

A NOTE ON THE OCCURRENCE OF *SOLANUM HOVEI* DUNAL IN INDIA

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Recently, one of the authors (K.C.S.) collected specimens of *Solanum* from Goa, during 1969 and Valpoy Range in 1972. A critical examination of the specimens and literature revealed that it was *Solanum hovei* Dunal. There are no specimens of this taxon in Indian herbaria. The Central National Herbarium Calcutta has however, a photograph of the type specimen. After fixing the identity by comparison with the photograph of the type, the specimens were sent for confirmation to the British Museum (Natural History) London, where the type specimen is deposited and a reply received as under in July 1974.

"Both specimens Sahni 3418 and Sahni 6154, do match the type specimen of *Solanum hovei* Dunal. We shall be glad to add these specimens to our collection".

The history of *Solanum hovei* Dunal is very old. This species was collected for the first time by A.P. Hove from Dolca Lat. 22° 8' N. Long. 72° 5' E., Sabermatty (Gujarat State) in the year 1819. Dunal in DC. Prodr. 1852 described A.P. Hove's collection as *Solanum hovei* Dunal which is close to *Solanum indicum* Linn. The specimens of *Solanum indicum* Linn. deposited in F.R.I. Herbarium Dehra Dun were critically examined for re-evaluation. The scrutiny, revealed that another two specimens one from Londa, Dharwar, Karnataka where it is locally known by the name of *mothirigani* and the second from Rajgad, Poona, Maharashtra, hitherto recognised as *Solanum indicum* Linn., did correspond to the characters of *Solanum hovei* Dunal. The discovery of this taxon from Goa during the course of field work for the preparation of Forest Flora of Goa is interesting because no authentic specimens of the plant were available in India till the recent collection. This paper records the occurrence of *Solanum hovei* Dunal, from Maharashtra, Karnataka and Goa and the plant deserves a mention in future Indian Floras.

Description

A prickly shrub up to 1.5 m high, prickles compressed, straight, 0.6-1 cm long, yellow; branches glabrous at the base with stellate hair at tips. Leaves 3-11 cm long, 2.5 cm broad, lanceolate or oblong-lanceolate, acute at both ends, minutely scabrous, stellate hair on both surfaces, prickly on mid vein and some lateral veins, lobes acute, petiole 1.5 cm long. Flowers 1 cm in diameter, lilac or violet, in extra-axillary racemose cymes, peduncles thick at the base of the flower. Calyx 5-partite, triangular, 3 mm long, stellately hairy and prickly, not enlarging in fruit. Corolla 1 cm across, stellately hairy outside, 5-lobed, lobes acute. Anthers 5 mm long, yellow. Ovary glabrous, style about 1 cm long, stellately hairy up to two-third from base. Berry 1 cm in diam., glabrous orange in colour. Seeds orbicular, 4 mm in diameter, strongly pitted.

Flowering and Fruiting February—June.

Specimens examined

11 November 1949, Londa, Dharwar (Karnataka), A.R. Broganca 454 ! 30 June 1964, Rajgad, Poona (Maharashtra), V.D. Vastak 3106 ! 27 January 1969, Colem Range, Dudhsagar (Goa), K.C. Sahni 6154 ! 26 September 1972, Valpoy Range (Goa), K.C. Sahni 3418 !



Solanum hovei Dunal A. Shoot. 1. Flower, 2. Calyx, 3. Anthers, 4. Gynoecium, 5. Seed.

The following table indicates the major differences between the two species :

<i>Solanum keei</i> Dunal	<i>Solanum indicum</i> Linn.
1. Prickles straight	1. Prickles recurved
2. Leaves scabrous and stellate, lanceolate or oblong lanceolate, base and lobes acute.	2. Leaves tomentose and stellate, ovate, base and lobes rounded.
3. Seeds strongly pitted.	3. Seeds smooth or minutely pitted.

Phytogeography

The distribution of this taxon is from North to South (Sabermatty in Gujarat to Duthssagar & Valpoy in Goa). It is possible that it has been dispersed through birds as dispersal by birds is usually associated with brightly coloured fruits and/or seeds. The species is characterised by brightly coloured orange berries. Migrant birds usually follow definite routes which are mostly north and south. The time of fruiting February to June coincides with the N. to S. migration during winter. This is the time when seeds could be picked up by birds on their southward journey.

Conservation

Since the taxon is endemic and rare its conservation is recommended by way of restricting the removal of the plants in the wild and rearing the plant in botanic gardens in North-Western and Peninsular India viz., Botanical Garden, Waghai, Dangs in Gujarat and Lalbagh Botanic Gardens, Bangalore.

Its economic value has not yet been investigated. However, most of the Indian *Solanums* are of medicinal importance (Chopra et. al. 1956).

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SUMMARY

Solanum keei Dunal (Solanaceae) a rare woody shrub endemic to North Western India has so far been known from its type collection from Dolca, Sabermatty (Gujarat State) collected by A.P. Hove in the year 1819. Dunal 1852 described Hove's specimen as *Solanum keei* Dunal. After 1852 this species has not been described in any Indian Flora viz., Clarke, 1883 and has not been reported from any where in India. This is now being reported for the first time during recent collections in Goa, during the course of our work on the preparation of Forest Flora of Goa. It is interesting and important to note that no authentic specimen of this taxon was available in Indian Herbaria till the confirmation of the present F.R.I. collection from British Museum, London. Its dispersal is attributed through migrant birds. Measures for conservation of this rare endemic are given.

भारत में सोलेनम होवेघाई दुनाल बिल्वने के सम्बन्ध में एक टिप्पणी

संस्कृत के ० वी० साहनी व एच० बी नैचानी

सारांश

सोलेनम होवेघाई दुनाल (सन्स्कृत), जो उत्तर-पश्चिमी भारत का स्थानिक दुर्लभ काष्ठीय लुप्त है, घनी एक वी ० वी० होवे द्वारा दोल्का, साबरमती (गुजरात राज्य) से सन् १८१९ में संग्रहीत प्रारूपिक नमूने से ही प्राप्त है। दुनाल ने होवे का नमूना सोलेनम होवेघाई दुनाल नाम से वर्णित किया है। सन् १८५२ के पश्चात् इस

बलि का वर्णन किसी भारतीय पादपज्ञात (इण्डियन प्लान्टोर) जैसे पत्रांक लिखित 1853 का, में नहीं मिलता और न यह ज्ञान भारत में कही होती सूचना की गई है। इसकी यह सर्व प्रथम सूचना "गोवा के रज्य पादपज्ञात" नामक पत्रके निबन्धित में किए गए कार्य के दौरान गोवा के जंगल संघर्ष से ली जा रही है। यह जानना रोचक और महत्वपूर्ण होगा कि इन संस्थान के वर्तमान सत्रह की ब्रिटिश म्यूजियम, लन्दन से मुद्रित करने से पूर्व इस वर्गीकारिकी एकक का कोई प्रामाणिक मूला भारतीय उद्भिज्ज्ञानियों में उपलब्ध नहीं था। इसका अर्थिकरण प्रबन्धी पक्षियों द्वारा बताया जाता है। इस दुर्लभ स्वाधिक जाति के संरक्षण उपाय भी बताए गए हैं।

Ein Briefchen an Vorkommen des *Solanum hovei* Dunal im Indien

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ZUSAMMENFASSUNG

Solanum hovei Dunal, ein rare waldige Busch örtlich beschränkt zu nordwest Indien, ist jetzt mit seine Typussammlung von Dolas, Sabermatty (Gujeratstaat) gekannt. Das war im Jahr, 1819, bei A.P. Hove gesammelt. Im 1852 beschriebte Dunal diese Art als *Solanum hovei* Dunal. Nachdem 1852 hat diese Art in irgend eine indische Flora nämlich, Clarke, 1883, nicht beschriebt oder von einigem Platz im Indien auch berichtet. Das ist seiner erste Bericht von neuer Sammlung des Goas, während unseres Arbeits für die Waldflora des Goas. Es ist interessant und wichtig zu bemerken daß bevor Bestätigung dieser forstforschungsinstitute Sammlung beim British-Museum, London, keiner authentische Exemplar in den indische Pflanzensammlungen verfügbar war. Seine Zerstreung ist zu Zugvögel beigelegt. Man hat die Weise für Erhaltung diese rare örtliche beschränkte Art herausgegeben.

Une note sur l'existence de *Solanum hovei* Dunal en Inde

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Résumé

Solanum hovei Dunal, un buisson ligneux rare, indigène de l'Inde de nord-ouest a été connu jusqu'ici par sa collection type, provenant de Dolas, Sabermatty (Etat de Goudjerate), effectuée par A.P. Hove en 1819. Dunal (1852) décrit l'échantillon de Hove comme *Solanum hovei* Dunal. A partir de 1852, aucune flore indienne n'a décrit cette espèce (viz Clarke 1883) et on ne l'a signalée nulle part en Inde. Elle figure pour la première fois dans les collections effectuées tout récemment au Goa au cours de notre travail relatif à la réalisation de la flore forestière du Goa. Il est à la fois intéressant et important de remarquer qu'aucun échantillon authentique de cette espèce ne se représentait dans les herbiers en Inde, jusqu'à ce que la collection actuelle de l'Institut de Recherches Forestières ne soit confirmée par le "British Museum" à Londres. La dissémination s'effectue par l'intermédiaire des oiseaux émigrants. Des mesures à prendre pour effectuer la conservation de cette espèce rare sont indiquées.

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