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Additional floral elements to the Ranthambhore Tiger Reserve, Rajasthan, India

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Ranthambhore Tiger Reserve (RTR), located in the south-eastern part of Sawai Madhopur District of Rajasthan State in western India, is well known for the Indian Tiger - a subspecies in crisis. It is located between 25°54′-26°12′N & 76°23′-76°35′E, with an area of 1333.88km² at the average altitude of 350m. The dense forests of *Anogeissus pendula* Edgew. (Dhok), along with other tree associates and shrubby and herbaceous layers, provide shelter and food for wildlife.

Sharma (1983), Das (1987), Das & Singh (1995) and others reported 392 species of higher plants. General vegetation account and floristic studies of Sawai Madhopur district have also been carried out by Jain (1960), Mathur (1987), and Das (1990).

The reserve sustains many rare and endangered plant species, most of which are considered threatened now. Many wild relatives of crop plants have also been identified as a potential genetic resource. Therefore the BSI surveyed the RTR for more than four years (from February 2001 to March 2005) and compiled data. A total of 539 species of flowering plants were collected (Singh & Shrivastava 2007), of these, the occurrence of 398 species were recorded by earlier workers. Thus 141 species belonging to 113 genera spread over to 48 families are additions.

Field surveys were conducted to the study of floristic diversity of RTR. Specimens collected were preserved and identified with the help of regional flora volumes, viz. Flora of Rajasthan (Shetty & Singh 1987-1993) and Flora of North-

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eastern Rajasthan (Sharma & Tiagi 1979) and matching with the types in various Indian herbaria including the Botanical Survey of India, Jodhpur (BSJO), Central National Herbarium, Kolkata (CNH) and



Herbarium of Rajasthan University, Jaipur (RUBL). All the voucher specimens are deposited in BSJO. Arrangement of families is according to Bentham and Hooker (1862-1883). Introduced species are marked with an asterisk (*) against the

The present study not only records 141 species of flowering plants as additions to RTR but also reports 75 species as additions to Sawai Madhopur district where the RTR exists. It is interesting to note that 20 grasses (Poaceae) and 14 sedges (Cyperaceae) taxa were also added. Implementation of wildlife protection rules and regulations and proper conservation and management strategies may form RTR more suitable habitat for *in-situ* conservation for the species of rare occurrence.

Species highlights:

In this study, an interesting, rare species considered to be endemic to western Rajasthan, Abutilon bidentatum Hochst. ex A. Rich. var. major (Blatt. & Hallb.) Bhandari was collected. Its occurrence in Aravalli hills shows extended distribution eastwards. Two new records to Indian flora, Tephrosia uniflora Pers. and Pergularia tomentosa L. of rare occurrence reported in the study area. Oryza rufipogon Griff., Luffa acutangula (L.) Roxb. var. amara (Roxb.) C.B. Clarke and Cajanus scarabaeoides (L.) du Petit-Thou. are some of the wild relatives of crop plants facing threats. It is worth mentioning that RTR is the only habitat in Rajasthan from where four taxa viz. Fimbristylis dipsacea (Rottb.) Clarke, Pergularia tomentosa L., Tephrosia uniflora Pers. and Abrus pulchellus Wall. ex Thw. have been reported. Some species which became restricted in distribution due to adverse ecological factors or inadequate reproductive mechanism are Capparis sepiaria L. var. vulgaris Hook. f. & Thoms., Oxalis corymbosa DC., Ziziphus mauritiana Lam. var. hysudrica (Edgew.) Almeida, Gardenia turgida Roxb. var. montana (Roxb.) Hook. f., Ceropegia bulbosa Roxb. var. lushii (Grah.) Hook. f., Convolvulus prostratus Forssk. var. deserti (Hochst. & Steud. ex Baker & Rendle) Parmar, Ipomoea nil (L.) Roth var. himalaica (Clarke) Johri, Euphorbia granulata Forssk. var. glabrata Boiss., Eriophorum comosum (Wall.) Wall. ex Clarke, Brachiaria lata (Schumach.) C. E. Hubbard var. pubescens C.E. Hubbard, Pennisetum pedicellatum Trin. subsp. unispiculum Brunken, and Vetiveria lawsonii (Hook. f.) Blatt. & McC.

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Table 1. Enumeration of species.

	Family	Botanical Name	Locality	Collection no. with Collector's Name	Habit	Fl. & Fr.	Remarks
1.	Brassicaceae	+ Farsetia hamiltonii Royle	Near Jogimahal	17095 AS	U	Sept-Feb	Fairly common, in the moist, shady places
2.	Cleomaceae	+ Cleome scaposa DC.	Mansarovar	17063 AS	Н	Aug – Nov	Occasional, on rocky slopes and in open
3.	Capparaceae	+ Capparis sepiaria L. var. vulgaris Hook. f. & Thoms.	Jogimahal	17342 AS	S	Mar – June	scrubs Rare, in scrub forests
4.	Capparaceae	+ Crateva adansonii DC.	On way to Fort	17023 AS	Т	Mar – June	Rare, in the valleys and low-lying areas
5.	Violaceae	Hybanthus enneaspermus (L.) Muell.	Mansarovar and Guda Forest	17064 & 19092 AS	Н	Aug – Nov	Common, in wastelands and open plains
6.	Caryophyllaceae	Polycarpon prostratum (Forssk.) Aschers. & Schweinf.	Galaisagar and Mansarovar	17306 & 19082 AS	Н	July - Oct	Occasional, in wet lands and beds of ponds
7.	Malvaceae	+ Abutilon bidentatum Hochst. ex A. Rich.	Jogimahal	16968 AS	U	Sept – Dec	Common, as forest under growth and in othe shady places
3.	Malvaceae	+ Abutilon bidentatum Hochst. ex A. Rich. var. <i>major</i> (Blatt. & Hallb.) Bhandari	Amarkund, on way to Fort	19014 AS	U	Sept – Dec	Endemic to W. Rajasthan; its occurrence in Aravallis shows extended distribution eastwards. Rare
9.	Malvaceae	+ Sida mysorensis Wight & Arn.	Jogimahal	16969 AS	U	Sept – Dec	Occasional, as forest under-growth
10.	Tiliaceae	Corchorus depressus (L.) Vicari	Near Jogimahal and Darrah, Anatpura	17089 & 19123 AS	Н	Aug – Mar	Common, in dry sandy beds of water bodies
11.	Tiliaceae	Corchorus tridens L.	Near Jogimahal and Darrah, Anatpura		Н	Aug – Nov	Common, in open forests and ravines
12.	Tiliaceae	+ Grewia tenax (Forssk.) Fiori	Banderwal Bawri, Anatpura	17075 AS	S	Aug – Nov	Occasional, in ravines and on the exposed hilly tracts
3. 4.	Tiliaceae Malpighiaceae	Grewia villosa Willd. + Hiptage benghalensis (L.) Kurz	Ganesh temple, Fort On way to Fort	16952 AS 16840 AS	S C	Aug – Oct Jan – Apr	Rare, in open forests Rarely seen in the forests
15.	Zygophyllaceae	+ Fagonia bruguieri DC.	Galaisagar	16886 AS	Н	Oct – Mar	Common, in dry sandy areas
16. 17.	Oxalidaceae Oxalidaceae	+ Biophytum sensitivum (L.) DC. Oxalis corniculata L.	Anatpura Galaisagar, Mishradarrah and Jogimahal	17086 AS 16894, 17344 & 17378 AS	H H	Aug – Oct Y	Rare, in moist habitats Common, in old monuments and in wet, shady forest grounds
18.	Oxalidaceae	+ Oxalis corymbosa DC.	Baba-ki-Gupha, Lakkardah	19154 AS	Н	Sept – Dec	Rare, in marshy and shady localities
9.	Rutaceae	*Citrus aurantium L.	Kamaldhar	17326 AS	Т	Oct – Mar	Planted near pilgrimage sites
20.	Rutaceae	*Murraya koenigii (L.) Spreng.	Jogimahal	16806 AS	Т	Mar – June	Planted near human habitations
21.	Simaroubaceae	Ailanthus excelsa Roxb.	Galaisagar	16877 AS	Т	Dec - July	Probably introduced, no grows in wild.
22.	Rhamnaceae	+ <i>Ziziphus mauritiana</i> Lam. var. <i>hysudrica</i> (Edgew.) Almeida	Rajbag	17332 AS	Т	Sept – Dec	Rare, in the open dry deciduous forests
23.	Fabaceae	Abrus pulchellus Wall. ex Thw.	On way to Kamaldha	17014 AS	С	Aug – Nov	Rare, in deep forested areas
24. 25.	Fabaceae Fabaceae	+ Alysicarpus hamosus Edgew.+ Alysicarpus monilifer (L.) DC.	Ganesh temple, Fort Mishradarrah and Mansarovar	16937 AS 16999 & 17046 AS	H H	Aug – Oct Aug – Nov	Rare, in grasslands Frequent, among grasses
26.	Fabaceae	+ Alysicarpus scariosus (Rottl. ex Spreng.) Grah. ex Thw.	Mansarovar	17052 AS	Н	Aug – Nov	Rare, in moist localities
27.	Fabaceae	+ Crotalaria hirsuta Willd.	Mansarovar	19069 AS	Н	Aug – Nov	Rare, in open forests among grasses
28.	Fabaceae	+ Indigofera oblongifolia Forssk.	Galaisagar	16889 AS	S	Sept – Mar	Occasional, in grasslands forming scattered patches
29.	Fabaceae	+ Indigofera sessiliflora DC.	Jogimahal	17303 AS	H	Aug – Nov	Rare, in grasslands
i0.	Fabaceae Fabaceae	Pongamia pinnata (L.) Pierre Tephrosia uniflora Pers.	Mordoongri Mansarovar	17368 AS 17051 AS	T U	Mar – June Aug – Nov	Probably introduced Rare, in exposed hilly tracts and weeds of
32.	Fabaceae	+ Teramnus labialis (L. f.) Spreng.	Jogimahal	16977 & 19099 AS	С	Oct – Feb	cultivated fields Rare, among shrubs and
3.	Caesalpiniaceae	Bauhinia variegata L.	On way to Fort	17028 AS	Т	Sept – Dec	bushes. Rare, probably
34.	Caesalpiniaceae	*Delonix regia (Bojer ex Hook.) Rafin.	Fort	16959 AS	Т	Oct - Mar	introduced Planted near pilgrimage sites
35.	Caesalpiniaceae	Senna obtusifolia (L.) Irwin & Barneby	On way to Fort	19022 AS	U	Aug – Nov	Common in wasteland and in exposed hilly tracts

	Family	Botanical Name	Locality	Collection no. with Collector's Name	Habit	Fl. & Fr.	Remarks
36.	Mimosaceae	Acacia senegal (L.) Willd.	Galaisagar	16900 AS	Т	Aug – Dec	Common in ravines in
37.	Mimosaceae	Mimosa pudica L.	Anatpura	17081 AS	U	Aug – Nov	scrub forests Rare, in wet and shady habitats
38.	Mimosaceae	Prosopis cineraria (L.) Druce	Kachida	16855 AS	Т	Mar – May	Occasional, in the
39.	Myrtaceae	*Psidium guajava L.	Kamaldhar	17327 AS	Т	Sept – Feb	outskirts of the forests Planted near pilgrimage sites and near habitations
40.	Lythraceae	Ammannia baccifera L.	Lahpur	19102 AS	Н	Υ	Common, in aquatic and
41.	Lythraceae	Ammannia multiflora Roxb.	Mishradarrah and Piplideh, near Sultang	16989 & 19038 AS	Н	Υ	marshy habitats Common, in aquatic and marshy habitats
42.	Lythraceae	+ Rotala densiflora (Roth ex Roem. & Schult.) Koehne	Mishradarrah	16990 AS	Н	Sept – Dec	Rare, in marshlands
43.	Cucurbitaceae	Blastania garcinii (Burm. f.) Cogn.	Ranideh, Anatpura	19116 AS	С	Sept – Dec	Occasional, among thickets of shrubs and bushes
44.	Cucurbitaceae	+ Bryonopsis laciniosa (L.) Naud.	Fort	16957 AS	С	Aug – Oct	Rare, on the outskirts
45.	Cucurbitaceae	Citrullus lanatus (Thunb.) Matsumura & Nakai	Mansarovar	19068 AS	С	Aug – Nov	Frequent, near the cultivated fields
46.	Cucurbitaceae	Luffa echinata Roxb.	On way to Fort	17005 AS	С	Aug – Nov	Occasional, among bushes and shrubs
47.	Passifloraceae	+ Passiflora foetida L.	Near Galaisagar and Galaisagar	17077, 17305 & 19113 AS	С	Aug – Mar	Common, on thickets
48.	Cactaceae	Opuntia elatior Mill.	Ranideh, Anatpura	16871 AS	S	Jan – June	Occasional, in open eroded outskirts of forests
49.	Rubiaceae	+ Gardenia turgida Roxb. var. montana (Roxb.) Hook. f.	Berda	19169 AS	Т	Apr – June	Rare, in interior parts of forests at medium elevation
50.	Asteraceae	+ Ageratum conyzoides L.	On way to Fort	17032 AS	Н	Υ	Common, in moist and shady places
51.	Asteraceae	Amberboa ramosa (Roxb.) Jafri	Galaisagar	16881 AS	Н	Oct-Apr	Occasional, in eroded sandy areas on the outskirts
52.	Asteraceae	+ Blumea eriantha DC.	On way to Fort	17039 AS	Н	Nov – Apr	Rare, in shady and humid places among grasses
53.	Asteraceae	+ Blumea laciniata (Roxb.) DC.	Rajbag	16829 AS	Н	Nov – Apr	Common, in moist shady places on the periphery of forests; often seen on the walls of old monuments
54.	Asteraceae	+ Blumea membranacea DC. var. jacquemontii (Hook. f.) Rand.	Fort and Jogimahal	16801 & 17337 AS	Н	Nov – Apr	Common, in the grasslands and among thickets
55.	Asteraceae	Dicoma tomentosa Cass.	Anatpura and	17079 & 17093 AS	Н	Aug – Mar	Common, usually grows on gentle slopes of hills
56.	Asteraceae	Echinops echinatus Roxb.	Near Jogimahal Berda	16860 AS	Н	Oct - May	Occasional, in ravines and in exposed & eroded plains in the peripheral
57.	Asteraceae	Grangea maderaspatana (L.) Poir.	Rajbag and Galaisagar	16837 & 17309 AS	Н	Υ	zones Common, inhabits wet
58.	Asteraceae	Launaea residifolia (L.) O. Ktze.	Near Galaisagar	17065 AS	Н	Υ	beds of reservoirs Frequent, in dry eroded habitats on the fringe of
59.	Asteraceae	+ Parthenium hysterophorus L.	Galaisagar and Jogimahal	16893 & 19098 AS	Н	Aug – Feb	forests Recently invaded the Park and established well in peripheral zones forming patches
60.	Asteraceae	Pulicaria angustifolia DC.	Near Jogimahal	17090 AS	Н	Oct - Mar	Occasional, in open wastelands and fallow
61.	Oleaceae	*Jasminum sambac (L.) Ait.	Galaisagar	16890 AS	S	Feb – May	land Planted near pilgrimage sites and human habitations
62.	Oleaceae	Nyctanthes arbor-tristis L.	Fort	17006 AS	S	Aug – Nov	Common in the forests, sometimes constitutes dense thickets
63.	Salvadoraceae	Salvadora persica L.	Singhdwar, Way to Fort	19188 AS	Т	Dec - May	Occasional, inhabits dry sandy areas
64.	Apocynaceae	Wrightia arborea (Dennst.) Mabb.	Darrah, Anatpura	19118 AS	Т	Apr – Sept	Rare, in open outskirts of hills to middle elevation along the slopes

	Family	Botanical Name	Locality	Collection no. with Collector's Name	Habit	Fl. & Fr.	Remarks
65.	Asclepiadaceae	Pergularia tomentosa L.	Futabundh	9979 Das	С	Feb – May	Rare, in open and scrub
66.	Gentianaceae	Canscora diffusa (Vahl) R. Br.	Bhakola	16867 AS	Н	Oct – Mar	forests Rare, along water channels passing
67.	Boraginaceae	+ Heliotropium strigosum Willd. subsp. brevifolium (Wall.) Kazmi	Chiroli	17319 AS	Н	Sept – Mar	through rocky terrain Rare, forms carpet vegetation in dried water
68.	Ehretiaceae	+ Cordia obliqua Willd.	Jogimahal	17336 AS	Т	Oct – Mar	reservoirs Occasional, in the mixed
69.	Convolvulaceae	Convolvulus prostratus Forssk.	Mishradarrah	17003 AS	Н	Aug – Feb	deciduous forests Common, in exposed
70.	Convolvulaceae	+ Convolvulus prostratus Forssk. var. deserti (Hochst. & Steud. ex Baker & Rendle) Parmar	Galaisagar	16896 AS	Н	Sept – Mar	degraded habitats Rare, in the ravines
71.	Convolvulaceae	+ Evolvulus nummularius (L.) L.	Jharokha	19137 AS	Н	July – Nov	Rare, in wet shady
72.	Convolvulaceae	+ Ipomoea dichroa (Roem. &	Chiroli anicut	19161 AS	Н	Aug – Dec	habitats Rare, in the outskirts of forests and fallow lands
73.	Solanaceae	Schult.) Choisy + <i>Physalis micrantha</i> Link	Fort	16961 AS	Н	Aug – Nov	Rare, in the moist shady
74.	Solanaceae	Withania somnifera (L.) Dunal	On way to Fort	19010 AS	U	Y	places Common, in moist, shady places, often abundant near
75.	Scrophulariaceae	Striga gesnerioides (Willd.) Vatke	Jharokha	19134 AS	Н	Aug – Oct	habitations Rare, in rocky habitats, particularly on hill-slopes as a root parasite on
76.	Scrophulariaceae	Veronica anagallis-aquatica L.	Mishradarrah	17346 AS	Н	Sept – June	Euphorbia neriifolia L. Rare, in moist to marshy
77.	Pedaliaceae	Pedalium murex L.	Mishradarrah	16984 AS	Н	Aug – Dec	habitats Common, in the fallow
78.	Acanthaceae	+ Andrographis paniculata (Burm. f.)	Anatpura	17085 AS	U	Dec – Mar	lands Frequent, in open
79.	Acanthaceae	Wall. ex Nees + <i>Blepharis linariaefolia</i> Pers.	Lahpur	19106 AS	Н	July - Dec	grasslands Occasional, in rocky areas on steep hill-
80.	Acanthaceae	+ <i>Dicliptera verticillata</i> (Forssk.) C. Christens.	Jogimahal and Shail eshwar Mahadev, Gu		Н	Oct – Jan	slopes Common, in moist, shady places in valleys and on gentle slopes of hills
81.	Acanthaceae	+ <i>Dipteracanthus patulus</i> (Jacq.) Nees var. <i>alba</i> (Saxton) Bhandari	Ganesh temple	16939 AS	Н	Jan – Dec	Rare, among grasses in the open periphery of forests
82.	Acanthaceae	Eranthemum purpurascens Wight ex Nees	Shaileshwar Mahadev, Guda	19144 AS	U	Oct – Mar	Rare, in densely forested areas in moist and shady places, particularly on hill-slopes
83.	Acanthaceae	+ Hygrophila serpyllum (Nees) Anders.	Lahpur	19101 AS	Н	Oct - Feb	Rare, inhabits marshy places
84.	Acanthaceae	+ Justicia procumbens L.	Near Jogimahal	17097 AS	Н	Υ	Occasional, among grasses in moist shady places
85.	Acanthaceae	+ <i>Justicia quinqueangularis</i> Koenig ex Roxb.	On way to Fort	17040 AS	Н	Aug – Nov	Occasional, along water channels among grasses
86.	Acanthaceae	+ Lepidagathis hamiltoniana Wall. ex Nees	Anatpura	19164 AS	Н	Nov – Mar	Frequent, on the exposed hills
87.	Acanthaceae	+ Ruellia tuberosa L.	Mishradarrah	16905 AS	Н	Aug – Nov	Rare, in wet crevices of
88.	Acanthaceae	Rungia repens (L.) Nees	On way to Kamaldhar	17017 AS	Н	July - Oct	rocks Rare, in moist shady
89.	Verbenaceae	+ Lantana wightiana Wall. ex Gamble	Galaisagar	16882 AS	S	Υ	places Rare, sparsely scattered
90. 91.	Lamiaceae Lamiaceae	Ocimum americanum L. + Ocimum gratissimum L.	Darrah, Anatpura Fort	19121 AS 16956 AS	U U	Y Y	in the peripheral zones Common, in flat terrain Occasional, in exposed
92.	Nyctaginaceae	*Bougainvillea spectabilis Willd.	Thumka	16875 AS	s	Υ	hilly tracts Planted near human
93.	Amaranthaceae	+ Alternanthera paronychioides St.	Mansarovar	17364 & 19083 AS	Н	Υ	habitations Common, in wet and marshy beds of
94.	Amaranthaceae	Alternanthera pungens Kunth	Rajbag	17335 AS	Н	Υ	reservoirs Occasional, in dried
95.	Amaranthaceae	+ Amaranthus palmeri Wats.	Fort	19180 AS	Н	Sept - Nov	ponds Occasional, in exposed
96.	Amaranthaceae	+ Pupalia lappacea (L.) Juss. var. velutina (Moq.) Hook. f.	Jogimahal	16970 AS	Н	Oct – Feb	hilly tracts Occasional, on the periphery

	Family	Botanical Name	Locality	Collection no. with Collector's Name	Habit	Fl. & Fr.	Remarks
97.	Polygonaceae	+ <i>Polygonum barbatum</i> L. subsp. <i>gracile</i> Danser	Berda	16862 AS	Н	Sept – Mar	Occasional, in aquatic and marshy places, usually on margins of
98.	Aristolochiaceae	+ Aristolochia bracteolata Lam.	Singhdwar	19189 AS	Н	July – Nov	reservoirs Occasional, found scattered in thickly forested areas under
99.	Euphorbiaceae	+ Chrozophora prostrata Dalz. var. parvifolia (Klotz. ex Schweinf.) Duthie	Kamaldhar	19007 AS	Н	Υ	shade Occasional, in gravel , shady places on the
100.	Euphorbiaceae	Croton bonplandianum Baill.	Jogimahal	19094 AS	Н	May – Sept	fringes of forests Occasional, in fallow
101.	Euphorbiaceae	+ Euphorbia granulata Forssk. var.	Mishradarrah	17004 AS	Н	Sept – Dec	land Rare, in rock-crevices in
102.	Euphorbiaceae	glabrata Boiss. + Phyllanthus urinaria L.	Mishradarrah	17001 AS	Н	July - Oct	shady places Occasional, near ditches and other drying water
103.	Moraceae	*Ficus religiosa L.	Jogimahal	16804 AS	Т	Υ	bodies Planted near pilgrimage sites and human habitations; sometimes grows on other trees and
104.	Moraceae	Ficus virens Ait.	Kamaldhar	16850 AS	Т	Oct – June	walls of old buildings Rare, along the water channels flowing through
105.	Hydrocharitaceae	Hydrilla verticillata (L. f.) Royle	On way to Fort	19021 AS	Н	Sept - Nov	rocky areas Common, in stagnant water of ditches, ponds
106.	Hypoxidaceae	+ Curculigo orchioides Gaertn.	Singhdwar	19185 AS	Н	Aug – Nov	and lakes Common, in the interior
107.	Liliaceae	Asphodelus tenuifolius Cav.	Galaisagar	16883 AS	Н	Dec – Mar	parts of the forests Common weed of cultivated fields and
108.	Cyperaceae	+ Cyperus alopecuroides Rottb.	Mishradarrah	16985 AS	Н	Aug – Nov	nearby low-lying areas Occasional, in marshy
109.	Cyperaceae	+ Cyperus atkinsonii C.B. Clarke	Shaileshwar Mahadev, Guda	19148 AS	Н	Dec - May	places Occasional, in sandy soils in rather dry
110.	Cyperaceae	Cyperus iria L.	Mishradarrah	16987 AS	Н	Aug – Nov	conditions Occasional, on marshy banks of flowing
111.	Cyperaceae	+ Cyperus niveus Retz.	Anatpura	19129 AS	Н	Aug – Nov	streams Rare, in moist and marshy habitats, sometimes even in rock crevices
112.	Cyperaceae	+ Cyperus nutans Vahl	Kamaldhar and Futabundh	17398 & 19063 AS	Н	Sept – Feb	Occasional, on the rocky banks of reservoirs
113.	Cyperaceae	Cyperus rotundus L.	Kamaldhar, Mansarovar and Anatpura	16821, 17058 & 19132 AS	Н	Y	Common, in variable habitats from terrestrial to marshy, sometimes as a weed in cultivated fields
114.	Cyperaceae	+ Eriophorum comosum (Wall.) Wall. ex C.B. Clarke	Kamaldhar and Shaileshwar Mahadev Guda	16847 & 19147 AS	Н	Υ	Rare, in moist and shady places, particularly near water reservoirs
115.	Cyperaceae	+ Fimbristylis aestivalis (Retz.) Vahl	Kachida kund	16861 AS	Н	Aug – Jan	Occasional, usually forming small patches in rock-crevices
116.	Cyperaceae	Fimbristylis dipsacea (Rottb.) C.B. Clarke	Near Padma talab, Mansarovar and Surkhora, Malik talab	16805, 17362 & 19176 AS	Н	Aug – May	Common, in wet beds of reservoirs forming green carpet
117.	Cyperaceae	+ Fimbristylis ferruginea (L.) Vahl	Kamaldhar	17399 AS	Н	Aug – Jan	Occasional, near reservoirs
118.	Cyperaceae	Fimbristylis miliacea (L.) Vahl	Mansarovar and	17055 & 19173 AS	Н	Aug – Dec	Common, in wet and
119.	Cyperaceae	+ Fimbristylis quinquangularis (Vahl) Kunth	Surkhora, Malik talab Mansarovar	17060 AS	Н	Aug – Mar	marshy places Common, in marshy
120.	Cyperaceae	+ Fimbristylis sieberiana Kunth	Semli, Anatpura	19159 AS	Н	Aug – Jan	places Occasional, along
121.	Cyperaceae	+ Schoenoplectus lateriflorus (Gmel.) Lye	Lahpur	19110 AS	Н	Sept – Feb	running water streams Occasional, in marshy habitats and sometimes on wet beds of
122.	Poaceae	+ <i>Brachiaria lata</i> (Schumach.) C. E. Hubbard var. <i>pubescens</i> C. E. Hubbard	On way to Fort	19036 AS	Н	Aug – Nov	reservoirs Rare, in moist, shady places; taxon is a native of W. Tropical

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	Family	Botanical Name	Locality	Collection no. with Collector's Name	Habit	Fl. & Fr.	Remarks
							Africa and found in sandy to rocky habitats in the desert of W. Rajasthan – the only place of occurrence in
123.	Poaceae	+ Chloris barbata Sw.	Jogimahal	17302 AS	Н	Aug – Oct	India Occasional, in outskirts of forests
124.	Poaceae	Crypsis schoenoides (L.) Lam.	Mansarovar	17366 AS	Н	Aug – Dec	Occasional, in drying beds of reservoirs and along irrigation channels forming carpet
125.	Poaceae	Cymbopogon martinii (Roxb.) Watson	Jogimahal	16903, 17390 AS	Н	Aug – Mar	Occasional, usually grows along the edges of water courses or in low- lying areas
126.	Poaceae	+ <i>Diplachne fusca</i> (L.) P. Beauv. ex Roem. & Schult.	Kamaldhar	16819 AS	Н	Mar – Oct	Occasional, in muddy and water-logged habitats on the fringes of reservoirs
127.	Poaceae	Eleusine indica (L.) Gaertn.	Anatpura	19133 AS	Н	Aug – Nov	Occasional, in low-lying areas and as a weed in cultivated fields
128.	Poaceae	+ Eragrostis japonica (Thunb.) Trin.	Chiroli	17318 AS	Н	Sept – Dec	Occasional, prefers wet and marshy habitats along the banks of reservoirs; sometimes occurs as a weed in
129.	Poaceae	Eragrostis pilosa (L.) P. Beauv.	Fort	17375 AS	Н	Aug – Dec	cultivated fields Occasional, in moist shady places and wet beds of reservoirs
130.	Poaceae	Eragrostis tenella (L.) P. Beauv. ex Roem. & Schult.	Near Jogimahal	17098, 17385 AS	Н	Aug – Dec	Common, in moist, shady habitats in the flaterrain
131.	Poaceae	+ <i>Eragrostis unioloides</i> (Retz.) Nees ex Steud.	Surkhora, Malik talab	19175 AS	Н	Aug – Nov	Very rare, grows near reservoirs with rocky banks
132.	Poaceae	+ Iseilema Iaxum Hack.	Mansarovar	17057 AS	Н	Aug – Nov	Occasional, in grasslands
133.	Poaceae	Oryza rufipogon Griff.	Surkhora, Malik talab	19177 AS	Н	Aug – Nov	Rare, in inundated low lands or in pools
134.	Poaceae	+ Panicum trypheron Schult.	Futabundh	19069 AS	Н	Aug – Nov	Occasional, among the thickets of shrubs and bushes in fallow lands and outer forests
135.	Poaceae	Paspalidium geminatum (Forssk.) Stapf	Padma talab	17341 AS	Н	Sept – Mar	Common, in marshy and semi-aquatic habitats
136.	Poaceae	Paspalum vaginatum Sw.	Padma talab	17388 AS	Н	Aug – Nov	Common, in marshy habitats, forming pure stands
137.	Poaceae	+ Pennisetum pedicellatum Trin. subsp. unispiculum Brunken	Ranthambhore Fort	17007 AS	Н	Sept – Dec	Rare, in hilly tracts
	Poaceae Poaceae	Perotis hordeiformis Nees + Phragmites karka (Retz.) Trin. ex Steud.	Anatpura Amarkund and Kachida valley	17082 AS 16842 & 19167 AS	H H	Aug – Nov Sept – Dec	Common, in grasslands Occasional, in perennial depressions in low lands forming dense patches
140.	Poaceae	+ Sporobolus helvolus (Trin.) Th. Durantl & Schinz	Jogimahal	17380 AS	Н	Aug – Nov	Occasional, in moist, shady places
141.	Poaceae	<i>Tragus roxburghii</i> Panigrahi	Piplideh, near Sultanpur	19045 AS	Н	Aug – Dec	Common, in exposed flat terrain, usually forming thick patches of the ground

H - Herb; S - Shrub; T - Tree; U - Undershrub; C - Climber; Fl. - Flowering; Fr. - Fruiting; Y - Throughout the year; AS - Anshu Shrivastava; + - Addition to Sawai Madhopur District flora; * - Introduced species.

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