NEW RECORDS OF PLANTS FROM RAJASTHAN

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The forests of southern Rajasthan, especially Mount Abu, Phulwari, Sitamata and Kumbhalgarh wildlife sanctuaries have great floral diversity according them 'mega floral diversity spots' of Rajasthan. The valleys and stream banks of these protected areas are rich in terrestrial orchids, tuberous plants, climbers and lianas as well as pteridophytic and bryophytic flora. During botanical surveys, conducted from 2001 to 2004, many new plant specimens were collected from many sites of southern and eastern Rajasthan, which are new to the flora of Rajasthan. A list of newly recorded species is given in Table 1.

Literature review on the flora of Rajasthan (Sharma & Tiagi, 1979; Shetty & Pandey, 1983; Singh, 1983; Shetty & Singh, 1987, 1991, 1993; Bhandari, 1990) revealed that *Tacca leontopetaloides*, *Stephania hernandilolia*, *Crinum latifolium* and *Costus speciosus* are not included in any of the state's Floras. Hence these species are new records for Rajasthan and worth publishing. According to Shetty and Singh (1991), *Peperomia pellucida* is a native of South America, naturalized in many parts of India including Rajasthan. It was collected from Jodhpur by Dr. Bhandari (Shetty & Singh, 1991). Since there is no dense forest in Jodhpur, it was perhaps collected from some garden found as a weed, and not from the forest. In Sitamata Wildlife Sanctuary, it is seen growing as ground flora near Valmiki Ashram under the dense shade of various trees. Thus it is the first report of the occurrence of this introduced invasive species in the wild in Rajasthan.

Nymphaea rubra is quite similar to *N. pubescens* and the latter is common in ponds of southern Rajasthan. The leaves, petioles, petals, stamens, fruits and fruit-stalk of *N. rubra* are red in colour (Venu *et al.*, 2003). *N. rubra* is found in many ponds of Banswara district and is seen growing with *N. pubescens*. Devotees offering flowers in the many temples of Banswara probably could be the reason for the introduction of *N. rubra* to the area.

Two varieties of *Jatropha gossypiifolia* namely *elegans* and *gossypiifolia* are present in Rajasthan. Both the varieties have different colour pattern in their body parts (Pullaiah & Chennaiah, 1997). Young leaves including petioles and glands are of dark purple in colour in *Jatropa gossypiifolia* var. *elegans* which is common everywhere, while *green in J. gossypiifolia* var. *gossypiifolia*. The nominate variety is rare in Rajasthan. So far it has been seen inside Kota city in moist pockets in southeastern Rajasthan and in Wakal river bed near Gau-Pipla village in Phulwari Wildlife Sanctuary in southern Rajasthan.

Table 1. New records of plants in the wild from Rajasthan

	Name of Plants & Family	Locality of occurrence with local status* (in parenthesis) Phulwari WS (Dist. Udaipur)	Sitamata WS (Dist. Udaipur & Chittorgarh)	Kumbhalgarh WS (Dist. Udaipur, Rajsamand & Pali)	Todgarh - Raoli WS (Dist. Rajsamand, Pali & Ajmer)	Other areas in Rajasthan
1.	*Stephania hernandifolia* Walp. (Menispermaceae)	Chuna Pani near Mahad, Range Mamer (R)	Near Bhagi Baodi (West of Forest Raod) (R)	-	-	-
2.	*Nymphaea rubra* Roxb. ex Andrews (Nymphaeaceae)	-	-	-	-	Lodha and Kupda pond (Banswara Dist.) (R)
3.	*Peperomia pellucida* (L.) H.B. & K. (Piperaceae)	-	Near Valmiki Ashram (LC)	-	-	-
4.	*Costus speciosus* (Koenig) Smith (Zingiberaceae)	1. Gamdi-ki-Nal and Dhedmariya, Range Kotra (R) 2. Bhildi Mata nallah and Katawali Jer, Range Panarwa (R)	Along bank of stream from Bhagi Baodi to Sitamata temple (C)	-	-	Khokhariya-ki-Nal, Kamalnath, Ladan and Ramkunda Forest Blocks**
5.	*Crinum latifolium* L. (Amaryllidaceae)	Thala, Sarvam, Katawali Jer, Mamer (LC)	Arampura (LC)	Areth Gate, Thandiberi, Ranakankar, Bokhada, Malgarh (LC)	Kabar Data barrack, Dhudleshwar Mahadeo temple (LC)	Som, Madri, Garanwas, Kamalnath and Nal Sandol Forest Blocks**
6.	*Jatropha gossypiifolia* L. var. *elegans* (Pohl) Muell.-Arg. (Euphorbiaceae)	Common (C)	Common (C)	Common (C)	Common (C)	Common (C)
7.	*Tacca leontopetaloides* (L.) Kuntze (Taccaceae)	1. Chuna Pani near Mahad, Range Mamer (R) 2. Gamdi-ki-Nal, Range Kotra (R)	Near Valmiki Ashram, on the way to Sitamata temple (R)	-	-	Kamalnath,Ramkunda, Ladan, Khokhariya-ki-Nal Forest Blocks**

R - Rare; LC - Less Common; C - Common; A - Abundant; ** All are under the jurisdiction of Udaipur (Central) Forest Division

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Mimusops elengi Linnaeus (Sapotaceae), a new larval food plant of *Euploea core core* (Cramer) (Lepidoptera: Nymphalidae)

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The Common Indian Crow, *Euploea core core* (Cramer) (Lepidoptera: Nymphalidae) is the commonest butterfly species found both in plains and hills in India. It is a polyphagous insect, known to lay eggs on several species belonging to families Moraceae, Asclepiadaceae and Apocynaceae plants such as *Ficus benghalensis*, *F. racemosa*, *F. arnottiana*, *F. religiosa*, *F. elastica*, *Streblus asper*, *Cryptolepis elegans*, *C. buchanani*, *Hemidesmus indicus*, *Tylophora indica*, *Holarrhena pubescens*, *Ichnocarpus frutescens*, *Carissa carindas*, *Nerium odorum* and *N. oleander* (Wynter-Blyth (1957); Gay *et al.* (1992); Kunte (2000); Jafer Palot and Radhakrishnan (2001)).

Mimusops elengi Linnaeus of the family Sapotaceae is a medium-sized tree found mostly in the forested areas of the Western Ghats and the sacred groves of Kerala. The tree is locally known as 'Elangi' and is noted for its gregarious flowering and fragrance.

During our study on the butterflies of Kerala, we observed the Common Indian Crow laying eggs on the leaves of *Mimusops elengi*. The butterfly completed its life cycle on the tree during the later part of southwest monsoon in August and September. The present record of *Mimusops elengi* Linnaeus is a new addition to the list of larval food plants of the Common Indian Crow Butterfly, *Euploea core core* (Cramer).

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