

Newly recorded and discovered angiospermic taxa in the present century from Rajasthan: a review

Kajal Anuragi¹, Farhat Banu², Gazala Aftab³ and Satish Kumar Sharma⁴

¹23, Jai Jagdamba Nagar, Dadi ka Phatak, Murlipura Scheme, Jaipur, Rajasthan, India

²25, OTC Lane-1, Near Aravalli Hospital, Mullatalai, Udaipur, Rajasthan, India

³Sector- 4 LA 25, Near Monilek Hospital, Jawahar Nagar, Jaipur, Rajasthan, India

⁴14-15, Chakariya Amba, Rampura Choraha, Jhadol Road, Udaipur, Rajasthan, India

*Corresponding author: gazalaftab86@mail.com (G.A.)

ABSTRACT

Rajasthan, the largest state in India, harbors rich biodiversity due to its diverse microhabitats. Though nearly 100% of the state falls in arid and semi-arid zone with areas of sparse vegetation, which dispenses uniqueness in biodiversity. A small tract of Bharatpur and Dholpur districts falls into the Gangetic plains. Continuous botanical explorations during the first quarter of the 21st century (2001–2025) have led to the discovery and documentation of several new species, subspecies, and varieties of angiosperms. This review compiles and synthesizes updated records of these newly reported taxa from Rajasthan, focusing on their taxonomic identity, phenology, and ecological significance. Data were collected from major scientific databases including **Scopus**, **Google Scholar**, **BioStor**, **Web of Science**, **PubMed**, **Plant Discoveries**, **Plants of the World Online** and various journals. In total, 95 taxa have been reported distributionally and discovered so far belong to 54 families with 85 genera. These taxa represent a wide range of life forms, viz., herbs, shrubs, trees, climbers/ stragglers. These findings highlight the state's underexplored botanical richness and underscore the ecological resilience of its flora. The study emphasizes the need for continued floristic surveys, systematic taxonomic revisions, and molecular studies to support biodiversity conservation in the state's fragile ecosystems.

Keywords: Angiosperms, New species, Rajasthan, Present century

INTRODUCTION

Rajasthan is located in the northwestern part of the country between 23°3' and 30°12' N-latitude and 69°30' and 78°17' E-longitude (Sharma et al. 2013). The state is recognised for arid and semi-arid biogeographical zones. Many microhabitats are confined to the state, such as perennial and seasonal rivers, hill stations, sand dunes, wetlands, grasslands, deep gorges, springs, waterfalls, etc. These unique habitats always attract plant lovers for their floral diversity. Hence, distinctive flora with their ecological and taxonomical information have been studied and published by a number of taxonomists (Puri et al. 1964; Bhandari 1978; Sharma & Tiagi 1979; Shetty & Pandey 1983; Shetty & Singh 1987, 1991 & 1993; Sharma et al. 2005; Singh & Singh 2006; Tiagi & Aery 2007;

Singh & Srivastava 2007; Kotia et al. 2008; Yadav & Meena 2011; Harikrishna et al. 2022). Several new additions to the Flora of Rajasthan have expanded our knowledge of the State's floral composition (Meena 2013; Dhakad et al. 2019; Kumar et al. 2020; Solanki et al. 2020; Kumar et al. 2020; Purohit 2020; Purohit et al. 2020; Kotiya et al. 2020 & 2021; Choudhary & Meena 2021; Sushila et al. 2021; Ravikumar et al. 2022; Sharma et al. 2022; Sharma & Sarsavan 2023; Kumar et al. 2023; Choudhary et al. 2023; Arigela et al. 2024). Recently, a number of species *i.e.* *Amorphophallus margaritififer*, *Lochroma arborescens*, *Dysphania pumilio*, *Opuntia cylindrica*, *Alternanthera philoxeroides*, *Agalia odoratissima*, *Dodonaea angustifolia*, *Tithonia diversifolia*, *Portulaca bhara*, *Wrightia dolichocarpa* have been reported as new records by Solanki et al. (2024), Sharma & Sarsavan (2024), Srivastava et al. (2025) from Rajasthan.

Received: 5 February 2026 | Accepted: 22 March 2026 |

Published Online: 01 April 2026 |

How to cite: Anuragi K, Banu F, Aftab G, Sharma SK. 2026. Newly recorded and discovered angiospermic taxa in the present century from Rajasthan: a review. Journal on New Biological Reports 15 (1): 5–16. Doi:<https://doi.org/10.65041/JNBR.2026.15.1.2>

METHODOLOGY

Data for the present review were compiled from published literature and verified through major

scientific databases such as Scopus, Google Scholar, BioStor, Web of Science, PubMed, Plant Discoveries, Plants of the World Online and various journals. In addition, relevant literature/ floristic records and herbarium specimens were consulted from the institutional sources, including the Botanical Survey of India, Jodhpur and other regional herbaria. All reported taxa from 2001–2025 were cross-checked for nomenclatural validity and

distributional status in Rajasthan using updated databases and BSI- authenticated references.

RESULTS AND DISCUSSION

The list of angiospermic diversity along with their families, habits, new species/ infraspecies recorded/ discovered from Rajasthan, the locality from where the species is reported for the first time, is given in Table 1.

Table 1. Angiospermic plant species along with family, habit and their distribution in Rajasthan

Sr. No.	Name of Species/ Infraspecies	Family	*Habit	Record Details	
				** Status: New species/ infraspecies recorded/ discovered	*** Locality from where species first time reported and Year of Publication
1.	<i>Nervilia aragoana</i> Gaudich	Orchidaceae	H	NDR ₂	Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2001
2.	<i>Butea monosperma</i> var. <i>lutea</i> (Witt.) Maheshwari	Fabaceae	T	NDR ₂	Girwa, Jhadol, Kotra and Foothills of the forest of Udaipur (Udaipur district) - 2002
3.	<i>Commiphora gileadensis</i> (L.) C. Chr.	Burseraceae	S	NDR ₂	Kedaria Village (Udaipur district) - 2002
4.	<i>Habenaria longicorniculata</i> J. Graham	Orchidaceae	H	NDR ₂	Mount Abu (Sirohi district) - 2002
5.	<i>Physalis maxima</i> Houst. ex. Mill.	Solanaceae	H	NDR ₂	Jodhpur (Jodhpur district) - 2002
6.	<i>Nymphaea rubra</i> Roxb. ex Andrews	Nymphaeaceae	H	NDR ₂	Lodha and Kupda pond (Banswara district) - 2005
7.	<i>Peperomia pellucida</i> (L.) H.B. & K.	Piperaceae	H	NDR ₂	Near Valmiki Ashram (Udaipur, Pratapgarh & Chittorgarh districts) - 2005
8.	<i>Crinum latifolium</i> L.	Amaryllidaceae	H	NDR ₂	Phulwari WLS: Phulwari ki Nal (Udaipur district), Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts), Kumbhalgarh WLS (Udaipur, Rajsamand & Pali districts), Todgarh - Raoli WLS (Rajsamand, Pali & Ajmer districts) - 2005
9.	<i>Tacca leontopetaloides</i> (L.) Kuntze	Taccaceae	H	NDR ₂	Phulwari WLS (Udaipur district), Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2005

10.	<i>Stephania hernandifolia</i> Walp.	Menispermaceae	H	NDR ₂	Phulwari WLS (Udaipur district), Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2005
11.	<i>Jatropha gossypifolia</i> L. var. <i>elegans</i> (Pohl) Muell.-Arg.	Euphorbiaceae	S	NDR ₂	Phulwari WLS (Udaipur district), Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts), Kumbhalgarh WLS (Udaipur, Rajsamand & Pali districts), Todgarh - Raoli WLS (Rajsamand, Pali & Ajmer districts) - 2005
12.	<i>Costus speciosus</i> (Koenig) Smith	Zingiberaceae	H	NDR ₂	Phulwari WLS (Udaipur district), Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2005
13.	<i>Stylosanthes fruticosa</i> (Retz.) Alston	Papilionaceae	H	NDR ₂	Degana tehsil (Nagaur district) - 2006
14.	<i>Nonea caspica</i> (Wild.) G.Don.	Boraginaceae	H	NDR ₂	Dholipal (Hanumangarh district) - 2007
15.	<i>Calamagrostis pseudophragmites</i> (Hall.F.) Koeler var. <i>tartarica</i> (Hook.F.) Bor	Poaceae	H	NDR ₁	Lunkaransar canal (Bikaner district) - 2008
16.	<i>Poa supina</i> Schrad.	Poaceae	H	NDR ₁	Malcoat (Sriganganagar district) - 2008
17.	<i>Cerastium fontanum</i> Baumg	Caryophyllaceae	H	NDR ₂	Chhatargarh, (Bikaner district) - 2008
18.	<i>Enteropogon monostachyos</i> (Vahl.) K. Schum.	Poaceae	H	NDR ₂	Kailana lake (Jodhpur district) - 2008
19.	<i>Senna uniflora</i> (Mill.) Irwin & Barneby	Caesalpiniaceae	H	NDR ₂	Mangrol and Laxmipura villages (Chittorgarh district) - 2008
20.	<i>Tamarix passerinoides</i> Delile ex Desv. var. <i>macrocarpa</i> Ehrenb.	Tamaricaceae	S	NDR ₂	Near Lake Sambhar, Nava (Nagaur district) - 2008
21.	<i>Acacia saligna</i> (Labill.) Wendl.	Mimosaceae	T	NDR ₁	Near Jaipur road, (Bikaner district) - 2008
22.	<i>Bothriochloa insculpta</i> (Hochst.) A. Camus	Poaceae	H	NDR ₂	Sadhuwali (Sriganganagar district) - 2008
23.	<i>Cleome burmannii</i> Wight & Arn.	Cleomaceae	H	NDR ₂	Pansal village (Bhilwara district) - 2009
24.	<i>Peristylus stocksii</i> (Hook.f.) Kraenzl.	Orchidaceae	H	NDR ₂	Guru Sikhar, Mount Abu (Sirohi district) - 2009

25.	<i>Morinda coreia</i> Buch.-Ham.	Rubiaceae	S	NDR ₂	Ata and Keli village (Chittorgarh district), Revera Mahadev (Pratapgarh district) - 2010
26.	<i>Spigelia anthelmia</i> L.	Loganiaceae	H	NDR ₂	Arapura and Lara villages in Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2010
27.	<i>Synedrella vialis</i> (Less.) A. Gray	Asteraceae	H	NDR ₂	Pratapgarh district - 2010
28.	<i>Alectra chitrakutensis</i> (M.A. Rau) K.K. Khanna & A. Kumar	Orobanchaceae	H	NDR ₂	Hindoli tehsil (Bundi district) - 2013
29.	<i>Persea americana</i> Miller	Lauraceae	T	NDR ₂	Mount Abu (Sirohi district) - 2013
30.	<i>Strelitzia reginae</i> Aiton.	Strelitziaceae	H	NDR ₂	Mount Abu (Sirohi district) - 2013
31.	<i>Eriocaulon truncatum</i> Buchanan-Hamilton ex Martius	Eriocaulaceae	H	NDR ₂	Mount Abu (Sirohi district) - 2013
32.	<i>Eriobotrya japonica</i> (Thunberg) Lindley	Rosaceae	S	NDR ₂	Mount Abu (Sirohi district) - 2013
33.	<i>Ruellia brittoniana</i> E.	Acanthaceae	H	NDR ₂	Mount Abu (Sirohi district) - 2013
34.	<i>Heracleum candolleianum</i> (Wight & Arn.) Gamble	Apiaceae	H	NDR ₂	Mount Abu (Sirohi district) - 2013
35.	<i>Blumea malcolmii</i> (C.B. Clarke) Hook.f.	Asteraceae	H	NDR ₂	Bhilwara district - 2013
36.	<i>Tylophora rotundifolia</i> Buch.-Ham. ex Wight	Asclepiadaceae	H	NDR ₁	Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2015
37.	<i>Cyperus conglomeratus</i> subsp. <i>curvulus</i> (Boeckeler) Kukkonen	Cyperaceae	H	NDR ₂	Balab garden farm (Bikaner District) – 2015
38.	<i>Solanum elaeagnifolium</i> Cav.	Solanaceae	H	NDR ₂	Jhunjhunu district – 2016
39.	<i>Commicarpus boissieri</i> (Heimerl) Cufod	Nyctaginaceae	H	NDR ₂	Shri Jogi Mataji Temple (Barmer district) - 2016
40.	<i>Premna resinosa</i> (Hochst.) Schauer subsp. <i>resinosa</i>	Verbenaceae	S	NDR ₂	On way to Jodhpur from Raniwada (Sirohi district) - 2016
41.	<i>Geodorum recurvum</i> (Roxb.) Alston.	Orchidaceae	H	NDR ₂	Near Valmiki Ashram, Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2016

42.	<i>Maytenus senegalensis</i> (Lam.) Exell.	Celastraceae	S	NDR ₂	Naval-ghar (Jhunjunu district) - 2016
43.	<i>Litsea glutinosa</i> (Lour.) C.B. Rob.	Lauraceae	T	NDR ₂	Ranthambhore Tiger Reserve (Sawai Madhopur district) - 2016
44.	<i>Strychnos potatorum</i> L.	Longaniaceae	T	NDR ₂	Phulwari WLS (Udaipur district) - 2017
45.	<i>Tylophora macrantha</i> Hook.f.	Asclepiadaceae	H	NDR ₂	Phulwari WLS (Udaipur district) - 2017
46.	<i>Eulophia herbacea</i> Lindl.	Orchidaceae	H	NDR ₂	Phulwari WLS (Udaipur district) - 2017
47.	<i>Geodorum densiflorum</i> (Lam.) Schltr.	Orchidaceae	H	NDR ₂	Near Valmiki Ashram, Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2017
48.	<i>Borassus flabellifer</i> L.	Arecaceae	T	NDR ₂	Bansi (Chittorgarh district), Velaniaya, Rishabhdeo (Udaipur district), Salumber (Salumber district) - 2017
49.	<i>Dioscorea oppositifolia</i> L.	Dioscoreaceae	S	NDR ₂	Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2017
50.	<i>Baccharoides anthelmintica</i> (L.) Moench	Asteraceae	H	NDR ₂	Kumbhalgarh WLS (Udaipur, Rajsamand & Pali districts) - 2008
51.	<i>Antidesma ghaesembilla</i> Gaertn.	Phyllanthaceae	T	NDR ₂	Ranthambhore Tiger Reserve (Sawai Madhopur district) - 2019
52.	<i>Erythrina suberosa</i> var. <i>sublobata</i> Roxb. Ex Haines	Fabaceae	T	NDR ₂	Kundakhoh gorge near Shahbad town (Baran district) - 2019
53.	<i>Musa rosacea</i> Jacq.	Musaceae	H	NDR ₂	Near Valmiki Ashram, Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2019
54.	<i>Spermadictyon suaveolens</i> Roxb.	Rubiaceae	S	NDR ₂	Udaipur and Rajsamand districts - 2019
55.	<i>Euphorbia jodhpurensis</i> Blatt. & Hallb.	Euphorbiaceae	H	NT	Jodhpur district, Chohtan (Barmer district), Suratgarh (Ganganagar district), Katarghati (Ajmer district) - 2019
56.	<i>Elatostema cuneatum</i> Wight.	Urticaceae	H	NDR ₂	Tipan Ghati Waterfall, Kailadevi WLS (Karauli district) - 2019
57.	<i>Solanum americanum</i> Mill.	Solanaceae	H	NDR ₂	Jaipur, Kota, Bharatpur and Ganganagar districts - 2020
58.	<i>Alopecurus aequalis</i> Sobolewski	Poaceae	H	NDR ₂	Amarpura Jalu (16 AMP), tehsil Sangaria (Hanumangarh district) - 2020

59.	<i>Calligonum crinitum</i> Boiss.	Polygonaceae	S	NDR ₁	Sattasar, Chhatargarh, Napasar, Deshnoke and Lunkaransar (Bikaner district) - 2020
60.	<i>Ipomoea sagittifolia</i> Burm.f.	Convolvulaceae	H	NDR ₁	Todgarh-Raoli WLS (Rajsamand, Pali & Ajmer districts), Chhapli (Rajsamand district) - 2020
61.	<i>Solanum villosum</i> Mill.	Solanaceae	H	NDR ₂	Jaipur (Jaipur district) – 2020
62.	<i>Aloe trinervis</i> C.S. Purohit, Kulloli & Suresh Kumar	Asphodelaceae	H	NT	Shivbari-Jorbhir Conservation Reserve (Bikaner district) -2020
63.	<i>Dalechampia scandens</i> L. var. <i>cordofona</i> (Hochst. Ex Webb.) Muell.-Arg.	Euphorbiaceae	H	NDR ₂	Todgarh-Raoli WLS (Rajsamand, Pali & Ajmer districts) - 2020
64.	<i>Micrococca mercurialis</i> (L.) Benth.	Euphorbiaceae	H	NDR ₂	Todgarh-Raoli WLS (Rajsamand, Pali & Ajmer districts) - 2020
65.	<i>Peristylus lawii</i> Wight	Orchidaceae	H	NDR ₂	Phulwari WLS (Udaipur district) - 2020
66.	<i>Cucumis sativus</i> f. <i>hardwickii</i> (Royle) W.J.de Wilde & Duyfjes	Cucurbitaceae	H	NDR ₁	Todgarh-Raoli WLS (Rajsamand, Pali & Ajmer districts) - 2020
67.	<i>Ceropegia odorata</i> Nimmo ex J. Graham	Asclepiadaceae	H	NDR ₂	Mount Abu (Sirohi district) - 2020
68.	<i>Sesamum alatum</i> Thonn.	Pedaliaceae	H	NDR ₂	Shyampura, Ranoli and Trilokpura villages (Sikar district) - 2021
69.	<i>Striga todgarhica</i> C.S. Purohit	Orobanchaceae	H	NT	Todgarh-Raoli WLS (Rajsamand, Pali & Ajmer districts) - 2021
70.	<i>Veronica polita</i> Fr.	Plantaginaceae	H	NDR ₂	Sariska Tiger Reserve (Alwar district) - 2021
71.	<i>Solanum violaceum</i> Ortega	Solanaceae	H	NDR ₁	Mount Abu (Sirohi district) - 2021
72.	<i>Olox nana</i> Wall. ex Benth.	Olacaceae	S	NDR ₂	Punawali (Chittorgarh district) - 2021
73.	<i>Brugmansia suaveolens</i> (Humb. & Bonpl. Ex Willd.) Bercht. & J. Presl.	Solanaceae	S	NDR ₂	Mount Abu (Sirohi district) - 2021
74.	<i>Indigofera jaisalmerica</i> C.S. Purohit & Kulloli	Fabaceae	H	NT	Brahamsar Dham (Jaisalmer district) - 2021

75.	<i>Datura discolor</i> Bernh.	Solanaceae	H	NDR ₂	Sundhamata Conservation Reserve, (Jalore district) and Jaisalmer Forest Division (Jaisalmer district) - 2022
76.	<i>Peristylus goodyeroides</i> (D.Don) Lindl.	Orchidaceae	H	NDR ₂	Phulwari WLS (Udaipur district) - 2022
77.	<i>Tribulus ochroleucus</i> (Maire) Ozenda & Quezel	Zygophyllaceae	H	NDR ₁	Near Harchand Kidani (Jaisalmer District) - 2022
78.	<i>Bidens bipinnata</i> L.	Asteraceae	H	NDR ₂	Jamwa Ramgarh WLS (Jaipur district) - 2023
79.	<i>Oropetium almeidanum</i> R.N. Kulloli & R.D. Shinde	Poaceae	H	NT	Near Amarsagar sand stone rocky plateau and Vinjorai (Jaisalmer district) - 2023
80.	<i>Datura quercifolia</i> H.B.K.	Solanaceae	H	NDR ₂	Dhar village (Udaipur district) - 2023
81.	<i>Corynandra chelidonii</i> var. <i>pallae</i> (Reddy and Raju) V.S. Raju	Cleomaceae	H	NDR ₂	Manohargarh, Nanirel, Padaluja, Dhamloo (Pratapgarh district) - 2023
82.	<i>Indigofera jodhpurensis</i> Bhellum, Dhar & Magotra	Fabaceae	H	NT	Edge of Jodhpur in the direction of Pali (Jodhpur district) - 2023
83.	<i>Cuscuta campestris</i> Yunck.	Convolvulaceae	H	NDR ₂	Kumbhalgarh WLS (Udaipur, Rajsamand & Pali districts) - 2023
84.	<i>Amorphophallus margaritifera</i> (Roxb.) Kunth.	Araceae	H	NDR ₂	Jamwa Ramgarh WLS (Jaipur district) - 2024
85.	<i>Iochroma arborescens</i> (L.) J.M.H. Shaw	Solanaceae	S	NDR ₂	Mount Abu (Sirohi district) - 2024
86.	<i>Dysphania pumilio</i> (R.Br.) Mosyakin & Clemants	Amaranthaceae	H	NDR ₂	Laxmangarh Forest Block (Sikar district) - 2024
87.	<i>Opuntia cylindrica</i> (Lam.) DC.	Cactaceae	S	NDR ₂	Bhim Bhadak Forest area (Jodhpur district) and Leela Dhora Forest Block (Barmer district) - 2024
88.	<i>Alternanthera philoxeroides</i> (Mart.) Griseb.	Amaranthaceae	H	NDR ₂	Maharana Pratap garden (Udaipur district) and Mount Abu (Sirohi district) - 2024
89.	<i>Cyperus alternifolius</i> Rottb.	Cyperaceae	H	NDR ₂	Ayad river bed area (Udaipur district) - 2024

90.	<i>Aglaia odoratissima</i> Blume	Meliaceae	T	NDR ₂	Kamalnath Reserve Forest of Jhadol tehsil (Udaipur district) - 2024
91.	<i>Nerium oleander</i> L. var. <i>roseum</i>	Apocynaceae	S	NDR ₂	Various streams of Udaipur, Rajsamand, Alwar, Baran and Pali districts - 2024
92.	<i>Dodonaea angustifolia</i> L.f.	Sapindaceae	S	NDR ₂	Gogunda, Udaipur, Ogha (Udaipur district) - 2024
93.	<i>Tithonia diversifolia</i> (Hemsl) A. Gray	Asteraceae	H	NDR ₂	Sitamata WLS (Udaipur, Pratapgarh & Chittorgarh districts) - 2024
94.	<i>Portulaca bharat</i> Amber Srivast., N. Chauhan, S.S. Dash & Sunil K. Singh	Portulacaceae	H	NT	Amargarh Leopard Conservation Reserve (Jaipur district) - 2025
95.	<i>Wrightia dolichocarpa</i> Bahadur & Bennet	Apocynaceae	T	NDR ₂	Village Obra Khurd, tehsil Gogunda and Ubeshwar Forest Block (Udaipur district) - 2025

*Habit: **H** – Herb, **S** – Shrub, **T** – Tree; **Status: New species/ infraspecies recorded/discovered: **NDR₁** – New distributional Record from Rajasthan and new to India also, **NDR₂**- New distributional record from Rajasthan, earlier known from other parts of India, **NT**- New Taxa (first discovered); ***Locality from where species first time reported: **WLS**- Wildlife Sanctuary.

The present review documents 95 Angiospermic species and infraspecies newly recorded distributionally or discovered from Rajasthan in the first quarter of the present century, *i.e.* from 2001 to 2025. These taxa represent a wide range of life forms *viz.*, herbs, shrubs, trees & climbers/ stragglers of 85 genera belonging to 54 families.

In Rajasthan, the spatial distribution of these taxa reveals notable diversity in certain regions such as Udaipur, Sirohi, Chittorgarh, and Bikaner with aggregation of scientific discoveries in naturally reserved areas meant for National Parks, Wildlife Sanctuaries, Conservation Reserves, Reserve Forests and other localities. These areas serve as local biodiversity hotspots, indicating that better moisture regimes retaining microhabitats and forested tracts play a pivotal role in sustaining rare and threatened Angiosperms.

The discovery of new taxa such as *Aloe trinervis*, *Striga todgarhica* and *Portulaca bharat* not only enriches the floristic inventory but also highlights the potential of underexplored ecosystem of Rajasthan to yield new scientific insights. Moreover, the presence of newly recorded species like *Wrightia dolichocarpa*, *Amorphophallus margaritifera*, *Iochroma arborescens*, and *Aglaia odoratissima* indicates possible biogeographical linkages with adjoining regions and the adaptability of these species to climatic gradients of Rajasthan. Few species were considered as planted ones till a few years back but now they are naturalized and are growing in the wild habitats of Rajasthan. Overall, these results highlight that Rajasthan still offers great potential for further floristic exploration and documentation. The findings reinforce the importance of sustained field investigation,

collaborative taxonomic studies, and conservation planning to preserve its unique floral heritage. Future research integrating molecular taxonomy and GIS-based mapping could further refine the understanding of species distribution and endemism patterns in the region.

The temporal trend (Figure 1) illustrates intermittent but consistent documentation activity, with pronounced peaks in 2005, 2008, 2013, 2016, 2019, 2021, and 2024. The highest peak occurred in 2020, when approximately 11 new taxa were recorded. These fluctuations may reflect variations in research intensity, funding availability, and field accessibility rather than actual biological change. The graph can be useful for analyzing trends in taxonomic work, research output, or biodiversity exploration across time.

Presently, several taxonomic revisions have been made in plant nomenclature. According to Plants of the World Online (POWO), many taxa previously treated as varieties or subspecies have been elevated to species rank. For instance, *Tamarix passerinoides* var. *macrocarpa* is now considered as *Tamarix macrocarpa*; *Butea monosperma* var. *lutea* as *Butea monosperma*; *Corynandra chelidonii* var. *pallae* as *Cleome angulata*; *Calamagrostis pseudophragmites* var. *tartarica* as *Calamagrostis pseudophragmites*; *Cucumis sativus* f. *hardwickii* as *Cucumis hardwickii* and *Erythrina suberosa* var. *sublobata* as *Erythrina suberosa*. Conversely, some species have been reduced to infraspecific rank, such as *Physalis maxima*, *Musa rosacea*, *Cleome burmannii*, *Dodonaea angustifolia*

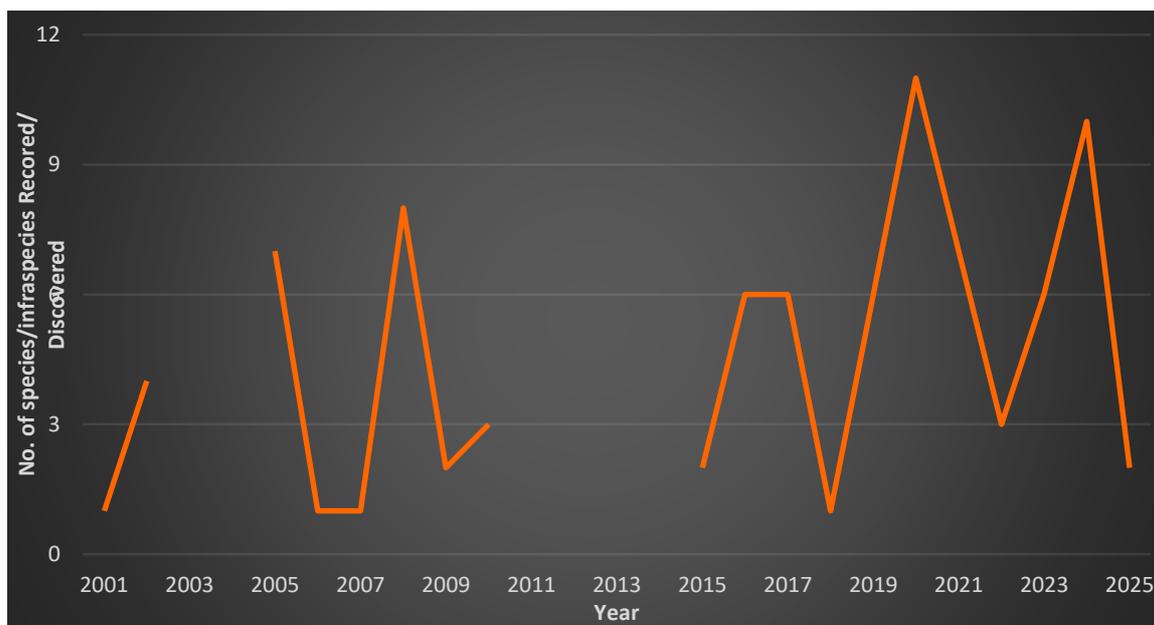


Figure 1. Trends of species and infraspecies records/discoveries from Rajasthan in the first quarter of the 21st century

which is now treated as *Physalis pruinosa* var. *pruinosa*, *Musa balbisiana* var. *balbisiana*, *Cleome rutidosperma* var. *burmannii*, *Dodonaea viscosa* var. *angustifolia*.

Based on comparative morphological analyses, the taxonomic status of several species namely *Nervilia aragoana*, *Synedrella vialis*, *Ruellia brittoniana*, *Tylophora macrantha*, *T. rotundifolia*, *Geodorum densiflorum*, *G. recurvum*, *Morinda coreia*, *Maytenus senegalensis*, *Costus speciosus*, *Jatropha gossypifolia* var. *elegans*, *Opuntia cylindrica*, *Tribulus ochroleucus*, *Sthania hernandifolia* and *Heracleum candolleianum* may be congruent with *Nervilia concolor*, *Calyptocarpus vialis*, *Ruellia simplex*, *Vincetoxicum hookerianum*, *V. rotundifolium*, *Eulophia picta*, *E. recurva*, *Morinda pubescens*, *Gymnosporia senegalensis*, *Hellenia speciosa*, *Jatropha gossypifolia* var. *gossypifolia*, *Austrocylindropuntia cylindrica*, *Tribulus mollis*, *Sthania japonica* and *Tetrataenium rigens* respectively. Furthermore, recently described species such as *Indigofera jaisalmerica* Purohit & Kulloli and *I. jodhpurensis* Bhellum, Dhar & Magotra have been synonymized under *I. cordifolia* B. Heyne ex Roth (Arigela et al. 2025).

CONCLUSION

The present review underscores the remarkable Angiosperm diversity of Rajasthan and the continued significance of taxonomic research in the region. The discovery of new species and infraspecies in the last 25 years (2001–2025) reveals the rich and underexplored floristic potential of the state, even within its arid and semi-arid landscapes. The present studies provide prospects to explore more taxa from the state. These findings serve as a crucial baseline for future

ecological, ethnobotanical, and conservation studies. Sustained field explorations, supported by taxonomic revisions and modern molecular techniques, are essential to fully document and conserve the unique botanical heritage of the state. This review underlines the need for collaborative efforts between taxonomists, ecologists, and conservationists to safeguard the botanical wealth of Rajasthan for future generations. It is suggested that while recording new taxa, researchers should be careful about the findings of modern taxonomy.

ACKNOWLEDGEMENTS

The authors are highly thankful to the officials of BSI, Jodhpur, for their assistance and valuable suggestions.

REFERENCES

- Aggarwal RK, Sharma, SC. 2008 – *Tamarix passerinoides* Delile ex Desv. var. *macrocarpa* Ehrenb. (Tamaricaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(2): 232–233.
- Arigela RK, Harikrishna P, Deroliya PK, Singh RK, Reddy CS. 2024 – Invasive alien plant species of Rajasthan, India. Ambika Prasad Research Foundation, Odisha.
- Arigela RK, Singh RK, Reddy CS, Kumar S. 2025 – Morphological variability of *Indigofera cordifolia* (Fabaceae) from different habitats in India and its two new synonyms. *Journal of Biodiversity Conservation* 9(1): 50–61.
- Bhandari MM. 1978 – Flora of the Indian Desert. Scientific Publisher, Jodhpur (India).
- Bhatia RK, Sharma S. 2007 – *Nonea caspica* (Wild.) G. Don. (Boraginaceae) - A new record for India. *Journal of the Bombay Natural History Society* 104(3): 370–371.

- Bhellum BL, Dhar SK, Magotra R. 2023 – A new species of Indigofera (Fabaceae) from India – *Indigofera jodhpurensis*. Nordic Journal of Botany 12: 1–6.
- Choudhary D, Meena KL. 2021 – *Brugmansia suaveolens* (Humb. & Bonpl. Ex Willd.) Bercht. & J. Presl: A new record to the flora of Rajasthan, India. Asian Resonance 10(1): 166–168.
- Choudhary D, Meena, KL, Hans D, Tak PK. 2023 – *Cuscuta campestris* (Convolvulaceae): A new record to the Flora of Rajasthan, India. Journal of Economic and Taxonomic Botany 47(1): 19–21.
- Dhakad M, Kotiya A, Chandrawal K, Khandal D, Meena SL. 2019 – *Elatostema* (Urticaceae): A new generic record to the flora of Rajasthan, India. Indian Journal of Forestry 42(1): 49–51.
- Harikrishna P, Arigela, RK, Reddy CS. 2022 – Floristic diversity and landscape of Aravallis, Rajasthan (India). Scientific Publishers. Jodhpur.
- Kantiya J, Sharma SC. 2008 – *Acacia saligna* (Labill.) Wendl. (Mimosaceae)- A new record for Rajasthan. Journal of Bombay Natural History Society 105(2): 233–234.
- Kheer NR, Prasad R, Meena DK, Meena KL. 2021 – *Oxalis nana* Wall. ex Benth. (Oxalaceae): A new record for Rajasthan, India. Indian Forester 147(5): 500–502.
- Kheer NR, Meena KL. 2018 – *Baccharoides anthelmintica* (L.) Moench (Asteraceae): A new record to the flora of Rajasthan, India. Asian Resonance 7(4): 20–23.
- Kotia A, Tiwari U, Rawat GS. 2008. Semi-arid region of India: vegetation characteristics and Threatened Plants. Special Habitats and Threatened Plants of India. ENVIS Bulletin: Wildlife and Protected Areas 11(1): 109–116.
- Kotiya A, Singh J, Jalal JS, Singh, GP, Reddy GV. 2020 – *Peristylus lawii* (Orchidaceae): A new record for Rajasthan state, India. International Journal of Botany Studies 5(4): 147–149.
- Kotiya A, Solanki Y, Singh J, Gupta S, Kumar V, Gunpal D. 2021 – *Solanum violaceum* Ortega (Solanaceae): A new species for Rajasthan state, India. International Journal of Botany Studies 6(1): 102–104.
- Kulloli RN, Purohit CS, Maina V, Kari B. 2020 – Recollection of critically endangered plant *Ceropegia odorata* Nimmo ex J. Graham (Asclepiadaceae) after 128 years from Mount Abu Wildlife Sanctuary, Rajasthan, India. Journal on New Biological Reports 9(3): 277–280.
- Kumar A, Solanki Y, Kotiya A, Mohil P. 2020 – *Solanum villosum* Mill. (Solanaceae): New addition to the flora of Rajasthan, India. Ambient Science 7(1): 34–35.
- Kumar A, Solanki Y, Sharma SK, Kumar N. 2023 – *Corynandra chelidonii* var. *pallae* (Reddy and Raju) V.S. Raju (Cleomaceae) – An addition to the flora of Rajasthan, India. International Journal of Biosciences 23(3): 69–74.
- Kumar S, Purohit CS, Kulloli RN. 2020 – *Aloe trinervis* sp. nov.: A new succulent species from Indian Desert (Asphodelaceae). Journal of Asia-Pacific Biodiversity 13: 325–330.
- Meena KL. 2010 – *Morinda coreia* Buch.-Ham.: A new record to the flora of Rajasthan. Journal of Indian Botanical Society 89(1&2): 210–212.
- Meena KL. 2010b – *Synedrella vialis* (Less.) A.Gray: A new record to the flora of Rajasthan. Journal of Economic and Taxonomic Botany 34(3): 614–618.
- Meena KL. 2013 – Some new records to the flora of Rajasthan, India. The Journal of Biodiversity 112: 233–240.
- Meena KL, Yadav BL. 2008. *Senna uniflora* (Mill.) Irwin & Barneby (Caesalpiniaceae): A new record of Rajasthan. Natural Product Radiance 8(5): 525–527.
- Meena KL, Yadav BL. 2010 – *Spigelia anthelmia* L. (Spigeliaceae): A new generic record to the flora of Rajasthan. The Journal of Indian Botanical Society 89(3&4): 258–261.
- Meena KL, Dhaka V, Ahir PC. 2013b – *Blumea malcolmii* (C.B. Clarke) Hook.f.: A new record to the flora of Rajasthan, India. Journal of Economic and Taxonomic Botany 37(1): 53–55.
- Prasad R, Meena KL, Singhadiya MK. 2021 – *Veronica polita* Fr. (Plantaginaceae) - An addition to the flora of western India from Sariska Tiger Reserve, Rajasthan. Indian Forester 147(2): 205–206.
- Prasad VP. 2015 – *Cyperus conglomeratus* subsp. *curvulus* - A new distribution record for India. Zoos' Print 30(11): 7.
- Puri GS, Jain SK, Mukerjee SK, Sarup S, Kotwal NN. 1964 – Flora of Rajasthan. Records of the Botanical Survey of India. 19: 1–159.
- Purohit CS. 2020. Dalechampia & Micrococcoa – Two generic addition for flora of Aravalli range, India with status of Family- Euphorbiaceae of Todgarh-Raoli Wildlife Sanctuary, Rajasthan, India. Journal on New Biological Reports 9(2): 209 – 219.
- Purohit CS. 2020 – *Ipomoea sagittifolia* Burm.f. – New record for Rajasthan and note on Family Convolvulaceae of Todgarh-Raoli Wildlife Sanctuary, Rajasthan. International Journal of Scientific Research in Science and Technology 7(3): 49–65.
- Purohit CS. 2021 – *Striga todgarhica* (Orobanchaceae) - A new parasitic species from Todgarh-Raoli Wildlife Sanctuary, Rajasthan, India. Journal on New Biological Reports 10(2): 89–94.

- Purohit CS, Kulloli RN. 2021 – *Indigofera jaisalmerica* sp. nov. (Fabaceae): A new species from Indian desert. *Journal of Asia-Pacific Biodiversity* 14(2021): 628–635.
- Purohit CS, Kumar R. 2020 – A review on genus *Calligonum* L. (Polygonaceae) from India and report *Calligonum crinitum* an addition for flora of India. *Journal of Asia-Pacific Biodiversity* 13: 319–324.
- Purohit CS, Sharma, SC. 2008 – *Bothriochloa insculpta* (Hochst.) A. Camus (Poaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(1): 111.
- Purohit CS, Jain K, Merushikha. 2020 – *Cucumis sativus* forma *hardwickii* – New record for Rajasthan with status of family Cucurbitaceae of Todgarh-raoli Wildlife Sanctuary, Rajasthan. *Species* 21(68): 410–423.
- Purohit CS, Kulloli RN, Bharti A. 2019 – *Euphorbia jodhpurensis* Blatt. & Hallb., an endemic plant from the Indian desert and its range extension from Todgarh-Raoli Wildlife Sanctuary, Rajasthan. *Euphorbia World* 15(3): 18–22.
- Ravikumar K, Tiwari U, Natesan BC, Kumar NA. 2022 – *Tribulus ochroleucus* (Maire) Ozenda & Quezel (Zygophyllaceae) - A new addition to the flora of India. *Journal of Threatened Taxa* 14(3): 20805–20807.
- Sharma S, Tiagi B. 1979 – Flora of North-East Rajasthan. Kalyani Publishers, New Delhi.
- Sharma BK, Kulshreshtha S, Rahmani AR. 2013 – Faunal heritage of Rajasthan, India. Springer, New York Volume-I.
- Sharma SC, Purohit CS, Bhatia RK. 2008 – *Poa supina* Schrad. (Poaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(1): 113.
- Sharma SC, Aggarwal RK. 2006 – *Stylosanthes fruticosa* (Retz.) Alston (Papilionaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(1): 114–115.
- Sharma SC, Kantiya J. 2008 – *Cerastium fontanum* Baumg. (Caryophyllaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(1): 118.
- Sharma SC, Kantiya J, Purohit CS –. 2008. *Calamagrostis pseudophragmites* (Hall.f.) Koeler var. *tartarica* (Hook.f.) Bor (Poaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(2): 227.
- Sharma SC, Purohit CS, Kantiya J. 2008 – *Enteropogon monostachyos* (Vahl) K. Schum. Ex Engl. (Poaceae) - A new record for Rajasthan. *Journal of Bombay Natural History Society* 105(1): 112.
- Sharma SK. 2001 – New record of *Nervilia aragoana* in Rajasthan. *Journal of Bombay Natural History Society* 98(3): 493.
- Sharma SK. 2002. Occurrence of *Butea monosperma* var. *lutea* (Witt.) Maheshwari in Rajasthan. *Journal of Bombay Natural History Society* 99(3): 547.
- Sharma SK. 2002 – Occurrence of *Habenaria longicorniculata* Grah. Family Orchidaceae in Mount Abu Wildlife Sanctuary, Rajasthan. *Journal of Bombay Natural History Society* 99(1): 156.
- Sharma SK. 2002 – Presence of *Commiphora gileadense*, Family Burseraceae, in Rajasthan. *Journal of Bombay Natural History Society* 99(1): 152–153.
- Sharma SK. 2015 – *Tylophora rotundifolia* (Asclepiadaceae) in Sitamata Wildlife Sanctuary, Rajasthan, India, *Taprobanica* 7(2): 118–119.
- Sharma SK, Banu F. 2017 – Addition to the flora of Rajasthan. *International Journal of Environmental Sciences* 21(1): 46–48.
- Sharma SK, Bhutya RC. 2013 – *Alectra chitrakutensis* (Orobanchaceae) in Bundi district, Rajasthan, India. *Taprobanica* 5(2): 142–143.
- Sharma SK, Khandal D. 2016 – New report of *Litsea glutinosa* (Family Lauraceae) from Rajasthan, India. *Bionature* 36(2): 81–82.
- Sharma S, Khandal D. 2019 – Reporting of new plant species to the flora of Rajasthan. *International Journal of Environmental Sciences* 23(2): 51–52.
- Sharma SK, Khandal D. 2022 – *Peristylus goodyeroides* (D. Don) Lindl. (Orchidaceae): A new addition to the flora of Rajasthan. *International Journal of Environmental Sciences* 26(2): 109–112.
- Sharma SK, Sarsavan A. 2023 – *Datura quercifolia* H.B.K. (Solanaceae) - A new record for Rajasthan, India. *Indian Journal of Environmental Sciences* 27(1): 1–3.
- Sharma SK, Sarsavan A. 2024 – Botanical Field notes from Rajasthan with records of new plant species. *International Journal of Scientific Research in Biological Sciences* 11(6): 34–41.
- Sharma SK, Sarsavan A. 2025 – First record of *Wrightia dolichocarpa* Bahadur & Bennet (Apocynaceae) from Rajasthan, India. *Journal on New Biological Reports* 14(1): 8–10.
- Sharma SK, Katewa SS, Bhatnagar C. 2005 – New records of plants from Rajasthan. *Zoos' Print Journal* 20(9): 1984–1985.
- Sharma SK, Sarsavan A, Gupta AK. 2022. First Record of *Datura discolor* Bernh. (Solanaceae) from Rajasthan, India. *Indian Journal of Environmental Sciences* 26(2): 105–108.
- Shetty BV, Pandey RP. 1983 – Flora of Tonk district. Botanical Survey of India, Howrah, Kolkata.
- Shetty BV, Singh V. 1987. Flora of Rajasthan. Botanical Survey of India, Howrah, Kolkata, Vol.-1.
- Shetty BV, Singh V. 1991 – Flora of Rajasthan. Botanical Survey of India, Howrah, Kolkata, Vol.-2.

- Shetty BV, Singh V. 1993. Flora of Rajasthan. Botanical Survey of India, Howrah, Kolkata, Vol.-3.
- Shinde RD, Landge SN, Kulloli RN, Chorghe AR. 2023 – *Oropetium almeidanum* (Poaceae: Chloridoideae): A new species from the Thar Desert, Rajasthan, India. *Phytotaxa* 579(4): 267–277.
- Shyam R, Solanki Y, Kotia A, Aery NC. 2020 – *Alopecurus aequalis sobolewski* (Poaceae): A new generic record for the state of Rajasthan (Indian Thar Desert). *International Journal of Botany Studies* 5(4): 303–305.
- Singh V, Pandey BP. 2002 – *Physalis maxima* Miller – A new record from India. *Indian Journal of Forestry* 25(2):187–190.
- Singh V, Singh M. 2006 – Biodiversity of Desert National Park Rajasthan. Botanical Survey of India, Howrah, Kolkata.
- Singh V, Srivastava AK. 2007 – Biodiversity of Ranthambhore Tiger Reserve Rajasthan. Scientific Publisher, Jodhpur, India.
- Solanki Y, Kumar A, Kotiya A, Mohil P. 2020 – *Solanum americanum* Mill. (Solanaceae)- An addition to the flora of Rajasthan: In arid and semi- arid region of India. *International Journal of Botany Studies* 5(2): 210–212.
- Solanki Y, Kumar N, Mangal P, Kotiya A, Meena A. 2024 – *Amorphophallus margaritifera* (Roxb.) Kunth (Araceae): A new record for the flora of Rajasthan, India. *Journal of Phytological Research* 37(2): 1–5.
- Solanki Y, Kumar N, Meena A, Singh J, Kotiya A. 2023 – *Bidens bipinnata* L. (Asteraceae): A new species record to Rajasthan state, India. *International Journal of Biosciences* 23(5): 54–59.
- Srivastava A, Chauhan N, Dash SS, Singh SK. 2025 – *Portulaca bharat* (Portulacaceae), a new species from Aravalli hills of Rajasthan, India. *Phytotaxa* 705(2): 212–218.
- Sushila, Kumar A, Raj R, Kumar A, Mohil P. 2021 – *Sesamum alatum* Thonn. (Pedaliaceae): A new addition to the flora of Rajasthan (India). *International Journal of Botany Studies* 6(6): 127–129.
- Tiagi B, Aery NC. 2007. Flora of Rajasthan (South and South East region). Himanshu Publication, New Delhi.
- Tiwari UKL, Kotia A, Mewada T, Rawat GS. 2009 – New distributional record of an endemic orchid, *Peristylus stocksii* from Rajasthan. *Indian Journal of Forestry* 32(1): 149–152.
- Tiwari UKL, Ravikumar K, Balachandran N, Sharma SK. 2016 – Some new records of plants from the state of Rajasthan, India. *Journal of Threatened Taxa* 8(3): 8632–8637.
- Yadav BL, Meena KL. 2009 – *Cleome burmannii* (Cleomaceae): A new record to the flora of Rajasthan, India. *Rheedea* 19(1&2): 65–66.
- Yadav BL, Meena KL. 2011 – Flora of South-Central Rajasthan. Scientific Publishers, Jodhpur, India.