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*Novon*, Vol. 9, No. 3. (Autumn, 1999), pp. 375-376.

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*Novon* is currently published by Missouri Botanical Garden Press.

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# A New Name for a Common Ecuadorian and Peruvian Wild Tomato Species

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**ABSTRACT.** The new name *Solanum habrochaites* S. Knapp & D. M. Spooner is coined to replace the homonym *Solanum agrimoniifolium* (Dunal) J. F. Macbride, which has been used for the wild tomato species known in *Lycopersicon* as *Lycopersicon hirsutum* Dunal.

While preparing the Solanaceae for the *Catalogue of the Vascular Plants of Ecuador* (Jørgensen & León-Yáñez, 1999), we discovered that a new name was necessary for the common wild tomato species previously known as *Lycopersicon hirsutum*. We accept species of tomatoes in the genus *Solanum* following molecular and morphological studies of Child (1990), Spooner et al. (1993), Bohs and Olmstead (1997), and Olmstead and Palmer (1997). Spooner et al. (1993) provided a compilation of names and combinations in *Solanum* for all nine taxa of tomatoes recognized by Rick et al. (1990). The epithet *hirsutum* is not available for this taxon in *Solanum*, as it is occupied by *Solanum hirsutum* Dunal (1816), and the pre-existing combination used by Spooner et al. (1993), *Solanum agrimoniifolium* (Dunal) J. F. Macbride, for *L. hirsutum* is a later homonym of an epithet already published in *Solanum*. A new epithet in *Solanum* is therefore necessary for this taxon.

***Solanum habrochaites*** S. Knapp & D. M. Spooner, nom. nov. Replaced name: *Lycopersicon hirsutum* Dunal, *Solanorum synopsis* 4. 1816, non *L. hirsutum* Dunal, in DC., *Prodromus* 13(1): 24. 1852. TYPE: Ecuador. Loja: "Hab. in agris Peruvianis prope Loxa," *Humboldt & Bonpland s.n.* (holotype, P). Locality for type collection fide Kunth (Humboldt et al., 1818), "Crescit prope Loxa Novo-Granatensium, alt. 1060 hex."

*Solanum agrimoniifolium* (Dunal) J. F. Macbride, Field

Mus. Nat. Hist., Bot. Ser. 13: 159. 1962. Hom. illeg., non Rydberg, Bull. Torr. Bot. Club 51: 154. 1924. *Lycopersicon agrimoniifolium* Dunal, in DC., *Prodromus* 13(1): 24. 1852; "*agrimoniaefolium*." TYPE: Peru. Sin. loc., *Pavón s.n.* (holotype, G not seen).

Both Dunal's and Rydberg's spellings of the epithet *agrimoniifolium* are errors to be corrected under Article 60.8 of the *Code* (Greuter et al., 1994). The new specific epithet is derived from the Greek, *habro* = soft, delicate, and *chaites* = haired, thus retaining as closely as possible Dunal's original intention.

Dunal (1816) stated that he saw the specimen he named *Lycopersicon hirsutum* in the Humboldt and Bonpland herbarium ("v.s.h. H et B."), but a specimen of this taxon could not be found in P-Bonpl. Kunth (Humboldt et al., 1818) did not see specimens of this taxon while writing his account of Humboldt and Bonpland's plants, "Specimina hujus et praecedentis speciei haud vidi." No specimen identifiable as this taxon and collected by Humboldt and Bonpland is present in the Willdenow herbarium (microfiche edition IDC). Dunal had intended to publish an illustrated edition of his *Solanorum synopsis* (1816), and to that end had a series of drawings of the taxa described therein prepared by the artist Node-Veran, to which he referred in *Solanorum synopsis* (Dunal, 1816). These drawings are held in the collections at Montpellier (MPU), and in the set is a plate of *Lycopersicon hirsutum* (Fig. 1B). A specimen in the general herbarium at P collected by Humboldt and Bonpland and annotated by Dunal that is a perfect match for this drawing is clearly the holotype for this name (Fig. 1). On the specimen are pinned several labels with different descriptions, one of them (far left lower corner) is that of Kunth (Humboldt et al., 1818). On the label in the upper left is written "Solanum dentatum" and a draft description in Dunal's hand. The description, however, does not

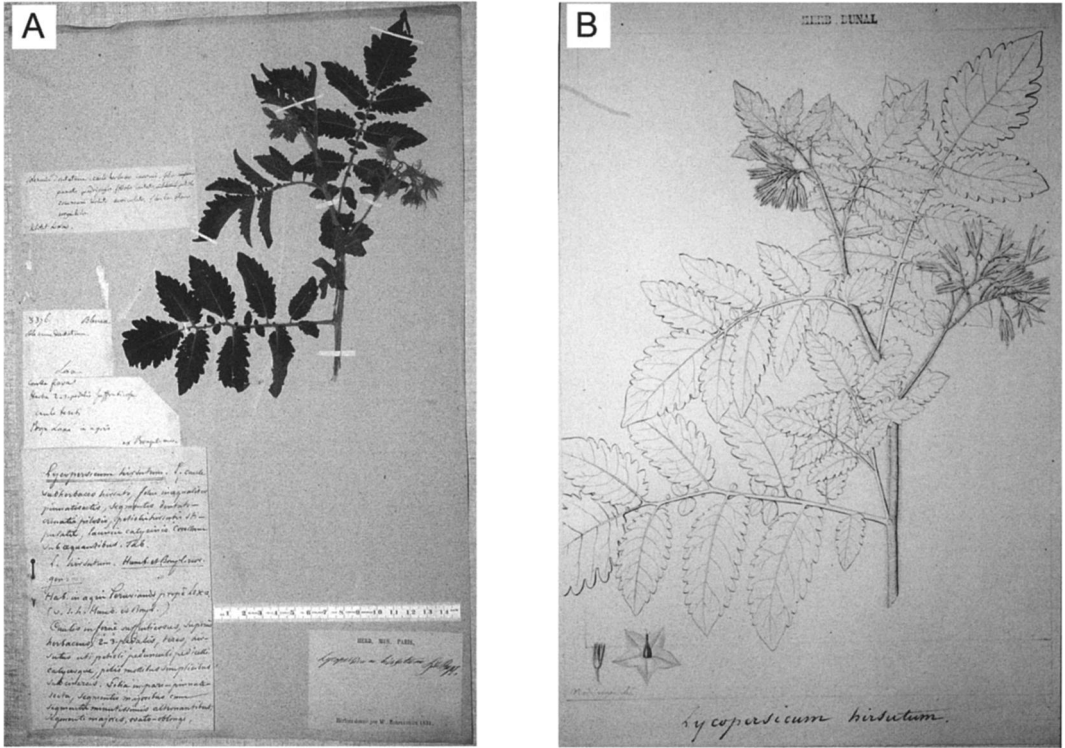


Figure 1. —A. Holotype specimen of *Solanum habrochaites* S. Knapp & D. M. Spooner (*Lycopersicon hirsutum* Dunal) at P. —B. Original drawing of *Lycopersicon hirsutum* Dunal by Node-Veran for Dunal, Solanaceae n° 83 (copyright Université Montpellier II, reproduced with permission: National collections of the herbarium of the Institut de Botanique (MPU)).

match that of *L. hirsutum* in *Solanorum synopsis*, nor does it match that of *L. dentatum* Dunal, also described in the same work (a synonym of *S. peruvianum* L.). To preserve nomenclatural stability, we prefer to coin a new name rather than use an epithet that perhaps was not intended by Dunal for this particular plant.

**Acknowledgments.** We thank R. K. Brummit of the Royal Botanical Gardens, Kew, for valuable advice and a thorough and careful review, and J. Mathéz of the Institut de Botanique, Montpellier, for permission to reproduce the unpublished Node-Veran drawing.

#### Literature Cited

- Bohs, L. & R. G. Olmstead. 1997. Phylogenetic relationships in *Solanum* (Solanaceae) based on *ndhF* sequences. *Syst. Bot.* 22: 5–17.
- Child, A. 1990. A synopsis of *Solanum* subgenus *Potatoe* (G. Don) (D'Arcy) (*Tuberarium* (Dun.) Bitter (s.l.)). *Feddes Repert.* 101: 209–235.
- Dunal, M.-F. 1816. *Solanorum synopsis*. Montpellier.
- Greuter, W., F. R. Barrie, H. M. Burdet, W. G. Chaloner, V. Demoulin, D. L. Hawksworth, P. M. Jørgensen, D. H. Nicolson, P. C. Silva, P. Treharne & J. McNeill. 1994. International Code of Botanical Nomenclature (Tokyo Code). *Regnum Veg.* 131.
- Humboldt, F. H. A. von, A. Bonpland & C. S. Kunth. 1818. *Solanaceae*. *Nov. gen. sp.* 3: 1–64.
- Jørgensen, P. M. & S. León-Yáñez (Editors). 1999. Catalogue of the Vascular Plants of Ecuador. *Monogr. Syst. Bot. Missouri Bot. Gard.* in press.
- Olmstead, R. G. & J. D. Palmer. 1997. Implications for the phylogeny, classification, and biogeography of *Solanum* from cpDNA restriction site variation. *Syst. Bot.* 22: 19–29.
- Rick, C. M., H. Laterrot & J. Philouze. 1990. A revised key for the *Lycopersicon* species. *Tomato Genet. Coop. Rep.* 40: 31.
- Spooner, D. M., G. J. Anderson & R. K. Jansen. 1993. Chloroplast DNA evidence for the interrelationships of tomatoes, potatoes, and pepinos (Solanaceae). *Amer. J. Bot.* 80: 676–688.