

MONOGRAPH OF *HARRISIA* (CACTACEAE), PART 2, TABLES 1–2, FIGS. 1–19
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Table 1. Overview of taxonomy of *Harrisia*. cv = not known outside of cultivation

SUBGENUS	SECTION/SERIES	NO. OF SPECIES	INCLUDED SPECIES
<i>Harrisia</i>	series <i>Harrisia</i>	10	<i>H. aboriginum</i> , <i>H. brookii</i> , <i>H. caymanensis</i> , <i>H. divaricata</i> , <i>H. eriophora</i> , <i>H. fernowii</i> , <i>H. fragrans</i> , <i>H. gracilis</i> , <i>H. portoricensis</i> , <i>H. taetra</i>
	series <i>Earlei</i>	1	<i>H. earlei</i>
	sect. <i>Adscendentis</i>	1	<i>H. adscendens</i>
<i>Eriocereus</i>	sect. <i>Eriocereus</i>	6	<i>H. bonplandii</i> , <i>H. jusbertii</i> (cv.), <i>H. martinii</i> , <i>H. pomanensis</i> , <i>H. regelii</i> , <i>H. tortuosa</i>
	sect. <i>Roseocereus</i>	1	<i>H. tetracantha</i>

Table 2. Number of species recognized in *Harrisia* by various authors, using the current infrageneric taxonomy.

	Britton & Rose (1920)	Backeberg (1977)	Anderson (2001)	Hunt et al. (2006)	This study
Series <i>Harrisia</i>	9	12	13	2	10
Series <i>Earlei</i>	1	1	1	0	1
Sect. <i>Adscendentis</i>	1	1	1	1	1
Sect. <i>Eriocereus</i>	5	6	4	5	6
Sect. <i>Roseocereus</i>	0	1	1	1	1

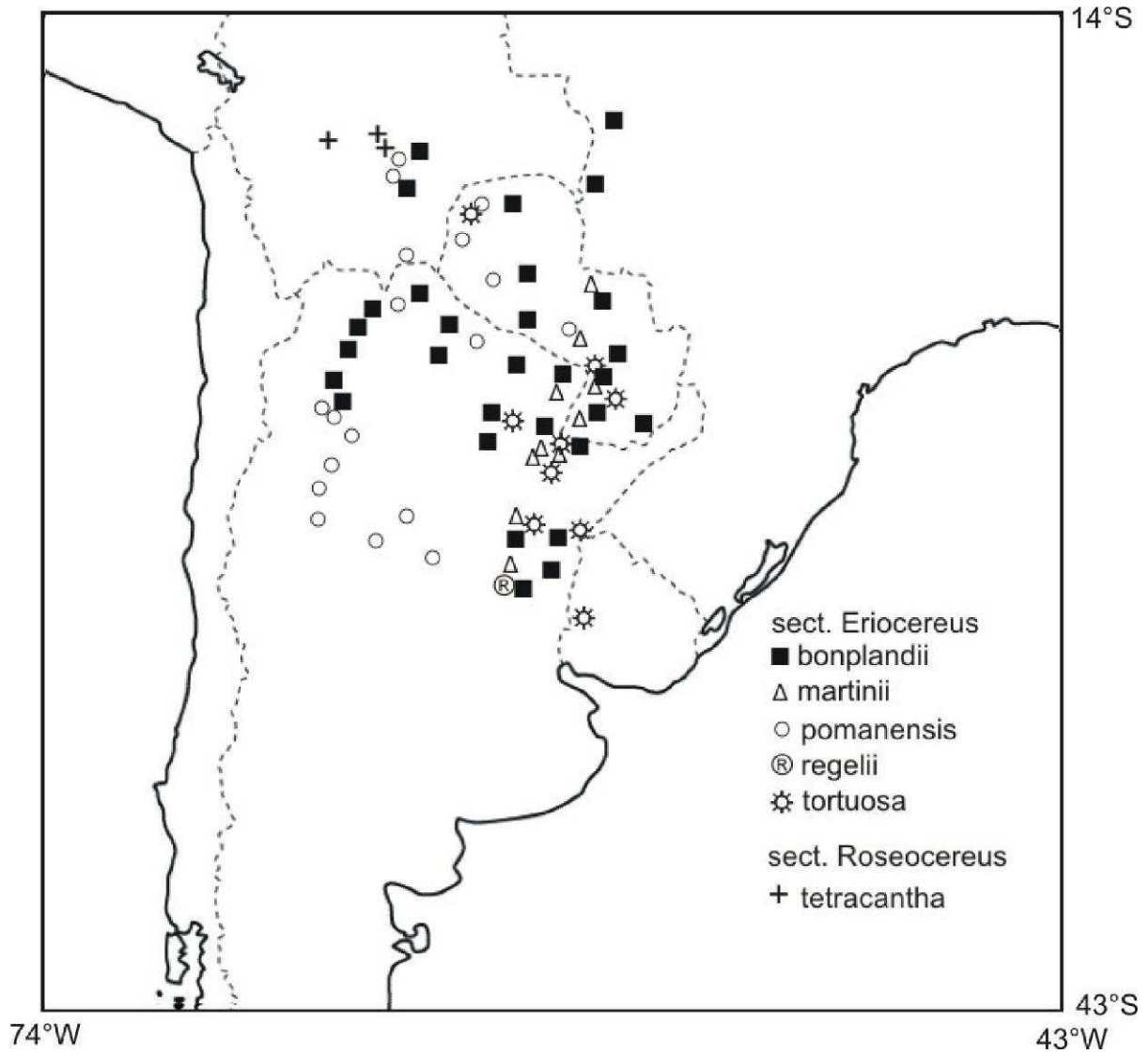


Figure 1. Map of distribution of *Harrisia* subg. *Eriocereus*. *Harrisia tetracantha* is stated to be present in Chuquisaca, Potosí, and Tarija Departments, Bolivia (Antezana & Navarro 2002) but no specimens were here examined. The distribution of *H. bonplandii* in Brazil is approximated from Egli (2002).

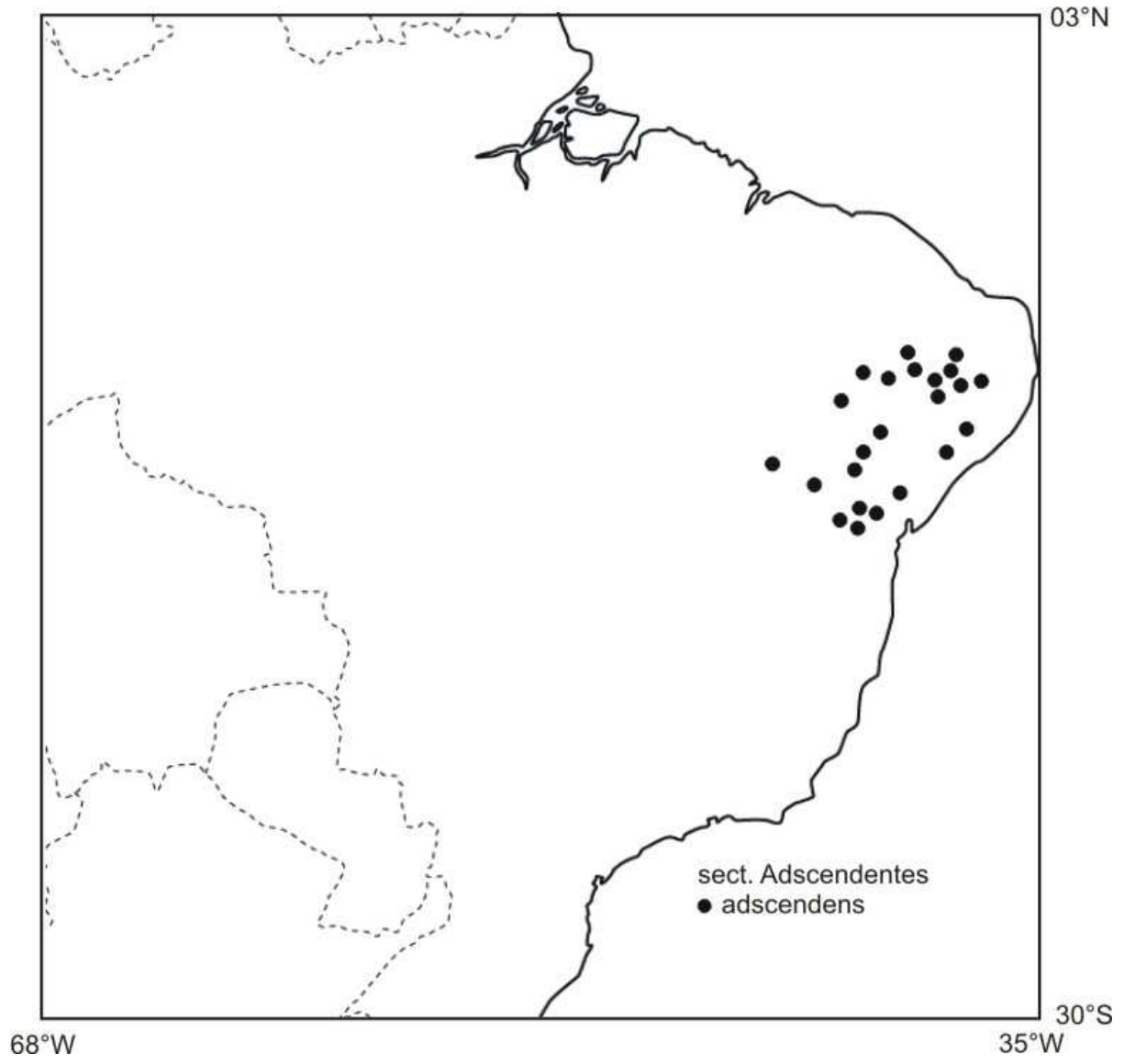


Figure 2. Map of distribution of *Harrisia adscendens*.

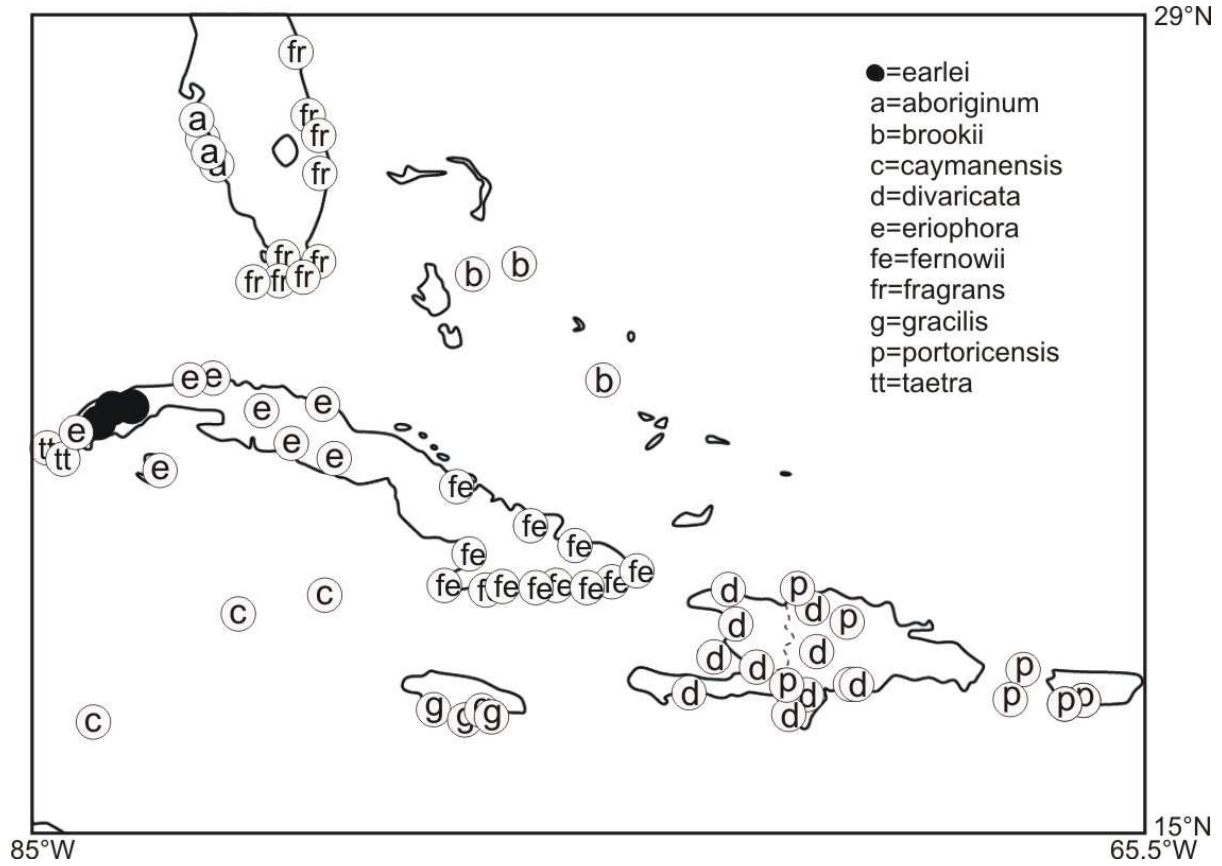


Figure 3. Map of distribution of *Harrisia* sect. *Harrisia*. Literature was also used for mapping *H. fernowii* (González Gutiérrez et al. 2006; Reyes & Acosta Cantillo 2007) and *H. divaricata* (Hilaire 2008). It is unclear if the “p” symbols denoting specimens morphologically similar to *H. portoricensis* in the Dominican Republic should be recognized as *H. divaricata* or *H. portoricensis*.

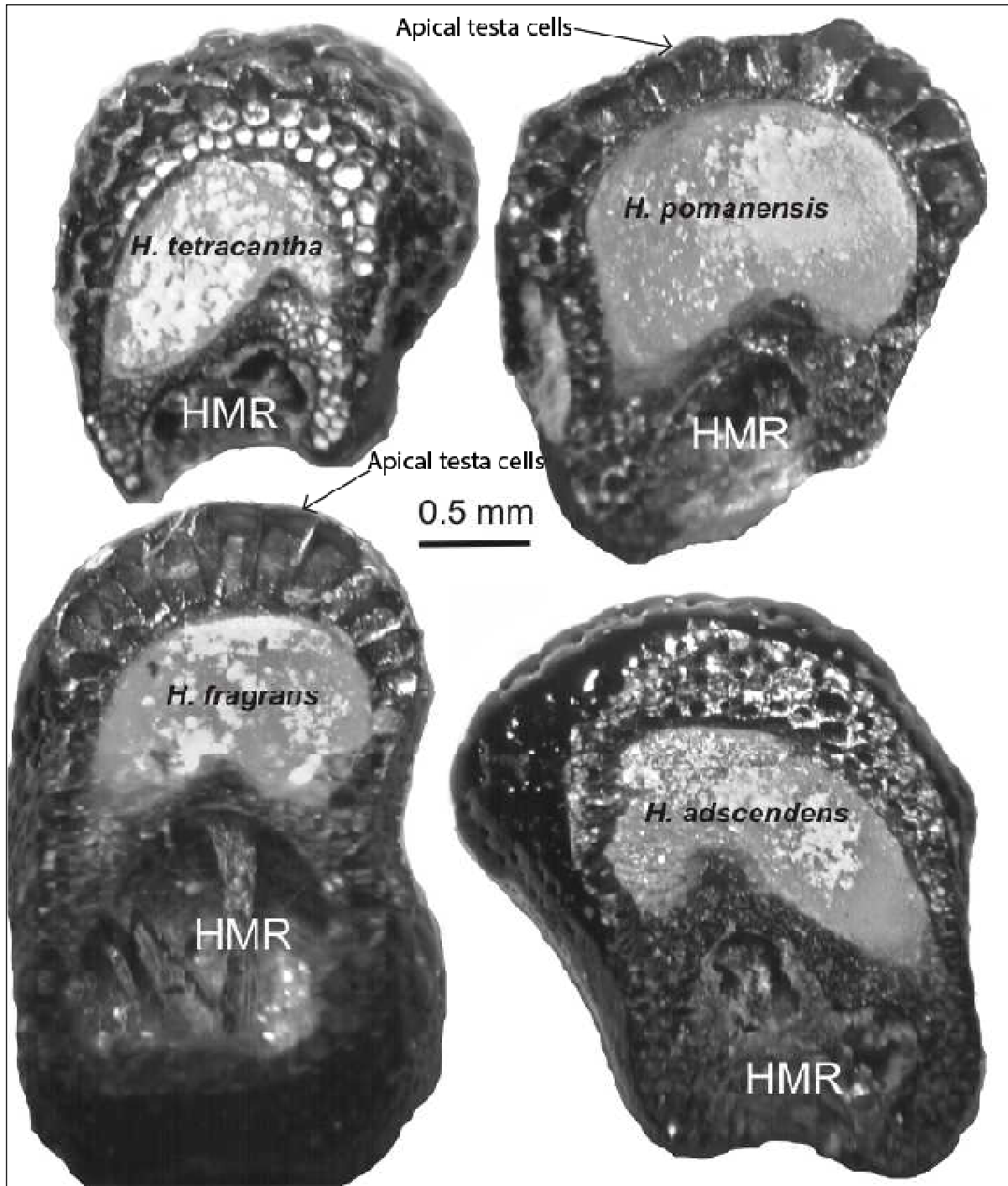


Figure 4. Longitudinal section of seeds of four species of *Harrisia*: *H. tetracantha* (Kamm s.n.), *H. pomanensis* (Leuenberger & Egli 4362), *H. fragrans* (Franck 472), and *H. adscendens* (Hofacker 403). The cavernous hilum-micropylar region (HMR) is indicated. The row of hollow apical testa cells is plainly visible in *H. fragrans* and *H. pomanensis*. The grayish white interior of the seed contains endosperm and the embryo. Seeds were secured with cyanoacrylate, remnants of which are seen in the basal HMR of the seed of *H. pomanensis*.

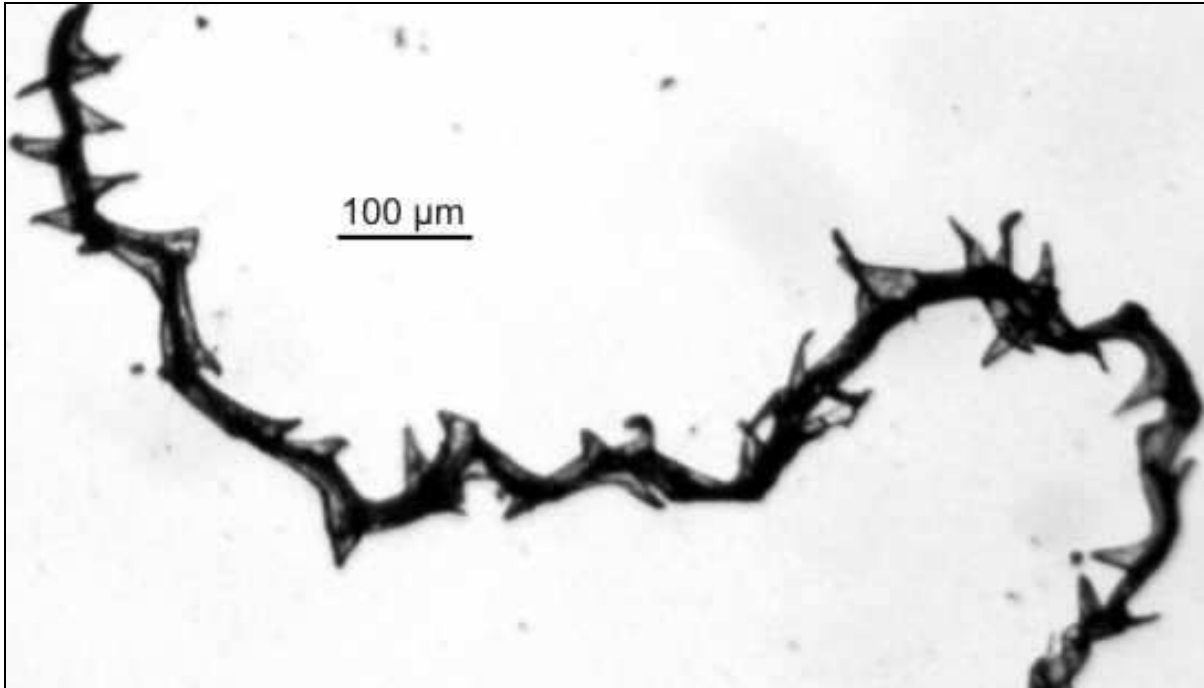


Figure 5. Light microscopy photo of scaly trichome from flower areole of *Harrisia regelii* (Franck s.n., 19 Jun 2008).

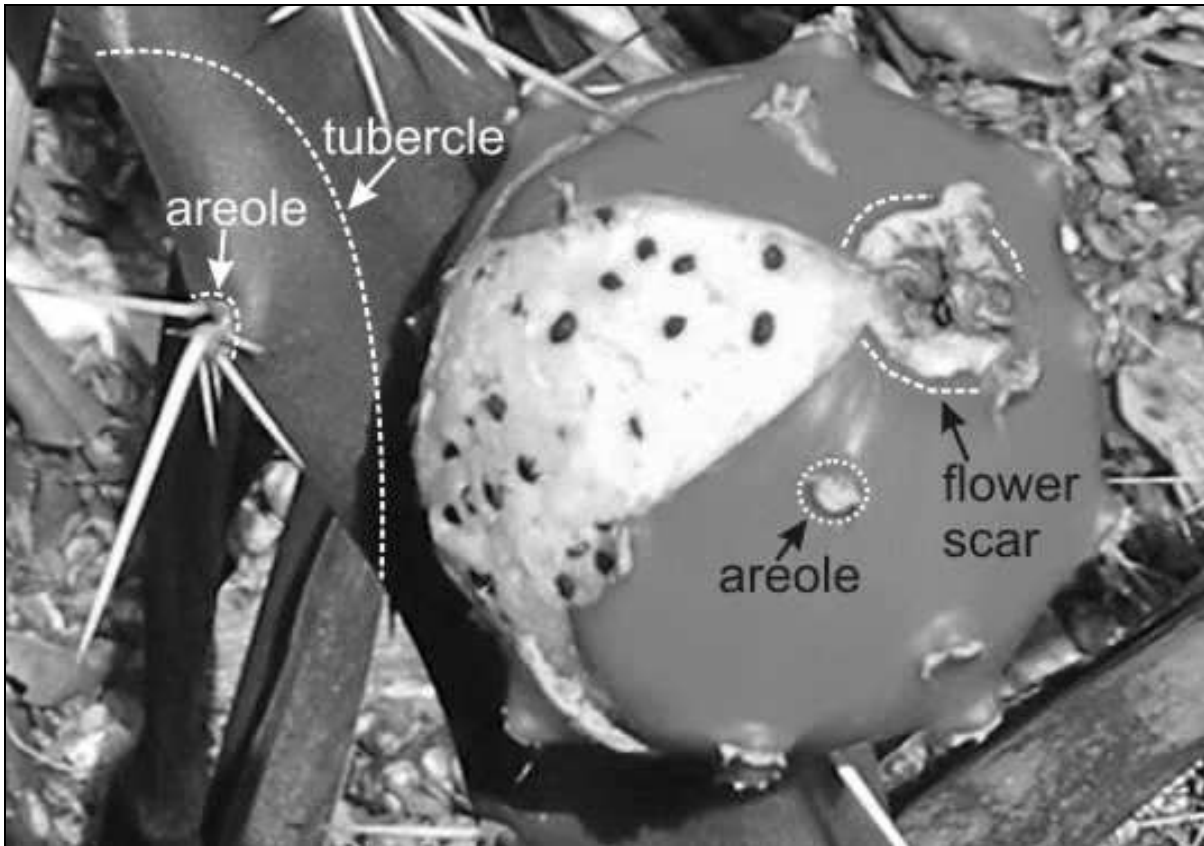


Figure 6. Photo of stem and splitting fruit of *Harrisia regelii* (Franck 2662), showing the areoles, flower scar, and stem tubercle. The fruit is ca. 4 cm in diameter.



Figure 7. Photo of immature fruit and stem of *Harrisia gracilis* (Franck 2265), showing the areole, scale, tubercles, scaly trichomes, and uniseriate trichomes. The immature fruit is ca. 4 cm in diameter.

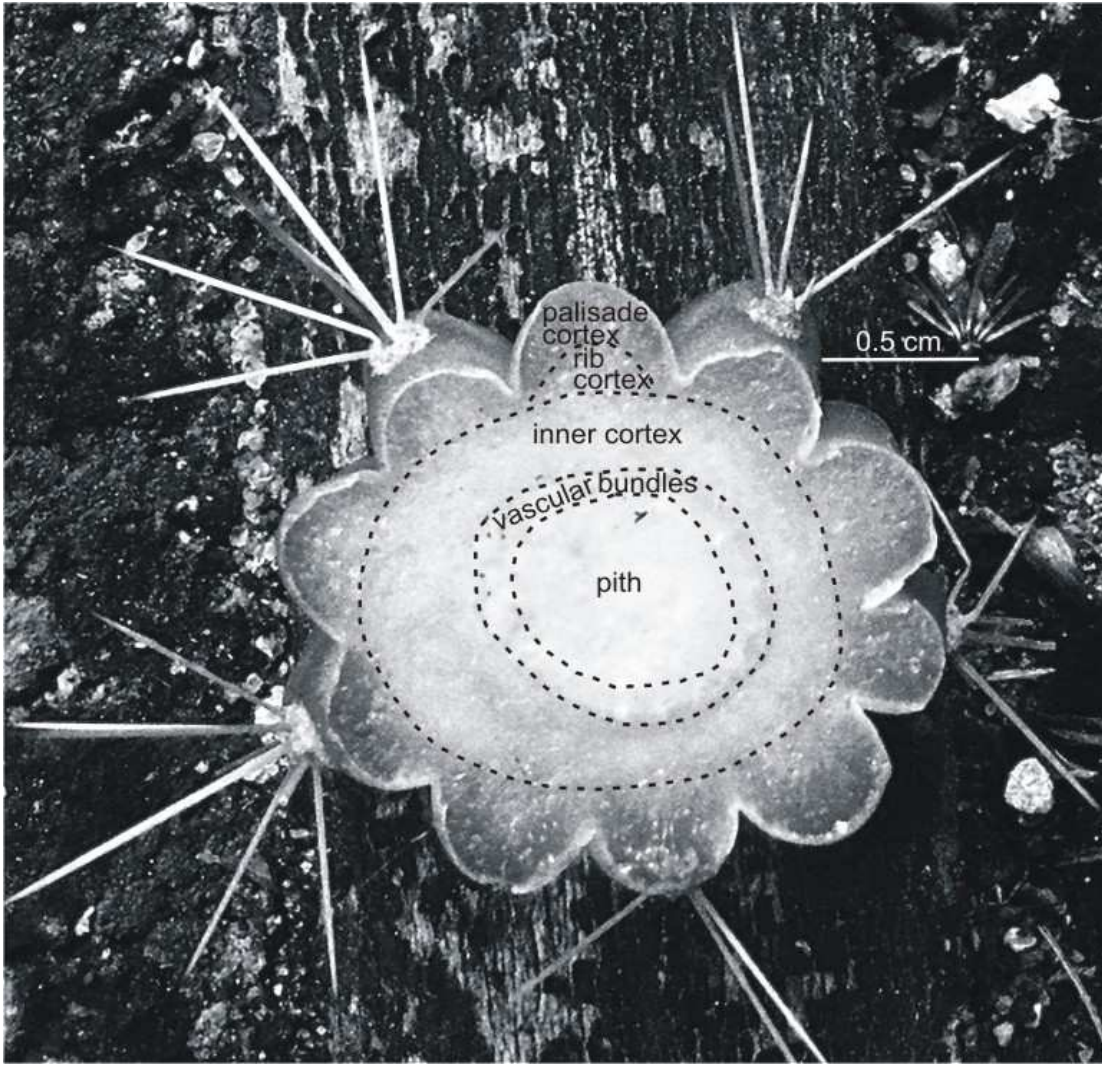


Figure 8. Cross-section of a 10-ribbed stem of *Harrisia divaricata* (Franck 3021), showing the palisade cortex, rib cortex, inner cortex, vascular bundles, and pith.

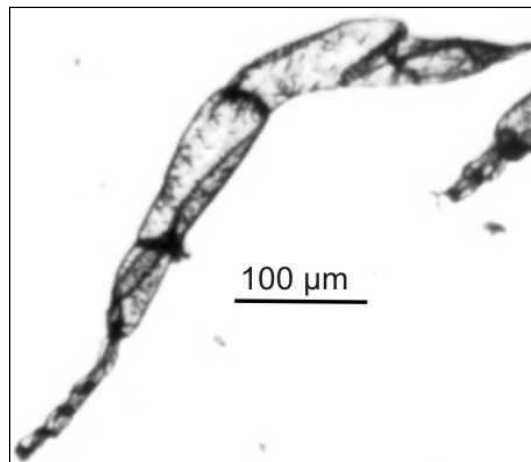


Figure 9. Light microscopy photo of uniseriate trichome from stem areole of *Harrisia adscendens* (Franck 2641).



Figure 10. Stem of *Harrisia* sect. *Harrisia*, showing the occasional presence of long, scaly trichomes on the areoles of young long-shoots.

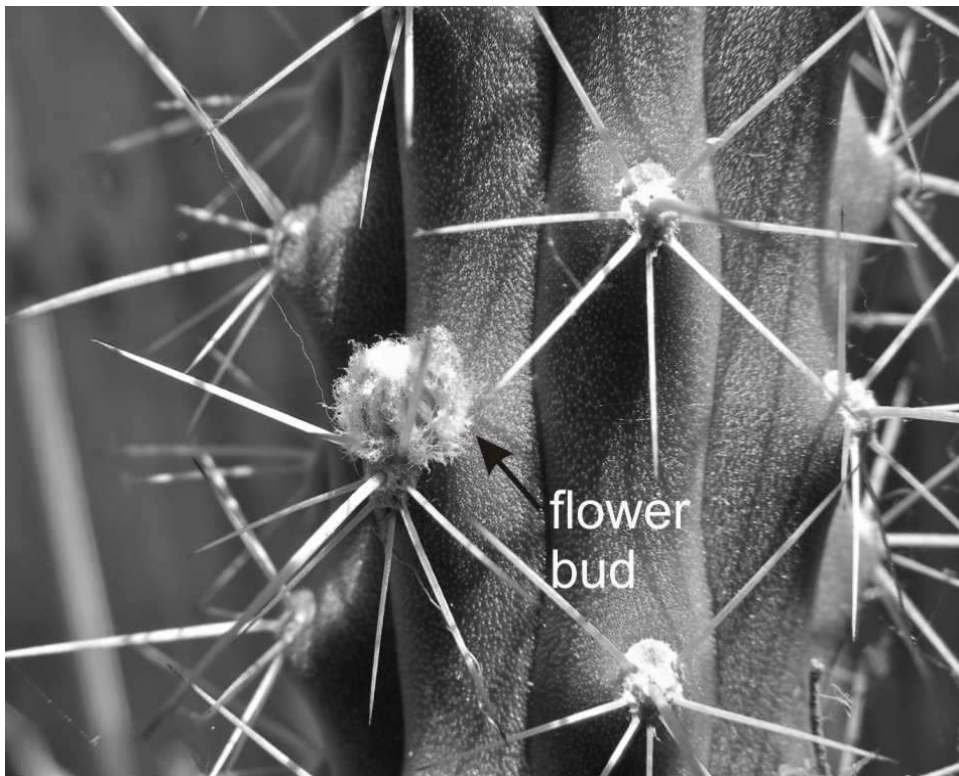


Figure 11. Photo of stem of *Harrisia fragrans* (Franck 472) showing the flower bud initiating from the adaxial portion of the areole. The diameter of the stem is ca. 3 cm.

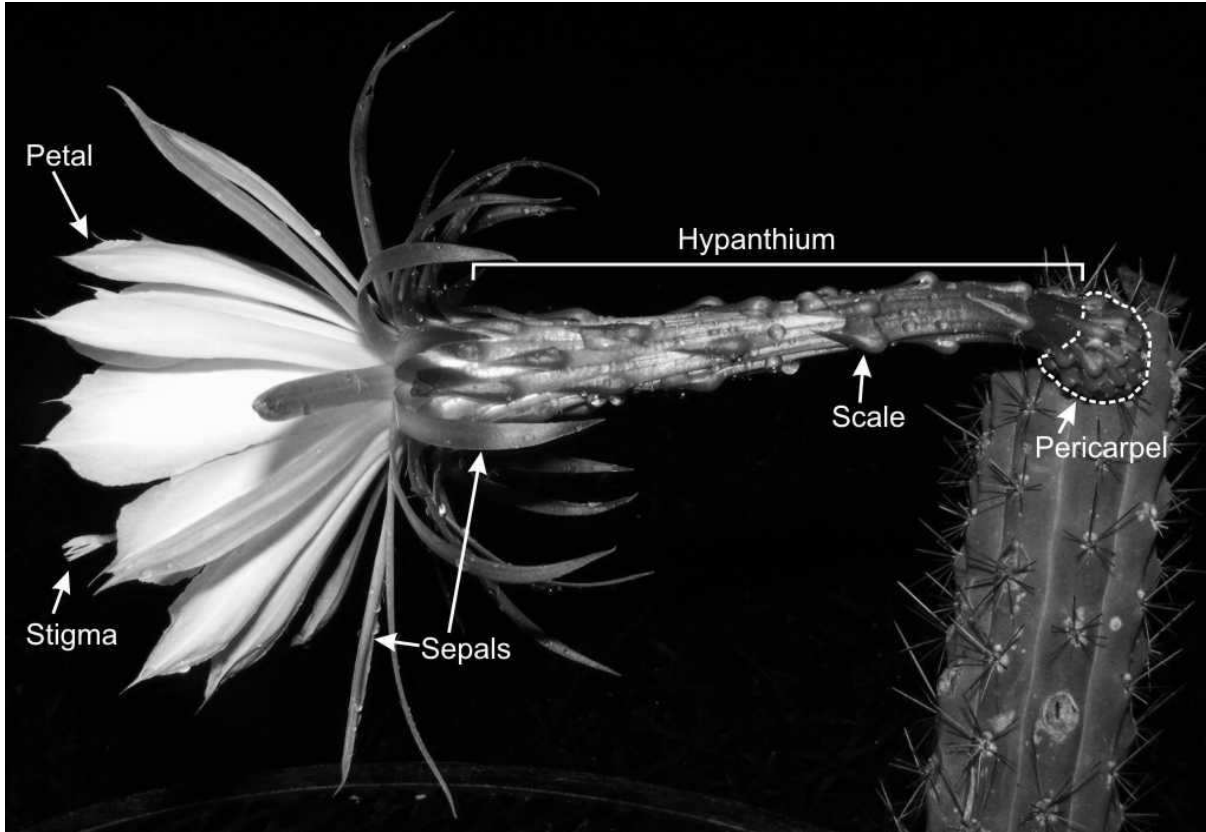


Figure 12. Photo of flower and stem of *Harrisia gracilis* (Franck 2661) showing the pericarpel, hypanthium, scales, sepals, petals, and exerted stigma. Water droplets are also visible on the hypanthium. The hypanthium is ca. 12 cm long.

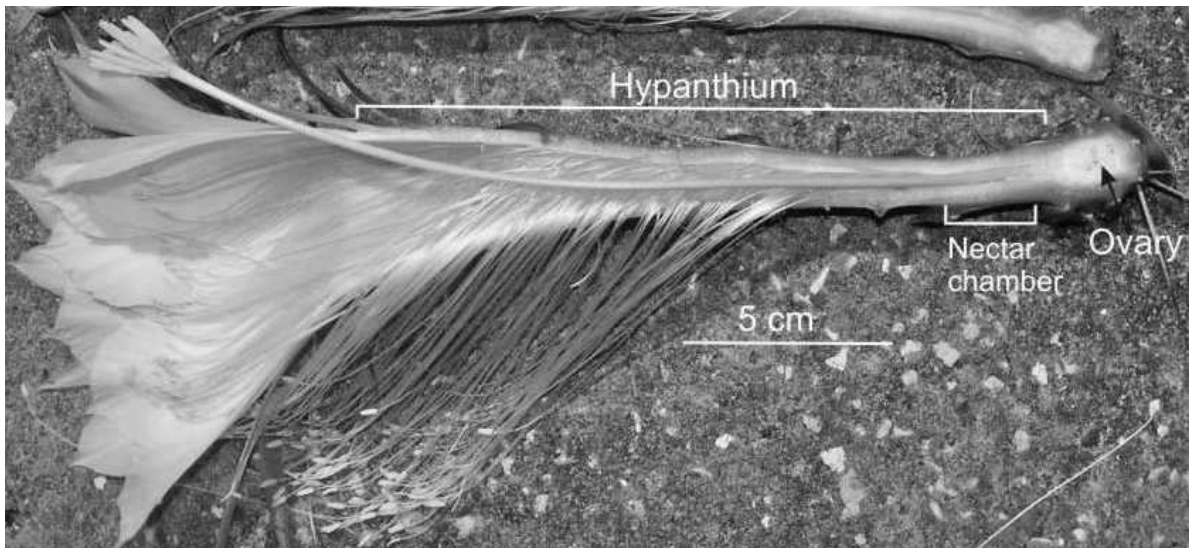


Figure 13. Photo of flower of *Harrisia regelii* (Franck 3022) showing the hypanthium, nectar chamber, and ovary. Each stamen of the dorsal stamen cluster arises independently from the inside of the hypanthium like the *Trichocereus*-type flower described by Schick (2011).

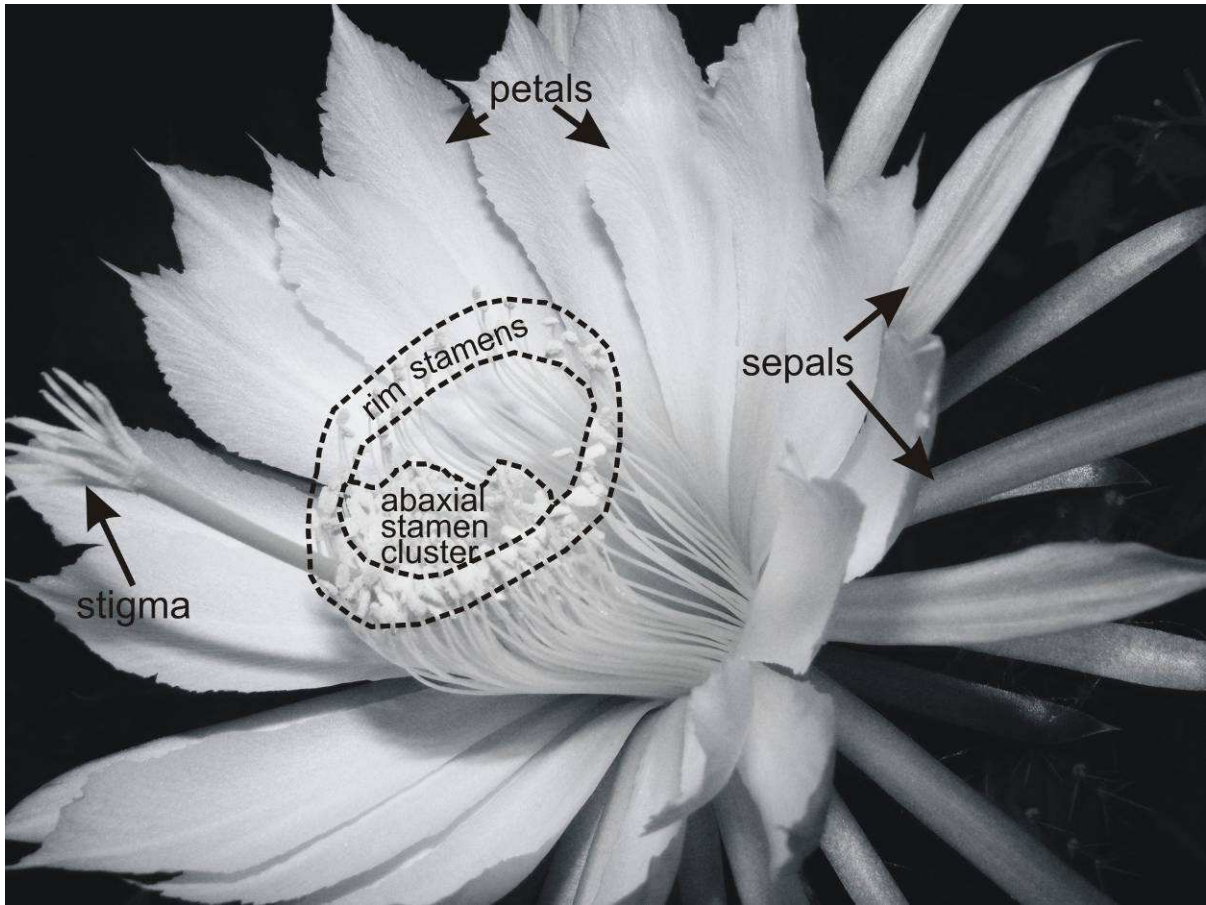


Figure 14. Photo of flower of *Harrisia fragrans* (Franck 1236) showing the abaxial stamen cluster, rim stamens, sepals, petals, and lobed stigma. The stigma lobes are ca. 8 mm long.

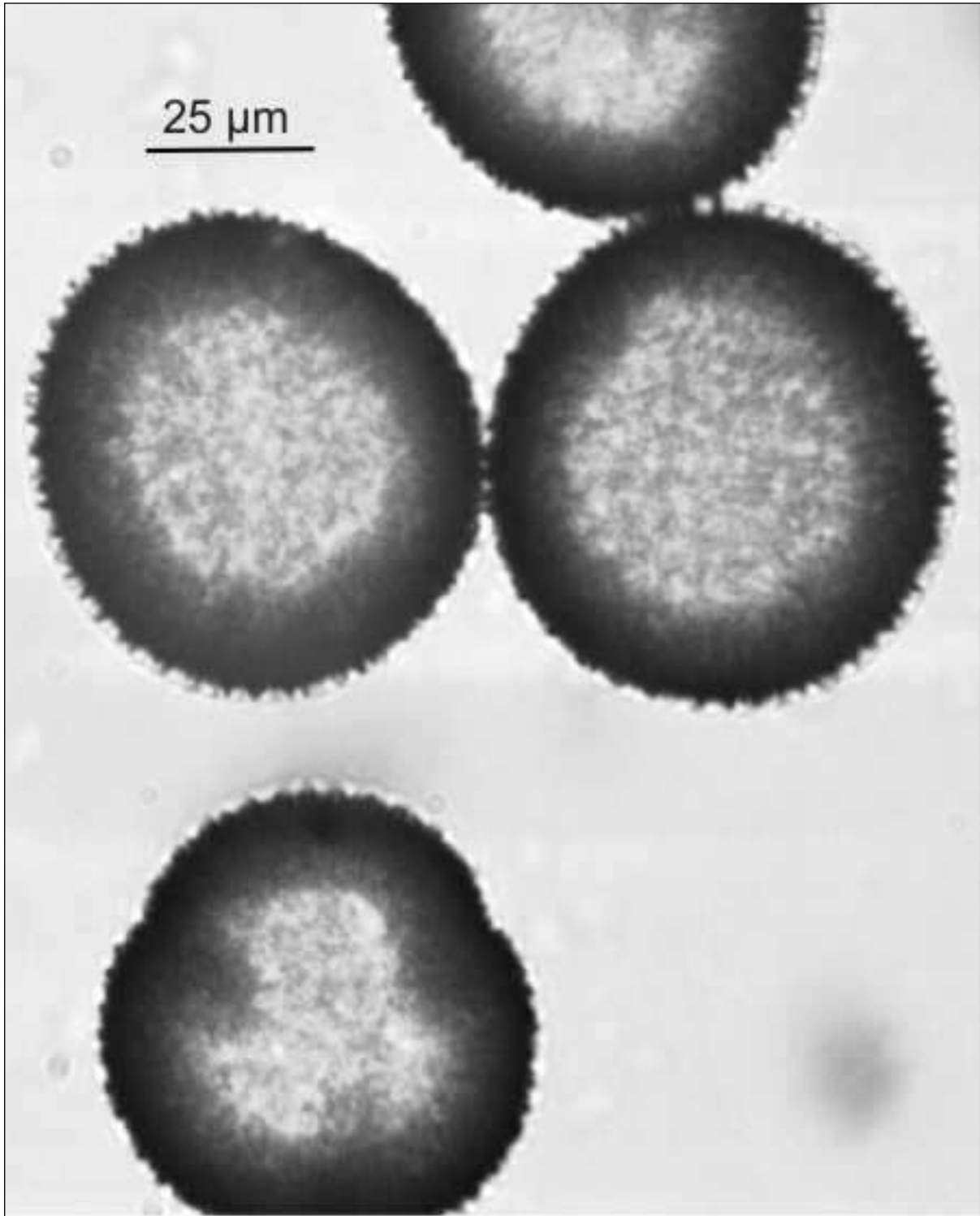


Figure 15. Light microscopy photo of unacetolyzed pollen of *Harrisia divaricata* (Franck 3021). Spinulae are evident at the outer circumference of the pollen.

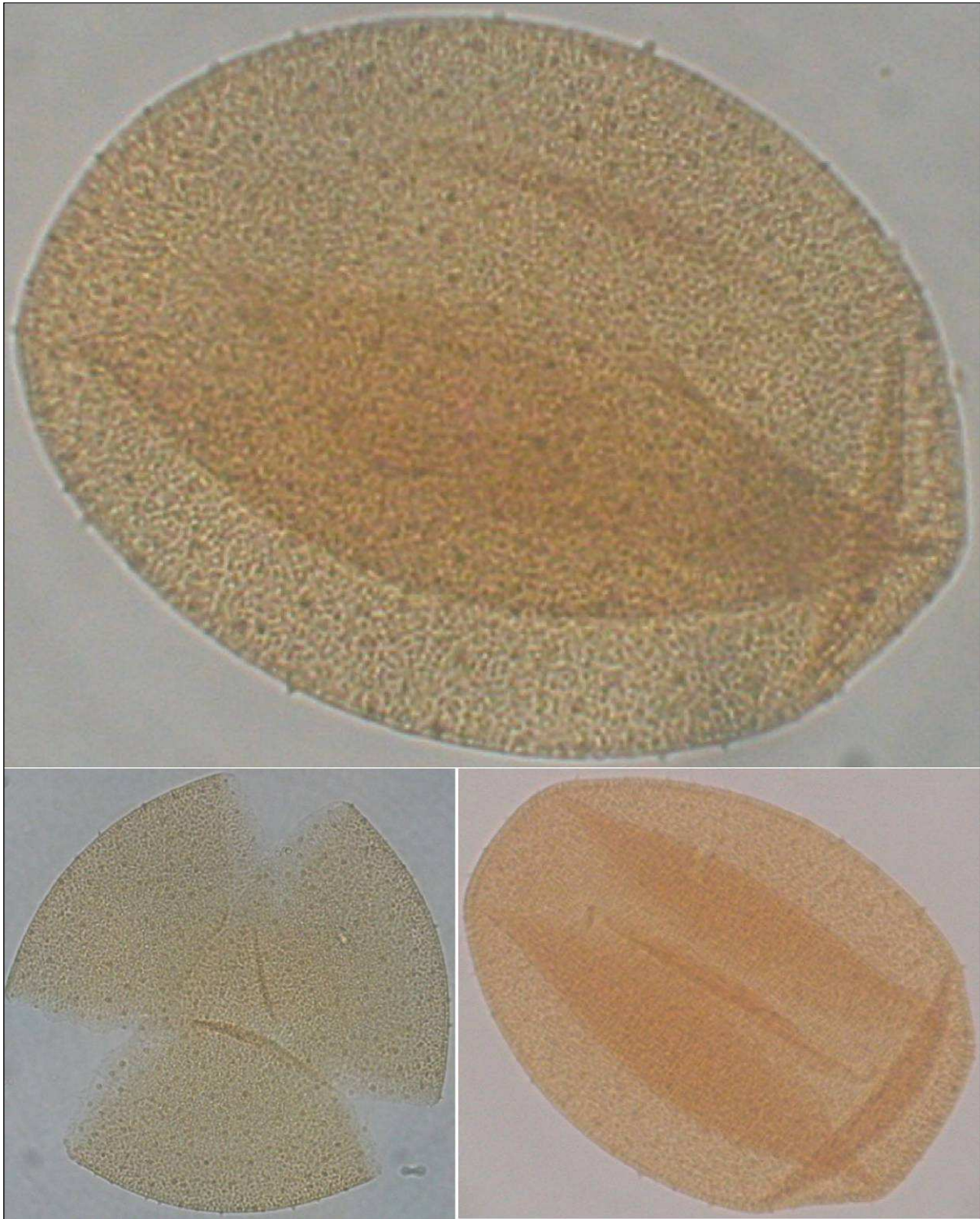


Figure 16. Light microscopy photo of acetolyzed pollen of *Harrisia fernowii* (unknown specimen as *H. taylorii*, probably from NY) from Bush & Weng (2007); top is equatorial view, bottom-left is polar view, and bottom right is aperture view.

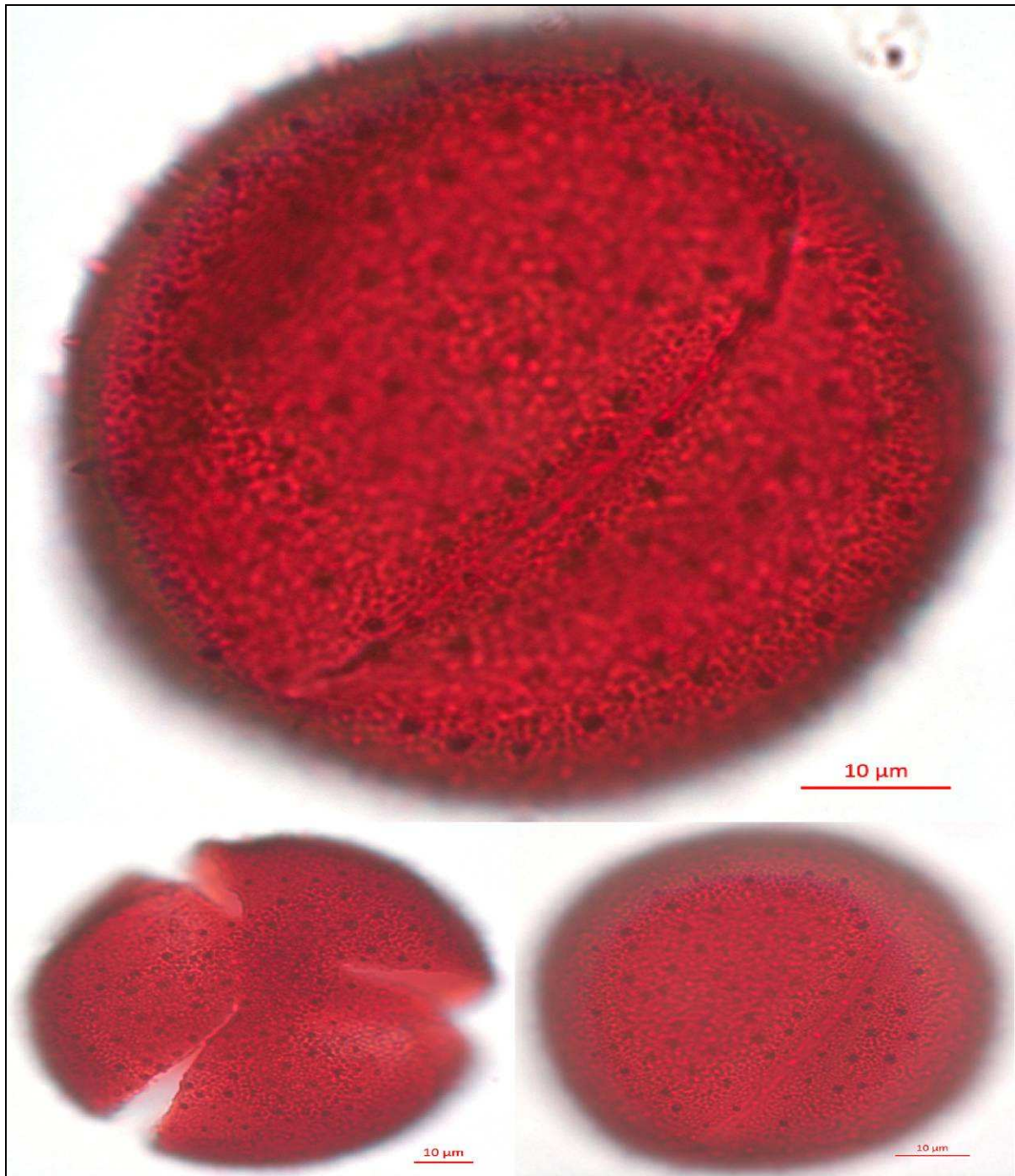


Figure 17. Light microscopy photo of acetolyzed pollen of *Harrisia martinii* stained with safranin-O from Zardini & Tillería 34496 (MO, acc. no. 5156682) from Bush & Weng (2007); top is equatorial view, bottom-left is polar view, and bottom right is aperture view.



Figure 18. Preparing *Harrisia gracilis* fruits for eating, Irish Town, Jamaica. In this instance, fresh limes were squeezed onto the fruit slices before eating.



Figure 19. A. Moth larva found feeding within immature fruit of *Harrisia fragrans* (Franck 1278 (USF)). B. Germinating seed of *H. fragrans* within an old fruit, cultivated in Sarasota Co., Florida.