



## Lectotypification of *Rhododendron sikkimensis* nom. nov (syn. *Rhododendron sikkimense*)

D K Pradhan<sup>1</sup>

<sup>1</sup>Quality Control Laboratory -High Altitude Research / Sikkim State Forest Herbarium, Forest Secretariat, Deorali, Gangtok, Sikkim, India. 737102

\*Corresponding Author Email: [pradhansikkim@gmail.com](mailto:pradhansikkim@gmail.com)

Received: 10.02.2023; Revised: 04.04.2023; Accepted: 27.4.2023

©Society for Himalayan Action Research and Development

**Abstract:** *Rhododendron sikkimense* Pradhan and Lachungpa is one of reported species from Sikkim. As per the protologue, its type specimen is unavailable both in CAL and Royal Botanic Garden, Edinburgh. The scrutiny of literature revealed that the species is restricted to Sikkim. For the valid publication, the lectotype is designated here and proposed as *Rhododendron sikkimensis* nom. nov. (syn. *Rhododendron sikkimense* Pradhan and Lachungpa) to specify the geographical location, Sikkim (Article 39, ICBN, Tokyo Code) for taxonomic purposes. The choice of lectotype is discussed and provided.

**Keywords:** Lectotype • *Rhododendron sikkimense* • *Rhododendron sikkimensis* • Sikkim Himalaya.

### Introduction

There are several species of *Rhododendron* in Sikkim (Hooker, 1849) however *Rhododendron sikkimense* Pradhan and Lachungpa was mentioned as doubtful species ([www.gbif.org](http://www.gbif.org)). This study was conducted to resolve the taxonomically doubtful species of Sikkim. The species, *Rhododendron sikkimense* was published after 1 January, 1990 as per the protologue that have its flowering time from August to October (Pradhan and Lachungpa, 1991).

As cited in the literature of *Rhododendron sikkimense* Pradhan and Lachungpa), the type specimen was indicated in CAL and Royal Botanic Garden, Edinburgh (E) herbaria. In accordance to the publication of enumeration of type specimen of CAL herbarium, there was no record of type specimen (Bandyopadhyay *et al.*, 2017). Further, there was no designated holotype in the Royal Botanic Garden, Edinburgh as per the communication of Royal Botanic Garden, Edinburgh (per comm. 2023).

Thus, the lectotype is designated here and proposed as *Rhododendron sikkimensis* nom. nov. (syn. *Rhododendron sikkimense* Pradhan and Lachungpa) for valid publication to specify the geographical location, Sikkim (Article 39, ICBN, Tokyo Code) for taxonomic purpose. This study was undertaken to resolve the taxonomically doubtful species for taxonomic purpose.

### Material and Methods

The study of *Rhododendron sikkimensis* nom. nov. (syn. *Rhododendron sikkimense* Pradhan and Lachungpa) carried out as per the protologue (Pradhan and Lachungpa, 1991; Pradhan, 2010) and reviewed several literatures for the taxonomic usages (Hooker, 1849; Hooker, 1872-1897; Hara, 1966, 1971). The specimen of *Rhododendron sikkimensis* nom. nov. (syn. *Rhododendron sikkimense* Pradhan and Lachungpa) of Royal Botanic Garden, Edinburgh was studied and examined.



## Results and Discussion

**Typification:** *Rhododendron sikkimensis* nom. nov. (syn. *Rhododendron sikkimense* Pradhan and Lachungpa). In: Sikkim –Himalayan Rhododendrons : 120-122.

**Lectotype:** India, Sikkim, Phuni, North of Lachung, 3730 m, Coll. : U.C. Pradhan and S.T. Lachungpa No 34. Date of Collection: 17.5.1986.

### Plant Descriptions

Plant ca. 5-6 ft; Leaves 3-5 leaves, 100 mm-1200 mm long, ca. 55 mm wide, thick, matted woolly, dull yellowish tomentum abaxial lamina, glabrous adaxial lamina oblong-ovate leaves, ca. 110mm long, ca. 50 mm wide, petiole ca 20-23 mm, inflorescence 5-8 flowered, red, flower ca. 50 mm long, terminal, short calyx ca 50-55 mm, corolla ca 30-33 mm long, ovary ca. 3-4 mm.

**Notes:** The literatures reflected that the species as doubtful species due to lack of type specimen and valid publication so this description is added to the species.

The authors described the species with 3-5 m height, leaves 75 mm long x 25-35mm broad whereas other described with different height and white colour (Singh, 2009).

In such discrepancies, the Royal Botanical Garden, Edinburgh was communicated and received the information on deposited herbarium of Pradhan and Lachungpa. The mentioned herbarium sheet contains the comment of D.G. Long as *Rhododendron thomsonii* hybrid who specimen has not yet been updated and treated as a type specimen in Edinburgh, RBG.

Hence, the additional description is added in this writing for the taxonomic purpose designating the herbarium sheet of Edinburgh as the lectotype of *Rhododendron sikkimensis* nom. nov. further added the information, “Ovary densely glandular pubescent; Corolla 35-40 mm; Calyx 4-5 mm; Lower surface elliptic,

whitish tomentose beneath”. Having said that the

Eventually, the protologue of the publication suggested that the designated lectotype is corresponding to *Rhododendron sikkimensis* nom. nov. (syn. *Rhododendron sikkimense* Pradhan and Lachungpa) (Art. 9.4 of the ICN, Turland *et al.*, 2018) that grows well in open area in association with *Rhododendron thomsonii* Hook.f, *Rhododendron campylocarpum* Hook.f, and *Rhododendron campanulatum* D.Don.



**Fig 1:** *Rhododendron sikkimensis* nom. nov. (Syn. *Rhododendron sikkimense* Pradhan and Lachungpa) . Courtesy: RBG, Edinburgh



## Acknowledgement

The author is thankful to David Harris, Curator, RBG, Edinburgh, Alan Elliott and Herbarium staffs of RBG, Edinburgh for valuable support, information and suggestions. The author also extend thanks to the Department of Forest and Environment, Government of Sikkim and the Staff of QCL-HARC/ SSFH for valuable supports.

## References

- Bandyopadhyay S, Krishna G and Venu P (2017) Missing Holotypes of Names in Plants, Fungi and Algae published from India. *International Journal of Advanced Research in Botany* 3(3): 34–39.
- Pradhan UC and Lachungpa ST (1991) Sikkim – Himalayan Rhododendrons, Primulaceae Books, Kalimpong, West Bengal. Pp.120-122
- Pradhan KC (2010) Handbook Rhododendrons of Sikkim, Sikkim Adventure, Sikkim, India.
- Hara H (1966) The Flora of Eastern Himalaya. First Report, University of Tokyo, Japan.
- Hara H (1971) The Flora of Eastern Himalaya. Second Report, The University of Tokyo Press, Japan.
- Hooker JD (1849) The Rhododendrons of Sikkim Himalaya. Reeve and Co., Henrietta Street, Covent Garden, London.
- Hooker JD (1872–1897) The Flora of British India. Vol. 1–7. L. Reeve & Co., Kent, London.
- Singh K (2009) Notes on the Sikkim Himalayan Rhododendrons: A taxa of great conservation importance. *Turkish Journal of Botany* 33(4):305-310.
- Turland NJ, Wiersema JH, Barrie FR, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Kusber WH, Li DZ, Marhold

K, May TW, McNeill J, Monro AM, Prado J, Price MJ and Smith GF (2018) International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017, *Regnum Vegetabile*. 159 Pages.