NAME: Epithelantha micromeris (Engelm.) A. Weber ex Britt & Rose
COMMON NAME: Button cactus, pingpong ball cactus, ping-pong ball button-cactus, poke button cactus, Biznaga-blanca chilona [Spanish]
SYNONYMS: Mammillaria micromeris Engelm., Cactus micromeris Kuntze Revis, Echinocactus micromeris F.A.C. Weber
FAMILY: Cactaceae


TYPE LOCALITY: San Felipe Creek to the Pecos River, Texas

TAXONOMIC UNIQUENESS: This is the only species in the genus Epithelantha. There are 2 varieties: var. bokei occurs in Texas, while var. micromeris occurs in Arizona, New Mexico and Texas. When looking at the genus, “Although generally resembling Mammillaria and superficially similar to M. lasiacantha, chloroplast DNA evidence somewhat inconclusively indicates that Epithelantha is taxonomically isolated and more closely related to Pediocactus and Ariocarpus than to Mammillaria (C.A. Butterworth et al. 2002).” (FNA 1993+).

DESCRIPTION: Small, erect, ovoid, globular cactus, often clumping, and with a depressed center. Plants are 5-9 cm (2-3.5 in) tall and 5-7.5 cm (2-3 in) in diameter, not deep-seated in substrate; roots are diffuse (tuberlike). Unsegmented stems are green, mostly spheric, often flat-topped, but usually obscured by the white spines, giving it a fuzzy appearance. Tubercles are numerous, not confluent into ribs, hemispheric or short cylindric, very small, ca 1-3 mm; areoles at tips of tubercles, nearly circular, elliptic when distended by flower or fruit, copiously woolly only at sexually mature stem apex; areolar glands absent. The spines are furlike, white, 2 mm in size. The spines cover the entire plant from small areoles arranged in tight spirals around the plant. There are about 20-40 slender spines. Spines of each areole in 2 or sometimes three 3 superimposed series except for a dense adaxial tuft, grayish or purplish white, often with brown bases collectively forming brown spot at center of each spine cluster. The diurnal flowers are pale pink, funnelform, 15 mm long (FNA 1993+ reports flower measurement as 0.6-0.9 x 0.3-0.5 cm), and appear at the apex of the plant; the flowers are
usually obscured by the longer spines of the stem. The thin bright red fruit are 1.3 cm long and 4-5 mm in diameter. The small, glossy seeds are black, reticulated, 1.2-1.4 x 1 mm.

AIDS TO IDENTIFICATION: Spines of *Epithelantha micromeris* 20-35(-40) per areole, in 1-3 superimposed series except for adaxial tuft, grayish or purplish white; general aspect of stem relatively rough; flowers 0.6-0.9 x 0.3-0.5 cm, usually obscured by the longer spines of the stem. For *E. bokei*, spines (40-)50-90 per areole, in more than 3 superimposed series, uniformly white to creamy yellow; general aspect of stem appearing smooth and shiny; flowers 1-1.7 x 1-1.7 cm. (FNA 1993+).


TOTAL RANGE: Southeastern Arizona, New Mexico, Western Texas, and northern Chihuahua, Mexico.

RANGE WITHIN ARIZONA: Santa Cruz and Cochise counties in southeastern Arizona.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial succulent shrub/subshrub.

PHENOLOGY: The flowers appear in May-June.

BIOLOGY: These cacti are normally found in small clusters because the seeds fall nearby. Also wind, rain, and wildlife help with the dispersal of seeds. Its’ sun exposure is light shade to full sun. This cactus can withstand the cold down to 15º F (-10º C). It needs a moderate amount of water and a mixed soil that drains well. This cactus has a tap root.

HABITAT: The Button cactus can be found in desert grasslands, on hills and ridges in Chihuahuan Desert.

ELEVATION: 3,000 – 5,800 ft (1000-1769 m).

EXPOSURE: Collected on SW-facing slope.

SUBSTRATE: Limestone or sometimes igneous soils.
Epithelantha micromeris

PLANT COMMUNITY: Chihuahuan Desert. Associated species include: *Cercocarpus* (mountain-mahogany), *Choisya dumosa* (Mexican orange), *Dasylirion wheeleri* (spoonflower), *Glossopetalon spinescens* (spiny greasebush), *Juniperus* (juniper), *Rhus* (sumac), and *Yucca*.

POPULATION HISTORY AND TRENDS: Unknown

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: Salvage Restricted (ARS, ANPL 1999) [Salvage Restricted (ARS, ANPL 1993)]
OTHER STATUS: Determined Subject to Special Protection (Secretaria de Medio Ambiente 2000)

MANAGEMENT FACTORS: As with other cacti, subject to horticultural collecting.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: USFS - Coronado National Forest; State Land Department; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:
AGFD Plant Abstract

Epithelantha micromeris


MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:
This plant does not do well as a transplant due to its’ brittle roots. Also known as the false peyote and used by the Tarahumara as a narcotic because it has hallucinogenic alkaloids. The name comes from the Greek for “flower at the top of the nipple”, a reference to the fact that the flowers don’t originate between the nipple as in the genus Mammillaria.

The genus name Epithelantha, is from Greek epi, upon, thele, nipple, and anthos, flower, describing the flower position near the tubercle apex. (FNA 1993+).

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