A Morphometric Study of Species Boundaries of the Wild Potato *Solanum* Series *Piurana* (Solanaceae) and Putatively Related Species from Seven Other Series in *Solanum Sect. Petota* (2008)

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Abstract

There are about 190 wild potato (*Solanum* L. section Petota Dumort.) species distributed from the southwestern United States to central Argentina and adjacent Chile and Uruguay. The morphological similarity of many of its constituent species has led to widely conflicting taxonomic treatments. *Solanum* series *Piurana* Hawkes is one of 21 series recognized in section Petota in the latest comprehensive taxonomic treatment by Hawkes in 1990. They are distributed from southern Colombia, south through Ecuador to central Peru. The limits of the series and validity of its constituent species are unresolved. We provide the first comprehensive morphological phenetic study of the series, to include putatively related species in ser. Conicibaccata, Cuneoalata, Ingifolia, Megistacroloba, Simplicissima, Tuberosa, and Yungasensa, through an examination 188 living germplasm accessions of 33 species, planted in replicated plots in a field station in Andean Peru. Only four morphologically well-defined groups were supported. Continuing work is exploring molecular support for these species in these eight series.

Access

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