

ADDITIONS TO THE FLORA OF HIMACHAL PRADESH, NORTH-WEST HIMALAYA

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Botanical explorations were made in Chamba district of Himachal Pradesh from 1984-1988 under "BSI District Flora Project" sponsored by Botanical Survey of India. Consequently, studies on phytogeography (Singh & Sharma 1989, Sharma & Singh 1990 a), floristic composition (Sharma & Singh 1990 b), herbaceous vegetation (Sharma & Singh 1994) and biological spectrum (Sharma & Singh 1995) of the district have been published. Occurrence of *Gnaphalium coarctatum* Willd.—A South American taxon naturalized in India, has recently been reported for the first time from the district (Singh & Sharma 1988). In continuation, following 28 taxa are being reported as the new plant reports for Himachal Pradesh. These have not been included earlier in their comprehensive three volume compilation entitled 'Flora of Himachal Pradesh, Analysis' by Chowdhery & Wadhwa (1984) or by the subsequent 30 authors (see under references) who have contributed additional plant reports to this work. The arrangement of the families is as in Hooker (1872-1897). All the specimens are preserved in Herbarium, Punjabi University, Patiala (PUN).

PAPILLIONACEAE

***Crotalaria medicaginea* Lam. var. *luxurians* (Benth.)**

Baker Rare, 600-1000 m.

Fl. & Fr. : May - October.

Katori, *Harinder Singh* 12879.

***Desmodium podocarpum* DC. var. *laxum* (DC.) Baker**

Rare, 1600-2400 m.

Fl. & Fr. : July - September.

Khajiar, *Harinder Singh* 14764.

***D. velutinum* (Willd.) DC.**

Rare 600-1200 m.

Fl. & Fr. : July - September.

Naini Khud, *Harinder Singh* 14830.

***Trifolium fragiferum* Linn.**

Naturalized as weed, 800-1800 m.

Fl. & Fr. : April - September.

Chamba, *Harinder Singh* 14757.

***Vicia sativa* Linn. var. *angustifolia* (Linn.) Wahlenb.**

Common, 600-1500 m.

Fl. & Fr. : March - May.

Chamba, *Harinder Singh* 14766.

HALORAGACEAE

***Myriophyllum verticillatum* Linn.**

Seen only in Khajiar Lake (1850 m).

Fl. & Fr. : July - September.

Khajiar Lake, *Harinder Singh* 14577.

LYTHRACEAE

***Ammannia baccifera* Linn.**

Common in rice fields, 600-1600 m.

Fl. & Fr. : July - September.

Chamba, *Harinder Singh* 14292.

***Rotala indica* (Willd.) Koehne**

Common weed of rice fields, 600-1600 m.

Fl. & Fr. : July - October.

Chamba, *Harinder Singh* 14153.

***R. pentandra* (Roxb.) Blatt. & Hallb.**

Common in rice fields, 600-1600 m.

Fl. & Fr. : July - October.

Bathri, *Harinder Singh* 14765.

CUCURBITACEAE

***Cucumis hardwickii* Royle**

Rare, 500 - 600 m.

Fl. & Fr. : July - November.

Chamba, *Harinder Singh* 13844.

COMPOSITAE

Dubyaea oligocephala (Sch.-Bip.) Stebbins

Restricted to a small pocket near Lakkar Mandi (2400 m) on dry exposed rocks.

Fl. & Fr. : August - October.

Lakkar Mandi, *Harinder Singh* 14561.

Gnaphalium pensylvanicum Willd.

Common, 600 - 2100 m.

Fl. & Fr. : March - October.

Bakrota (Dalhousie), Chamba ; *Harinder Singh* 13941, 14079 & 14214.

Hypochoeris glabra Linn.

Common, 1800 - 2700 m.

Fl. & Fr. : July - October.

Lakkar Mandi, *Harinder Singh* 11952.

CAMPANULACEAE

Campanula benthamii Wall. ex Kitamura

Common, 600 - 2700 m.

Fl. & Fr. : March - October.

Chamba, *Harinder Singh* 14226.

CONVOLVULACEAE

Convolvulus microphyllus Sieb. ex Spreng.

Rare; in day waste places, 600 - 1000 m.

Fl. & Fr. : March - June.

Naini Khud, *Harinder Singh* 12900.

SOLANACEAE

Physalis micrantha Link

Rare; waste places, roadsides and cultivated fields, 600 - 1000 m.

Fl. & Fr. : July - October.

Katori border, *Harinder Singh* 14070.

SCROPHULARIACEAE

Lindernia antipoda (Linn.) Alst.

Common in rice fields, 600 - 1200 m.

Fl. & Fr. : June - October.

Chamba, Naini Khud; *Harinder Singh* 14295, 14843.

LENTIBULARIACEAE

Utricularia exoleta R. Br.

In streams, ditches and lakes; 800 - 2700 m.

Fl. & Fr. : June - October.

Khajiar Lake, *Harinder Singh* 14035.

VERBENACEAE

Verbena tenuisecta Briq.

An escape from cultivation in and around Chamba town (900 m).

Fl. & Fr. : July - October.

Chamba, *Harinder Singh* 13855.

POLYGONACEAE

Polygonum hydropiper Linn. subs. **megalocarpum** Danser

Common in moist places, 600 - 1800 m.

Fl. & Fr. : August - October.

Chamba, *Harinder Singh* 14848.

ORCHIDACEAE

Epipactis helleborine (Linn.) Crantz

Common, 2000 - 2700 m.

Fl. & Fr. : July - September.

Lakkar Mandi, *Harinder Singh* 14563.

AMARYLLIDACEAE

Zephyranthes citrina Baker

Established in gardens and waste places in Chamba town and its environs (900 m).

Fl. & Fr. : August - September.

Chamba, *Harinder Singh* 14276.

ALISMATACEAE

Sagittaria guayanensis HBK. subsp. **lappula**
(D. Don) Bogin.

Common in shallow ditches, fresh water ponds
and rice fields; 600 – 1000 m.

Fl. & Fr. : August – October.

Chamba, *Harinder Singh* 14281.

CYPERACEAE

Cyperus haspan Linn.

Common in rice fields, 600 – 1300 m.

Fl. & Fr. : August – October.

Chamba, *Harinder Singh* 14056.

Scirpus supinus Linn. var. **lateriflorus** (Gmel.)
Koyama.

Rare; in rice fields and marshy places, 600 – 1800 m.

Fl. & Fr. : July – September.

Chamba, *Harinder Singh* 14285.

GRAMINEAE

Brachiaria deflexa (Schum.) Hubb. ex Robyns

Rare, 600 – 1600 m.

Fl. & Fr. : August – October.

Naini Khud, *Harinder Singh* 13731.

Cymbopogon olivieri (Boiss.) Bor

Common, 600 – 1500 m.

Fl. & Fr. : May – July.

Chamba, *Harinder Singh* 13959.

Digitaria stricta Roth ex Roem. & Schult. var.
denudata (Link.) Henr.

Common, 600 – 2000 m.

Fl. & Fr. : August – October.

Naini Khud, *Harinder Singh* 14949.

D. stricta Roth ex Roem. & Schult. var. **glabrescens**
Bor

Common, 600 – 2200 m.

Fl. & Fr. : August – October.

Chamba, Bathri ; *Harinder Singh* 13815, 14702.

D. timorensis (Kunth) Bal.

Rare, 800 – 1600 m.

Fl. & Fr. : August – October.

Chamba, *Harinder Singh* 14283.

D. violascens Link.

Rare, 600 – 1300 m.

Fl. & Fr. : April – June.

Sahu, *Harinder Singh* 13967.

Leptochloa panicea (Retz.) Ohwi

In damp rice fields, lawns and other moist
situations, 600 – 900 m.

Fl. & Fr. : August – October.

Katori, *Harinder Singh* 12873.

Setaria pallide-fusca (Schum.) Stapf & Hubb.

In cultivated grounds, 600 – 1400 m.

Fl. & Fr. : August – October.

Chamba, *Harinder Singh* 13820.

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