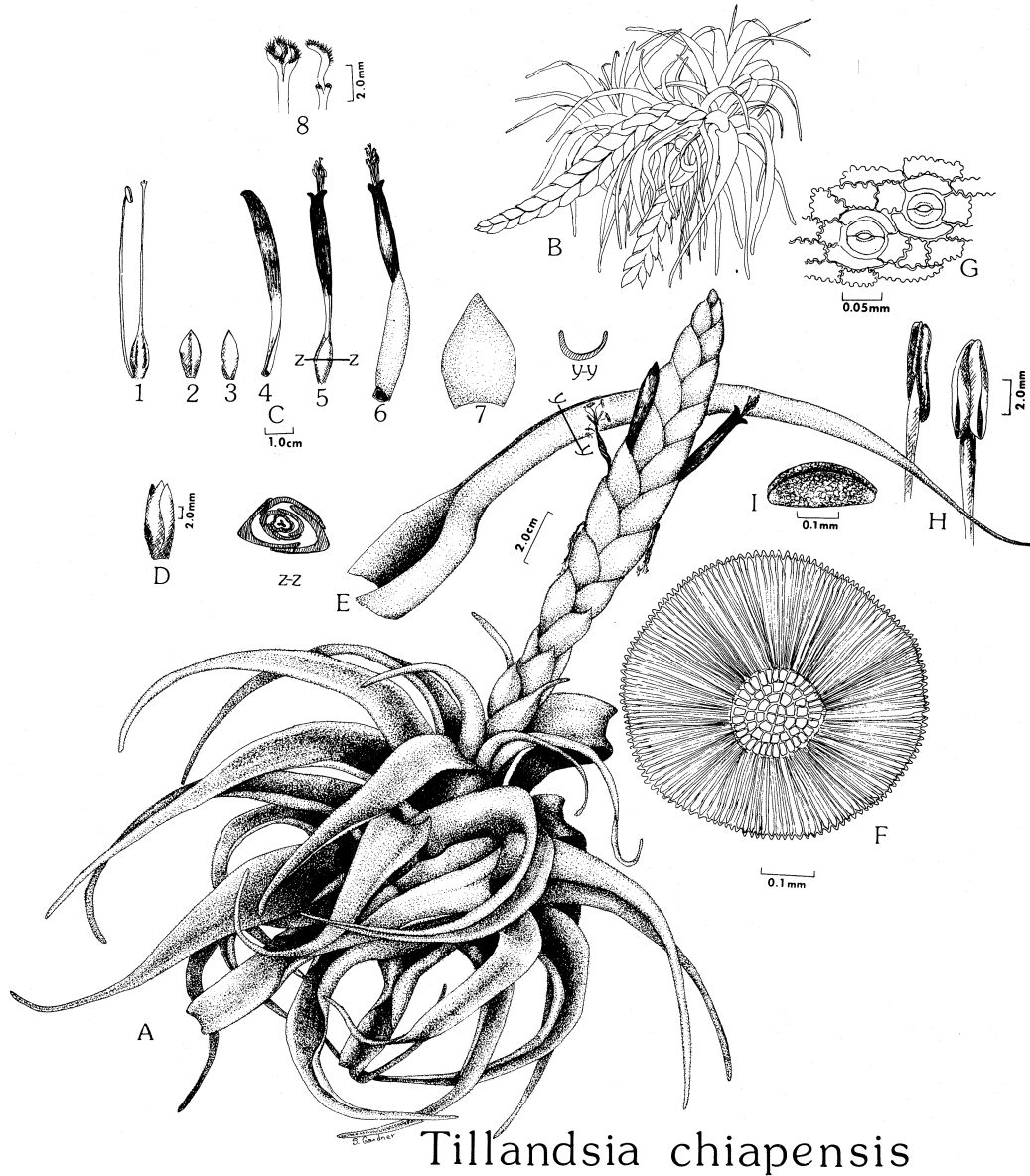
ECOLOGY: The type location for this species is in the region of Chiapas designated as the Central Depression (Breedlove, 1973). The region bordering the gorge is dry thorn woodland. Dense colonies of *T. chiapensis* occupy the upper portions of limestone canyon walls which rise approximately 350 meters above the river, and extend laterally for several miles (actual limits of the population have not been determined). The plants occur on both sides of the river and are fully exposed to solar radiation. The flowering season is October and November. Other bromeliads growing on the canyon walls include several species of *Hechtia*. The bromeliads occurring in the trees above the canyon and on the less steep portions of the canyon walls include *Tillandsia concolor*, *T. juncea*, *T. caput-medusae*, *T. fasciculata*, *T. schiedeana* and a species of *Billbergia*.

Live plants of the type collection have been introduced into cultivation, including some at the Marie Selby Botanical Gardens.

LITERATURE CITED

- Breedlove, D. E. 1973. Phytogeography and vegetation of Chiapas (Mexico) in A. Graham, Ed., *Vegetation and Vegetational History of Northern Latin America*. Elsevier Scientific Publishing Co., N.Y.

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## *Tillandsia chiapensis*

Figure 1: A, habit (flowering); B, habit (post flowering, showing clumping); C, inflorescence parts: 1, ovary, style and one stamen; 2, one of two anterior sepals; 3, posterior sepal; 4, petal; 5, complete flower; 6, flower with bract; 7, floral bract; 8, stigma, and stigma with 2 lobes cut away; D, calyx; E, leaf; F, foliar trichome; G, pair of stomata from abaxial surface of blade; H, anther; I, pollen grain.