

Argentina peduncularis var. *ganeshii* (Rosaceae): a new combination for an endemic taxon of Nepal

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Abstract: *Potentilla peduncularis* D.Don var. *ganeshii* H.Ikeda & H.Ohba has been transferred to the genus *Argentina* as a distinct taxon based on distinctive morphological characters. *Potentilla peduncularis* var. *ganeshii* differs from *P. peduncularis* D.Don var. *peduncularis* in having sparse lanate beneath the leaflets. Therefore, a new combination, *Argentina peduncularis* (D.Don) Soják var. *ganeshii* (H.Ikeda & H.Ohba) G.Parmar, *comb. nov.*, has been made here.

Keywords: Alpine, Endemic, *Potentilla peduncularis*, Rosaceae, Taxonomic Treatment.

Introduction

Argentina Hill and *Potentilla* L. are genera belonging to the family Rosaceae Juss. Recent taxonomic circumscription, corroborated by molecular phylogenetic studies, has resulted in the transfer of the taxa of *Potentilla* sect. *Anserina* to the genus *Argentina* s.l. (Eriksson *et al.*, 2003; Dobeš & Paule, 2010; Soják, 2010). Stipular auricles are ventral (inserted on the inner side of the petiole) in the genus *Argentina* s. str., while stipular auricles are lateral (inserted on the sides of the petiole) in the genus *Potentilla* s.str. (Soják, 2010). Based on ventral stipular auricles, Soják (2010) transferred *Potentilla peduncularis* D.Don to the genus *Argentina* and treated *Argentina peduncularis* (D.Don) Soják as the accepted name. Nevertheless, Shrestha *et al.* (2022) and various online portal platforms (such as COL, 2025; POWO, 2025; WFO, 2025) have treated *P. peduncularis* D.Don var. *ganeshii* H.Ikeda & H.Ohba

as a synonym of *A. peduncularis*. However, both morphological and geographical consistency support the placement of it as a distinct variety under *A. peduncularis*. The distinction between *P. peduncularis* var. *ganeshii* and var. *peduncularis* is based on subtle yet taxonomically significant morphological characters, as summarized in Table 1. Besides, all the major studies in Nepal have treated *P. peduncularis* var. *ganeshii* as a distinct taxon (Singh, 2001; Ikeda, 2011; Shrestha *et al.*, 2018; Rajbhandari & Rai, 2019; Press *et al.*, 2026). Based on the original description of var. *ganeshii* by Ikeda and Ohba (1996), together with comparative morphological data for var. *peduncularis* from regional floras (Grierson & Long, 1987; Shah, 2001; Li *et al.*, 2003; Ikeda, 2011), a new combination, *Argentina peduncularis* var. *ganeshii*, is proposed here.

Taxonomic Treatment

Argentina peduncularis (D.Don) Soják var. ***ganeshii*** (H.Ikeda & H.Ohba) G.Parmar, **comb. nov.** *Potentilla peduncularis* D.Don var. *ganeshii* H.Ikeda & H.Ohba, J. Jap. Bot. 71(5): 252. 1996. Singh, Fl. Pl. Nep.: 280. 2001; Ikeda in Watson *et al.*, Fl. Nep. 3: 361. 2011; Shrestha *et al.*, Hb. Fl. Pl. Nep. 1: 434. 2018; Rajbhandari & Rai, Hb. Fl. Pl. Nep. 2: 199. 2019; Shrestha *et al.*, Pl. Nep.: 355. 2022. *Type:* NEPAL, **Central Nepal**, Rasuwa District, Tulo Bhera Kharka–Jaisuli Kund, 4250 m, 28°12' N 85°13' E, 30.07.1994, F. Miyamoto, K.R. Rajbhandari, S. Akiyama, M. Amano, H. Ikeda & H. Tsukaya 9430046 (holo TI [TI00021705!]; iso BM n.v., GH n.v., KATH!).

Fig. 1

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Fig. 1. Holotype of *Argentina peduncularis* (D. Don) Soják var. *ganeshii* (H. Ikeda & H. Ohba) G. Parmar (TI [TI00021705]).

Table 1. Diagnostic morphological differences between the two varieties of *Argentina peduncularis*.

Characters	var. <i>ganeshii</i>	var. <i>peduncularis</i>
Leaf surface	Sparsely lanate on both surfaces	Densely or sparsely pubescent or lanate above, sericeous beneath
Flower size	2–2.5 cm across	1–3.5 cm across
Episepals	4–6 mm long, sparsely strigose on both sides	6–7 mm long, sparsely strigose inside, densely strigose outside
Sepals	Glabrescent inside, sparsely strigose outside	Glabrescent except shortly lanate near tips inside, sparsely to densely strigose outside
Habitat	Endemic to alpine zones of Nepal	Broader East Himalayan distribution

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Literature cited

- COL 2025. *Catalogue of Life. Annual Checklist. Species 2000*. Naturalis, Leiden, the Netherlands. Available at: <https://www.catalogueoflife.org/> (Accessed on 13.09.2025).
- DOBEŠ C. & J. PAULE 2010. A comprehensive chloroplast DNA-based phylogeny of the genus *Potentilla* (Rosaceae): implications for its geographic origin, phylogeography and generic circumscription. *Molecular Phylogenetics and Evolution* 56: 156–175. <https://doi.org/10.1016/j.ympev.2010.03.005>
- ERIKSSON T., HIBBS M.S., YODER A.D., DELWICHE C.F. & M.J. DONOGHUE 2003. The phylogeny of Rosoideae (Rosaceae) based on sequences of the internal transcribed spacers (ITS) of nuclear ribosomal DNA and the trnL/F region of chloroplast DNA. *International Journal of Plant Sciences* 164(2): 197–211. <https://doi.org/10.1086/346163>
- GRIERSON A.J.C. & D.G. Long 1987. *Flora of Bhutan: including a record of plants from Sikkim*. Volume 1(3). Royal Botanic Garden, Edinburgh.
- IKEDA H. 2011. *Potentilla*. In: WATSON M.F., AKIYAMA S., IKEDA H., PENDRY C.A., RAJBHANDARI K.R. & K.K. SHRESTHA (eds.), *Flora of Nepal*. Volume 3. Royal Botanic Gardens, Edinburgh. pp. 349–369.
- IKEDA H. & H. OHBA 1996. Taxonomic studies of Himalayan *Potentilla* (Rosaceae). IV. Polyploidy of *P. peduncularis* D.Don with description of a natural hybrid. *Journal of Japanese Botany* 71(5): 249–253.
- LI C.L., IKEDA H. & H. OHBA 2003. *Potentilla*. In: WU Z.Y. & P.H. RAVEN (eds.), *Flora of China*. Volume 9. Science Press, Beijing & Missouri Botanical Garden Press, St. Louis. pp. 291–327.
- POWO 2025. *Plants of the World Online*. Facilitated by the Royal Botanic Gardens, Kew. Available at: <https://powo.science.kew.org/> (Accessed on 12.09.2025).
- PRESS J.R., SHRESTHA K.K. & D.A. Sutton 2026. *Annotated checklist of the flowering plants of Nepal*. The Natural History Museum, London. Available at: http://www.efloras.org/florataxon.aspx?flora_id=110&taxon_id=242424664 (Accessed on 05.08.2026)
- RAJBHANDARI K.R. & S.K. RAI 2019. *A handbook of the flowering plants of Nepal*. Volume 2. Department of Plant Resources, Kathmandu.
- SHAH M. 2001. *Potentilla*. In: ALI S.I. & M. KAISER (eds.), *Flora of Pakistan*. University of Karachi, Karachi & Missouri Botanical Garden, St. Louis.
- SHRESTHA K.K., BHANDARI P. & S. BHATTARAI 2022. *Plants of Nepal (Gymnosperms and Angiosperms)*. Heritage Publishers & Distributors Pvt. Ltd., Kathmandu.
- SHRESTHA K.K., BHATTARAI S. & P. BHANDARI 2018. *Handbook of flowering plants of Nepal (Gymnosperms and Angiosperms: Cycadaceae–Betulaceae)*. Volume 1. Scientific Publishers, Jodhpur.
- SINGH A.P. 2001. *Flowering plants of Nepal (Phanerogams)*. Department of Plant Resources, Kathmandu.
- SOJÁK J. 2010. *Argentina* Hill, a genus distinct from *Potentilla* (Rosaceae). *Thaiszia Journal of Botany* 20: 91–97.
- WFO 2025. *World Flora Online*. Available at: <http://www.worldfloraonline.org/> (Accessed on 13.09.2025).