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## NEW PLANT RECORDS FOR THE PUNJAB PLAINS

Eversince July 1963, the author has been making plant collections from Punjab. During the exploration, some species previously not recorded from the Punjab plains have been gathered. Seven of these, belonging to *Polypetalae*, are listed below along with some pertinent notes. Specimens cited have been deposited in the Herbaria of Panjab University, Chandigarh (PAN), Punjab Agricultural University, Ludhiana (Ludhiana) and Punjabi University, Patiala (PUN).

## RANUNCULACEAE

**Ranunculus arvensis** Linn. Sp. Pl. 555. 1753; Collett, Fl. Simlensis 10. 1902; Bamber, Pl. Punjab 350. 1916.

Collett and Bamber (loc. cit.) recorded the occurrence of this plant from W. Himalaya at an altitude of 1200-2300 m. This has been collected by me at an altitude of 300-330 m, as a weed of cultivation in wheat and clover fields.

*Specimens examined:* Banur, Sharma 2703; Zirkapur, Sharma 3480 (PUN).

*Flowers and fruits:* March-April.

## CARYOPHYLLACEAE

**Sagina apetala** Arduino, Animadvers. Bot. Spec. Alt. 2: 22. 1764.

This is an introduction from Europe. The plant is a slender, wiry, tufted annual with greenish flowers. It usually occurs in flowerbeds or under moist conditions in shady places. Its wiry habit and absence of petals immediately separate it from the rest of the wild members of the family occurring in the Punjab plains.

*Specimens examined:* Nursery Sector 23, Chandigarh, Sharma 1694 (PAN); Government College for boys, Ludhiana, Sharma 848; Baradari Gardens, Patiala, Sharma 1766; Bassi Pathanan, Sharma 2673 (PUN).

*Flowers and fruits:* February-April.

## PORTULACACEAE

**Portulaca parvula** A. Gray in Proc. Am. Acad. 22: 274. 1887.

This is an introduction from tropical America and is found in variety of habitats: under the shade of bushes and trees growing in waste places, or spreading and growing in the crevices of the exposed brick-floors or in meadows. The plant has a preference for exposed, sandy, waste places.

*Specimens examined:* Kauli, Sharma 899; Mahendra College, Patiala, Sharma 1566; Rakhra, Sharma 2154; Patiala, Sharma 2278; Samana, Sharma 2882, 3259 (PUN).

*Flowers and fruits:* March-October.

## OXALIDACEAE

**Oxalis latifolia** H. B. & K. Nov. Gen. & Sp. 5: 237, t. 467. 1821.

Native of Mexico; naturalized in moist and shaded places in gardens, nurseries, well irrigated fruit orchards and in pots along with other ornamentals.

*Specimens examined:* Government College for boys, Ludhiana, Sharma 379 Baradari Gardens, Patiala, Sharma 925 Punjabi University, Patiala, Sharma 3784 (PUN).

*Flowers:* July-September.

## PAPILIONACEAE

**Rhynchosia minima** DC. var. **laxiflora** Baker  
in Fl. Brit. India 2: 223. 1876.

This plant is a common climber on hedges during monsoon period and occurs more frequently in Siwaliks in comparison with plains.

*Specimens examined*: Surajpur Siwaliks, Sharma 2127 (PAN); Phawara Chowk, Ludhiana, Sharma 207; Punjabi University, Patiala, Sharma 931, 1579; Gandakheri, Sharma 2215 (PUN).

*Flowers and fruits*: March-November.

## HALORAGACEAE

**Myriophyllum spicatum** Linn. Sp. Pl. 992. 1753; Subramanyam, Aquatic Angiosperms 17. 1962.

Subramanyam (loc. cit.) records the occurrence of this species at about 500-2000 m in Kashmir, northern boundary of Punjab and Uttar Pradesh. This plant has been collected from the localities at an altitude of about 240 m. It is very common in irrigation canals along with *Potamogeton perfoliatus* Linn. which has also descended from W.

Himalaya (alt. 1200-2500 m). So far I have not seen this plant outside Patiala district.

*Specimens examined*: Rakhra, Sharma 2290, 3217; Patiala, Sharma 2537; Samana, Sharma 3279 (PUN).

## UMBELLIFERAE

**Apium tenuifolium** (Moench.) Thell. in Hegi, Ill. Fl. Mitteleur. 5(2): 1140. 1926.

A native of America. Previously this plant was collected from Pinjore gardens (alt. 600 m), near Kalka hills. The plant was collected again at an altitude of 250 m from Patiala and 330 m from Bhankarpur, growing as a weed in moist and shaded places of gardens and in Ghaggar river-bed respectively.

*Specimens examined*: Pinjore gardens, Sharma 2610 (PAN); Baradari gardens, Patiala, Sharma 2509; Bhankarpur, Sharma 3489 (PUN).

*Flowers and fruits*: March-May.

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## TWO NEW RECORDS OF THE GENUS OXALIS FOR JAMMU AND KASHMIR STATE

Floristic studies of Jammu City have brought to light two species of genus *Oxalis* namely *O. latifolia* H. B. & K. and *O. martiana* Zucc. as additions to those already recorded from this state. Specimens of the two species have been deposited in the herbarium of Jammu University.

**Oxalis latifolia** H. B. & K. Nov. Gen. & Sp. 5: 237, t. 467. 1821.

A stemless perennial herb; sparingly pubescent; bulbs ovate, 0.8-1.2 cm thick; leaves digitately 3-foliate, borne on 22-25 cm long petiole; young leaves pilose; leaflets broadly obdeltoid or obsagittate, 1.5-2.0 cm long and 2.5-3.5 cm broad; stipules scaly, adnate

to the petiole, 1.9-1.5 cm; flowers violet in umbels on 22-28 cm long peduncles; bracts lanceolate, 0.3 cm; pedicels filiform, 1.2-1.5 cm long; sepals lanceolate, 0.4 cm long; petals cuneate, twice the size of sepals; capsule cylindrical, 0.5 cm; seeds round, concave, 3-5 in each cell.

Shady locations in the lawns of Government Guest House, Canal Road, Jammu (JL<sub>1</sub>).

*Flowers*: March-June.

**O. martiana** Zucc. in Denkschr., Akad. Muench 9: 144, n. 6, 1823-24.

Pubescent perennial herb; bulbs globose, 1-1.5 cm across; petioles 10-15 cm long; leaf-