

A New Combination in *Peltostigma* (Rutaceae)

Roy E. Gereau

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.

ABSTRACT. *Peltostigma parviflorum* Q. Jiménez & Gereau is reduced to synonymy under *P. guatemalense* (Standley & Steyermark) Gereau, comb. nov., based on *Galipea guatemalensis* Standley & Steyermark.

Peltostigma Walpers (Rutaceae: Rutoideae) belongs to subtribe Choisyinae of the tribe Zanthoxyloideae, while *Galipea* Aublet (Rutaceae: Rutoideae) belongs to subtribe Cuspariinae of the tribe Cusparieae. The two subtribes may be contrasted as follows (Engler, 1931):

Choisyinae: flowers actinomorphic; corolla polypetalous; stamens all antheriferous; seeds with endosperm.

Cuspariinae: flowers usually zygomorphic; corolla usually gamopetalous; some stamens often reduced to staminodes; seeds with little or no endosperm.

Peltostigma parviflorum Q. Jiménez & Gereau is the only species of the genus with unifoliate leaves and small flowers (petals 8.2–10.1 mm long) (Jiménez & Gereau, 1991); its congeners (*P. pteleoides* (Hooker) Walpers and *P. eximium* C. V. Morton) possess 3–5-foliate leaves and large flowers (petals 15–25 mm long) (Morton, 1933; Standley & Steyermark, 1946). *Galipea guatemalensis* Standley & Steyermark was named from a fruiting specimen lacking the floral characters necessary for correct generic (or even subtribal) placement in the Rutaceae. Examination of its holotype has shown that *G. guatemalensis*, an earlier name, is the same species as *P. parviflorum*, necessitating the following new combination.

Peltostigma guatemalense (Standley & Steyermark) Gereau, comb. nov. Basionym: *Galipea guatemalensis* Standley & Steyermark, Publ. Field Mus. Nat. Hist., Bot. Ser. 23: 165. 1944. TYPE: Guatemala. Izabal: Río Dulce, between Livingston and 6 mi. upriver, on N side, 1–25 m, 14 Apr. 1940 (fr), Steyermark 39448 (holotype, F).

Peltostigma parviflorum Q. Jiménez & Gereau, Ann. Missouri Bot. Gard. 78: 527. 1991. Syn. nov. TYPE: Costa Rica. San José: 9°43'10"N, 84°23'10"W, Zona Protectora La Cangreja, Santa Rosa de Puriscal, 400–500 m, 4 sep. 1987 (fl), Q. Jiménez M. & L. J. Poveda A. 494 (holotype, CR; isotypes, K, MO).

Jiménez & Gereau (1991) discussed geographical trends in the morphology of *Peltostigma guatemalense* (as *P. parviflorum*) in terms of a "northern race" consisting of the collections from Guanacaste and Puntarenas, Costa Rica, and a "southern race" comprising the type and four collections from Antioquia, Colombia. The "races" may be contrasted as follows: "Northern race": petioles 0.2–2.1 cm long, not extremely variable, the longest in a given specimen exceeding the shortest by 0.5–1.5 cm; leaflet blade 3.2–16.0 × 1.2–7.3 cm, the apex obtuse or obtusely acuminate, the base acute to rounded; petals 8.2–9.3 × 8.0–8.5 mm. "Southern race": petioles 0.3–5.6 cm long, extremely variable, the longest in a given specimen exceeding the shortest by 2.0–4.5 cm; leaflet blade 4.2–20.6 × 2.2–10.2 cm, the apex acutely acuminate, the base usually attenuate; petals 9.8–10.1 × 8.5–9.7 mm.

The type of *Galipea guatemalensis* has larger leaflets (to 19.5 × 8.7 cm) and longer petioles (to 2.6 cm) than is characteristic for the "northern race," but is otherwise more similar in foliar characters to the northern than to the southern populations. A previously unreported collection of this species from Peru has foliar characters entirely within the parameters of the "southern race," but insufficiently mature flowers to assess the correlation between geography, floral measurements, and foliar characters. With few collections and little available data on flower size, it is preferable to continue to consider *Peltostigma guatemalense* a single species with some observable correlation between geography and morphological characters. Further investigations based on more ample collections could reveal the desirability of recognizing the two informal "races" as subspecies.

Specimen examined. PERU. **Madre de Dios:** Manú, Parque Nacional Manú, Río Manú, Pakitsa station, Tachigali Trail, 4 km N of camp, 11°56'S, 71°16'W, 350 m, 11 Sep. 1989 (fl), R. B. Foster & H. Beltran 11371 (F, MO).

Acknowledgments. I thank J. A. Kallunki and A. Pool for bringing the type of *Galipea guatemalensis* to my attention; J. S. Miller and G. E. Schatz for useful discussions of geographic variability; and C. M. Taylor for a careful reading of the manuscript.

Literature Cited

Engler, A. 1931. Rutaceae. Nat. Pflanzenfam. ed. 2, 19a: 187-359.

Jiménez M., Q. & R. E. Gereau. 1991. *Peltostigma parviflorum* (Rutaceae), nueva especie de Costa Rica y Colombia. Ann. Missouri Bot. Gard. 78: 527-530.
Morton, C. V. 1933. A new species of *Peltostigma* from Mexico. Proc. Biol. Soc. Wash. 46: 83-84.
Standley, P. C. & J. A. Steyermark. 1946. Rutaceae. In: P. C. Standley & J. A. Steyermark, Flora of Guatemala, Fieldiana, Bot. 24(5): 389-425.



Gereau, Roy E. 1995. "A new combination in *Peltostigma* (Rutaceae)." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 5, 34–35.
<https://doi.org/10.2307/3391827>.

View This Item Online: <https://www.biodiversitylibrary.org/item/14665>

DOI: <https://doi.org/10.2307/3391827>

Permalink: <https://www.biodiversitylibrary.org/partpdf/16527>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.