A NEW SPECIES, A NEW COMBINATION, AND NEW SYNONYM Y FOR SOUTH AMERICAN JALTOMATA (SOLANACEAE)

THOMAS MIONE
Biological Sciences, Central Connecticut State University,
New Britain, CT 06050-4010
e-mail: MioneT@CCSU.edu

SEGUNDO LEIVA G.
Museo de Historia Natural, Universidad Antenor Orrego,
Avenida America Sur 3145, Trujillo, Peru

NEIL R. SMITH AND SCOTT J. HEVNER
Biological Sciences, Central Connecticut State University,
New Britain, CT 06050-4010

ABSTRACT. Jaltomata hunzikeri, a rare shrub of the coast of the department of Lima, Peru, is described and shown in a photograph. Hebecladus sinuosus, transferred as J. sinuosa, is a shrub that is widely distributed in the Andes. Saracha lobata and S. sordideviolacea are placed in synonymy with J. dentata.

Key Words: edible fruit, Hebecladus, Jaltomata, Saracha, Solanaceae

In the process of taxonomic revision of the genus Jaltomata we have found it necessary to describe a new species, make a new combination, and place two binomials in synonymy with another.

Jaltomata hunzikeri Mione, sp. nov. Type: PERU. Dept. Lima:
Prov. Barranca, 5 km north of Barranca, lomas of Pativilca,
300 m, sandy hillside, 18 Sep 1938, Stork, Horton, and Vargas C. 9228 (HOLOTYPE: GH; ISOTYPE: G, K, MO). Figure 1.

Planta fruticosa ad 1 m altitudine; axes juvenes, petioli, pedunculi, pedicelli, facies abaxialis calycis villosa, pilis uniseriabilis, non ramosis, erectis, apice glandiferentibus; inflorescentia floribus 10 ut maximum; corolla breviter tubulosa, limbo 16–17 mm diametro, quinque lobis triangularibus, alba, annulo azureo prope extremum tubi; stamina 4.8–7 mm longitudine, filamenta villosa secus proximales 45–60 partes per centum longitudinis; stylus 6.0–7.7 mm longitudine.

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Figure 1. *Jaltomata hunzikeri* Mione, in flower, Stork, Horton, and Vargas 9228, (HOLOTYPE: GH). Photo by S. J. H.
Shrub to 1 m high. Young axes, petioles, peduncles, pedicels, and abaxial face of calyx villous, the hairs uniseriate, unbranched (finger-type), erect and gland-tipped. Young axes with raised longitudinal ridges (an artifact of drying?). Older axes to 1.5 cm in diameter, terete and glabrate. Leaves alternate, often geminate, the blades ovate, to 8 × 5.5 cm, with 3–4 pairs of primary veins, the apex acute, the base somewhat truncate and often oblique, the younger blades densely pubescent, the older sparsely pubescent, the margin dentate or erose-dentate or repand and ciliate with gland-tipped hairs 0.12–0.42 mm long; petioles to 3 cm long. Inflorescences axillary or sometimes arising from branch dichotomies, umbellate, to 10-flowered including buds. Peduncle 4–9 mm long; pedicel 8.6–11.3 mm long. Calyx green at anthesis, stellate, the lobes triangular and 4.0–5.9 mm from pedicel to tip, 1.9–3.2 mm from pedicel to sinus, the margin ciliate with finger hairs 0.3–0.6 mm long, abaxially with both finger hairs 0.3–0.8 mm long and glands 55–70 μm long having multicellular heads and unicellular stalks (illustrated in Mione and Serazo 1999); calyx 10 mm in diameter with fruit (mature?). Corolla short-tubular (the tube not evident after pressing, but mentioned by collectors on label), the limb crateriform or broadly infundibular or rotate, 16–17 mm in diameter, white with blue ring near end of tube, with 5 triangular lobes, 6.2–11.0 mm from flower center to tip of corolla lobe, 4.0–7.3 mm from center to sinus, the margin ciliate with finger hairs 0.1–0.5 mm long. Stamens 4.8–7.0 mm long, the filaments villous on proximal 45–60% of the length, the finger hairs 1.0–1.5 mm long; anthers 1.3–1.5 × 0.7–0.9 mm, some basally sagittate. Pollen grains (stained 30 minutes in “cotton blue”) 26.25–31.25 μm in diameter (average 28.5 μm, n = 24). Style and ovary glabrous. Style 6.0–7.7 mm long, 0.1–0.2 mm wide at midlength; stigma capitate, not bilobed, 0.24–0.6 mm wide perpendicular to style, exserted 0–1 mm beyond dehisced anthers. Berry (mature?) 5 mm across, and very likely subspherical and orange or red at maturity.

**PARATYPE:** Peru. Dept. LIMA: Prov. Barranca, 5 km north of Barranca, talus slope of hill rising abruptly from low, narrow, coastal plain, 80 m, 5 Sep 1938, Morrison and Beetle 9099 (GH).

The specimens (the type and paratype) of this species were treated as *Saracha villosa* (Zuccagni) G. Don by Macbride (1962). We do not agree, based on study of: 1) photos of the type
of *S. villosa* (G-DC, F neg. 6880, NV), 2) description of the hairs of the type of *S. villosa* (provided by G), and 3) the translation to English (by N. R. S.) of the Latin description within the protologue of *Atropa villosa* Zuccagni, basionym of *S. villosa*.

*Jaltomata hunzikeri* is similar to *J. cajacayensis* S. Leiva & Mione and *J. propinqua* (Miers) Mione & M. Nee, of the departments of Ancash and Lima, Peru, respectively; all three shrubs bear gland-tipped hairs and have a short-tubular corolla with a much broader limb. *Jaltomata hunzikeri* lacks corolla lobules, the stigma is at approximately the same height as the dehisced anthers, and grows at 80–300 m in the fog-dependent, coastal lomas habitat. The other two species have corolla lobules alternating with the larger lobes, have stigmas exerted several mm beyond the anthers, and grow above 1,800 m (Mione et al. 2000).

The specific epithet was chosen to honor Armando T. Hunziker, eminent Solanaceae taxonomist.

**Jaltomata sinuosa** (Miers) Mione, *comb. nov.*


*Jaltomata sinuosa* is superficially similar to *J. sanctae-martae* (Bitter) Benítez of Colombia and Venezuela. Both species are shrubs, are villous with gland-tipped finger hairs, and bear rotate corollas. *Jaltomata sinuosa* has 3–5 flowers per inflorescence,
flowers 2.5–3.8 cm in diameter, and orange berries while *J. sanctae-martae* has up to 10 flowers per inflorescence, flowers to 1.8 cm in diameter, and according to Benítez de Rojas (1980), red berries.

**DISTRIBUTION, HABITAT, USES, LOCAL NAMES.** *Jaltomata sinuosa* occurs in disturbed habitats in the Andes from western Venezuela to Bolivia. The fruits are eaten (*Dillon et al. 6193; Leiva et al. 2042; Mione et al. 672*) and the local names include “tomatillo” (*Hawkes and García-Barriga 100*) and “uvilla de monte” (*Mione and McQueen 468, 469*).

**REPRESENTATIVE SPECIMENS:** **Venezuela.** MÉRIDA: Vicinity of El Royal, near La Toma, 2440 m, 4 Nov 1978, *Luteyn et al. 6181* (MO, NY).


**Cuzco.** Acomayo, 2900 m, Feb 1937, *Vargas 201* (F, GH, MO); Machu Picchu, 2134 m, 2 Feb 1938, *Stafford 1224* (K). APURÍMAC: Grau, Manchahuara, Orpeza Valley, 3000 m, 23 Jan 1939 *Vargas 9798* (G, K).
Bolivia. LA PAZ: Prov. Bautista Saavedra, Charazani, 20 kms hacia Apolo, 2400 m, 5 Aug 1985, Beck 11396 (NY); Prov. Larecaja, Sorata, Challapampa, ea. 2600 m, Jul–Aug 1863, Mandon 429 (G two sheets).

The type specimens of Saracha lobata Bitter and S. sordideviolacea Bitter were both collected in Peru, department of Lima, province of Huarochirí, near Matucana. Both types were destroyed in Berlin; only photos are available for study. It was evident that these species belong to the genus Jaltomata, but given only photos of the types we were not able to decide whether these should be placed in synonymy with Jaltomata species, or transferred to Jaltomata. To solve this problem T. M., S. L. G., and L. Yacher visited Matucana in 1998 and collected specimens that match the photos. In the same region, at the type locality of J. dentata (R. & P.) Benítez, we collected conspecific specimens we identified as J. dentata. We conclude that S. lobata and S. sordideviolacea are synonyms of J. dentata.


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LITERATURE CITED


