

Taxonomic notes on *Sibbaldia micropetala* (D. Don) Handel-Mazzetti : Rosaceae : II

Autor(en): **Rajput, Muhammad Tahir M. / Tahir, Syeda Saleha / Husain, Syed Zahoor**

Objektyp: **Article**

Zeitschrift: **Candollea : journal international de botanique systématique = international journal of systematic botany**

Band (Jahr): **49 (1994)**

Heft 1

PDF erstellt am: **22.07.2024**

Persistenter Link: <https://doi.org/10.5169/seals-879531>

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

Taxonomic notes on *Sibbaldia micropetala* (D. Don) Handel-Mazzetti. Rosaceae. II

MUHAMMAD TAHIR M. RAJPUT
SYEDA SALEHA TAHIR
&
SYED ZAHOR HUSAIN

RÉSUMÉ

RAJPUT, M. T. M., S. S. TAHIR & S. Z. HUSAIN (1994). Notes taxonomiques de *Sibbaldia micropetala* (D. Don) Handel-Mazzetti. Rosacées. II. *Candollea* 49: 129-132. En anglais, résumés français et anglais.

Lors de la révision du genre *Sibbaldia* à l'échelle mondiale, il a été remarqué que *Sibbaldia micropetala* était mal identifié dans la plupart des herbiers. L'identité de *Sibbaldia micropetala* est discutée. La synonymie taxonomique est établie, en se référant à la description originale et à l'examen du type. Cinq taxons sont reconnus comme faisant partie de cette synonymie et leur distribution est présentée.

ABSTRACT

RAJPUT, M. T. M., S. S. TAHIR & S. Z. HUSAIN (1994). Taxonomic notes on *Sibbaldia micropetala* (D. Don) Handel-Mazzetti. Rosaceae. II. *Candollea* 49: 129-132. In English, French and English abstracts.

During the course of reviewal of genus *Sibbaldia* at world level, it was noticed that *Sibbaldia micropetala* was mostly misidentified in most of the herbaria. The identity of *Sibbaldia micropetala* is discussed. Taxonomic synonymy was established, based on study of original description and the examination of type material. Five taxa are placed under the synonymy, and its distribution is documented.

KEY-WORDS: ROSACEAE — *Sibbaldia micropetala* — Synonymy — Trichome.

Introduction

Sibbaldia micropetala (D. Don) Handel-Mazzetti was first described by DON (1825) in *Prodrum Florae Nepalensis* as a species of genus *Potentilla*, but later on HANDEL-MAZZETTI (1932) transferred it to genus *Sibbaldia*. Taxonomically it belongs to family Rosaceae sub-family Rosoideae and tribe Potentilleae, HUTCHINSON (1964). SOJAK (1970) placed it in Sect. *Piletophyllum*, which was also recognized by DIXIT & PANIGRAHI (1981). The study of collections of *Sibbaldia* held at A, B, BM, E, K, KOY, KUH, RAW, RNG and US was undertaken while preparing this account, indicated that *S. micropetala* is usually misidentified in most of the herbaria. In the past there have been some regional studies on *Sibbaldia* (HOOKER, 1878; MURAVJOVA, 1936; CHATTERJEE, 1938; DIXIT & PANIGRAHI (1981) but unfortunately these often leave a large number of taxonomic and nomenclatural problems unsolved, and mostly based, without examining the

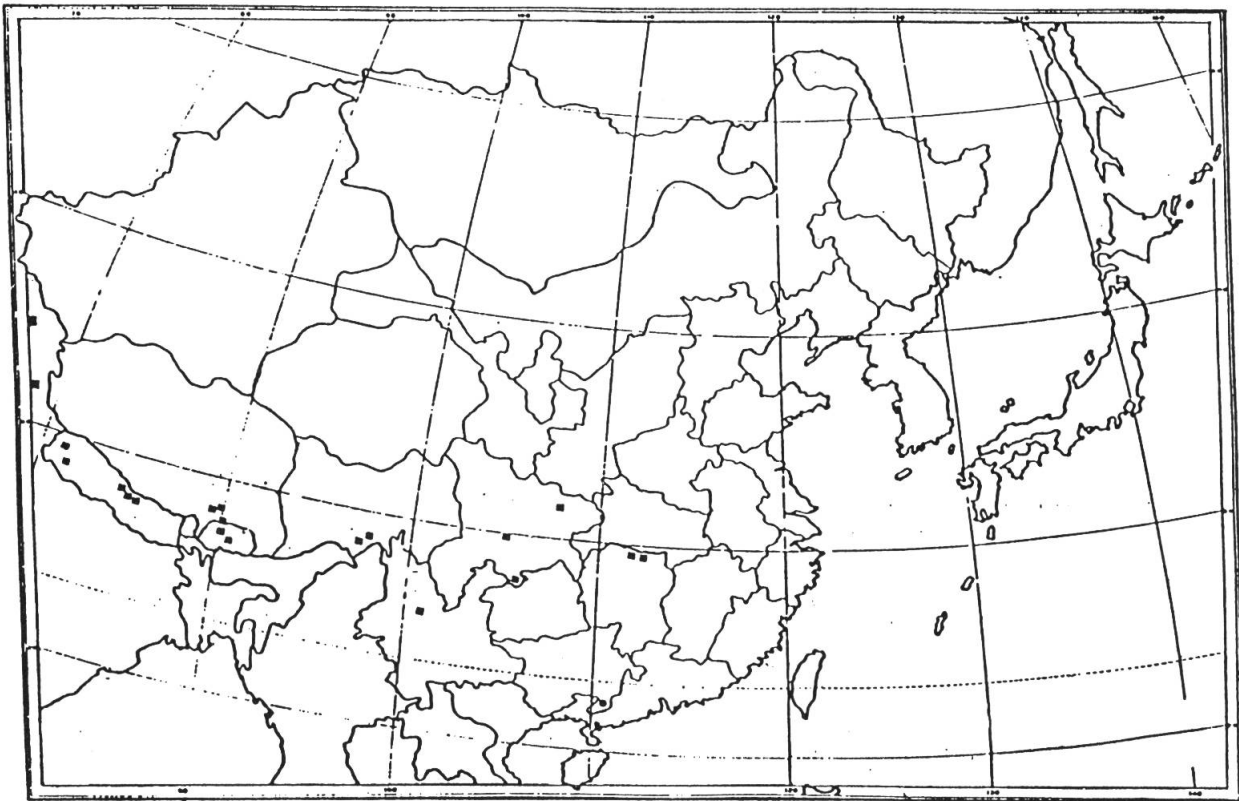


Fig. 1. — Map showing the distribution of *Sibbaldia micropetala* (D. Don) Handel-Mazzetti.

types of the concerned taxa. The examination of large collections, and particularly the type specimens of the taxa under consideration, provided ample evidence for this study.

Typification and synonymy

The examination of the types of *Potentilla albiflora* Wallick ex Hooker, *Potentilla* (*Sibbaldia*) *micropetala* var. *gibbosa* Cardot, *Sibbaldia axilliflora* (Hooker) Chatterjee and *Sibbaldia byssitecta* Sojak, and studied the original description of *Sibbaldia potentilloides* Camb. revealed no significant differences between them, also the field notes transcribed on the herbarium labels provide no ground whatsoever for separating the above-mentioned taxa. It is therefore suggested here to treat *S. micropetala* (D. Don) Handel-Mazzetti as the correct name with synonyms as follows:

Sibbaldia micropetala (D. Don) Handel-Mazzetti in G. Karsten & H. Schenck, Vegetationsbilder 22(8): 6. 1932. Basionym: *Potentilla micropetala* D. Don, Prodr. Fl. Nepal 321. 1825. Holotypus: Gossain than, Wallick Num. List 1018, 1830 (BM!); isotypus: K!

Sibbaldia potentilloides Camb. in Jacquem., Voy. Inde 4: 54, 2, t. 67. 1844. Typus: Indian Himachal Pradesh, Bashahn dt. Mountain tops of Hatton Sine lect. 18510 (MUP Photo A!).

Potentilla albifolia Wallick ex Hooker f., Fl. Brit. India 2: 347. 1878. Holotypus: Gossain than, Wallick Num. List. No. 1018 (K!). This sheet has three collections mounted on it. The top collection is the type.

Potentilla (Sibbaldia) micropetala var. *gibbosa* Cardot, *Extraits de Not. Syst. Ill.* 7/8: 242. 1916. Hototypus: Yunnan: paturages près du col de Yun-tze-hay, *Delavay 2360* (isotypus K!; photo RNG, a).

Sibbaldia axilliflora (Hooker) Chatterjee, *Notes Roy. Bot. Gard. Edinburgh*, 19: 325. 1938. Typus: Western Himalaya, Kumaon, Wallich Cat. 1236 (A).

Sibbaldia byssitica Sojak, *Preslia* 42: 184. 1970. Hototypus: Bhuttan, Ra La, 26.6.1938, *Gould 589* (K!; isotypus: A!; photo RNG).

Ecology and distribution

Sibbaldia micropetala is found on open soil, among small rocks, around Summer grazing encampments, at an altitude ranging from 3325 to 4200 m. Flowering periods May-July. This species of the genus *Sibbaldia* is without any hybridization problem and is widely distributed in South East Asia. Particularly in Sikkim, Nepal, India, Kashmir, Bhuttan, Eastern Himalaya and Yunnan Province of China. Distribution is based on herbarium materials available in the herbaria mentioned in the acknowledgements and is given in the distribution map (Fig. 1).

Taxonomic remarks

Sibbaldia micropetala (D. Don) Handel-Mazzetti is a white tomentose prostrate *Potentilla*-like herb, the branches are often reddish in fresh material 3-29 cm high. Leaves 5-9 foliolate imparipinnate. Basal leaves larger with membranous stipules. *Sibbaldia micropetala* can be distinguished from all other species of *Sibbaldia* by its leaves which are densely covered by snow-white trichomes on their lower surface. A variation has been noticed in the colour of the hairs on the upper surface of the leaflets. Mostly leaves are brownish or greenish brown tomentose on upper surface, but in young condition the leaflets are snow-white on both surfaces. The field notes on *AGSES 37* at (E) indicates that in apparently richer soils the plant develop a greener foliage. Morphologically *Sibbaldia micropetala* resembles *S. sikkimensis* (Prain) Chatterjee but *S. micropetala*, can be separated as *S. sikkimensis* has petals which are purple-red, and leaf petioles 1.2-7.2 cm long, whereas *S. micropetala* has yellow petals and leaf petioles 0.6-2.0 cm long. The achenes of this species have a few prominent folds on its surface and have strongly colliculate pattern which are not found in any other species of the genus *Sibbaldia*.

Selected specimens examined

Bhutan: Shingbe, Me La, N.E. of Bhutan, Ludlow, *Sherriff & Hicks 20707* (BM, E). China: Szechuan bor occid, Karlong, in prato herbosa puticosa, *Harry Smith 3036* (BM); Tibet: Source of the Irrawaddy, adung Valley (28°20'N 97°40'E) *Kingdon-Ward 9759* (BM). Yunnan: Yangtze Watershed prefectural district of likiang, Eastern slopes of likiang Snow Range, *Rock 4777* (E, US 121497). India: Punjab, *Drummond 22904* (K); Assam orka la Bhuttan frontier, *Kingdon-Ward 13733* (BM). Sikkim, Jongri, Gamothan, Hara, Kanai, Murata, Togashi, *Tayama 566* (A, BM, KYO). Kashmir: Srainager, above Gulmarg, Khilanmarg, Plateau, *Lancaster 2* (BM). Nepal: chipli north of Pokhara, *Stainton sykes & Williams 4895* (BM, US 2318032); near Balandra Pas, *Polunin, Sykes & Williams 2567* (A, BM, E).

ACKNOWLEDGEMENTS

Senior author is grateful to the Commonwealth Scholarship Commission, U.K. for the award of Commonwealth Academic Staff Fellowship for post-doctoral research at Reading University. We wish to thank the Directors/Curators of the following herbaria, from which the specimens have been borrowed on loan for this study: A, B, BM, E, KYO, KUH, RAW, RGN and US. We would also like to acknowledge the help given by Dr. Steve Spongberg of the Arnold Arboretum of Harvard University, USA, Dr. Nigel Taylor of Royal Botanic Gardens, Kew and Dr. Charlie Jarvis, British Museum (Natural History) London, for providing information on type material.

REFERENCES

- CHATTERJEE, D. (1938). A note on the Indian and Chinese species of the genus *Sibbaldia* Linn. *Notes Royal Bot. Gardens, Edinburgh* 19: 325-327.
- DIXIT, B. K. & G. PANIGRAHI (1981). Revision of the genus *Sibbaldia* L. (Rosaceae) in India. *Proc. Indian Acad. Sci. (Plant Sci.)* 90(3): 253-272.
- DON, D. (1825). *Prodromus Florae Nepalensis*: pp. 229-233. London.
- HANDEL-MAZZETTI, H. (1932). In: KARSTEN, H. & H. SCHENCK, *Vegetationsbilder* 22: 8-6.
- HOOKER, J. D. (1878). *The Flora of British India* 2: 345-348. Reeve & Co., London.
- HUTCHINSON, J. (1964). *Genera of the flowering plants* 1: 195-199. Oxford, Clarendon Press.
- MURAVJOVA, A. D. (1936). The genus *Sibbaldia* L. and its species. *Acta. Inst. Bot. Ac. Sci. USSR, Ser. 1* 2: 217.
- SOJAK, J. (1970). Eine neue *Sibbaldia* Art aus Bhuttan. *Preslia* 42: 184-186.