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A NEW VARIETY OF *RHODIOLA IMBRICATA* EDGEW. (CRASSULACEAE) FROM INDIA

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Edgeworth (1851) described *Rhodiola imbricata* from Kumaon (Type : K., Photo BSD) and subsequently a new species was also described by Hooker f. et Th. (1858) as *Sedum imbricata* from the same collection and this became a later homonym of *S. imbricatum* (Edgew.) Walpers (1848) and Clarke (1878) treated both of them under synonym of *S. rhodiola* DC. However, during the present revisionary study it has been ascertained that *S. rhodiola* DC. does not occur in India.

A critical examination of all the available collections of *Rhodiola imbricata* at different Indian Herbaria revealed that the specimens collected by Nair, from Sach Pass, Himachal Pradesh do not fit within the range of characters given in the Protologue of *R. imbricata* Edgew. The specimens were critically studied and thought desirable to describe it as distinct taxon. The characters distinguishing the latter from *R. imbricata* are tabulated below :

	R. imbricata Edgew. var. *imbricata*.	*R. imbricata* Edgew. var. *lobulata* Singh et Bhatt.
1.	Cauline leaves : linear-lanceolate, 7-25 × 1.5-5 mm, entire, acute.	Cauline leaves : elliptic-ovate or broadly lanceolate, 15-35 × 5-12 mm, lobulate, lobes 4-8, on both the margins, obtuse.
2.	Scaly leaves : triangular to ovate, 4-8 × 3-6 mm.	Scaly leaves : very-broadly ovate, 12-20 × 5-10 mm.
3.	Flowering heads : 4-4.5 cm across.	Flowering heads : 2-2.7 cm across.
4.	Bracts : not exceeding the corymb.	Bracts : exceeding the terminal corymb.

A brief illustrated account of the new taxon is given for easy identification.

Rhodiola imbricata Edgew. var. **lobulata** Singh et Bhattacharyya var. nov.

R. imbricata Edgew. var. *imbricata* affinis, sed differt foliis caulinis ovato-ellipticis, cum 4-8 lobis, foliisque squamatis late ovatis, in magnitudine fere duplicibus.

Holotypus lectus ad locum Sach Pass, Himachal Pradesh, 4535 m, die 23.7.1964, N. C. Nair 32763A, et positus in herbario CAL (planta mascula). Isotypus N. C. Nair 32763B (BSD).

Perennial herb, 25 cm high. Rhizome thick 1.2 cm across, epigaeous, with imbricate scaly leaves, broadly ovate, 12-20 × 5-10 mm, blackish brown, appressed below the stems. Cauline leaves imbricate, ovate-elliptic 15-35 × 5-12 mm lobulate, 4-8 lobes on both the margins, obtuse at the apex, sessile. Inflorescences terminal, involucrate, compact,



Rhodiola imbricata Edgew.

compound corymbs, 15-30 flowered, clusters 5-9, dioecious, pedicellate, 6-9 mm long, bracteate, yellow. Sepals linear to subulate, 5-6 × 1.3-1.7 mm, green, round at the apex. Petals oblong-obovate, or broadly lanceolate, 6-7 × 1.4-2.5 mm, pale yellow, glabrous, obtuse. Male flowers : Stamens 10, longer than petals in two whorls, outer alternate with petals 6.5-8.5 mm, inner opposite 3.5-5 mm long; filaments filiform; anthers basifixed. Nectar scales broadly oblong 0.8-1.3 × 0.5-1.0 mm. Gynoecium abortive, 4-5 mm long, slightly out curved at tips.

Flowering and *fruiting* : July-September.

Holotype, India, Himachal Pradesh, Sach Pass 4535 m, 23.7.1964, N. C. Nair 32763 A, (CAL), (Male Plant). Isotype : 32763 B, (BSD).

The holotype and isotype have been deposited in the Central National Herbarium (CAL) and herbarium of the Botanical Survey of India, Northern Circle, Dehra Dun (BSD) respectively.

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