

Supplement to the flora of Allahabad (Prayagraj) District, Uttar Pradesh, India : A checklist

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Received : 18.02.2025; **Revised** : 21.03.2025; **Accepted** : 13.04.2025

How to cite : Kaur J, Kumar S. Supplement to the flora of Allahabad (Prayagraj) District, Uttar Pradesh, India : A checklist. *Flora and Fauna* 2025. 31(1) : 105-112.

ABSTRACT

The current checklist comprises 350 species from 73 families, which include 55 dicot and 18 monocot families, that are newly identified in the flora of Allahabad district. Among these 350 species, 256 are classified as dicots, while 94 are monocots. Currently, the flora of Allahabad district encompasses a total of 713 species, 419 genera, and 113 families of both monocotyledons and dicotyledons. This document presents a checklist of species that are novel to the district, along with their updated nomenclature and additional data relevant and supplement to the flora of Allahabad district.

Figure : 01

References : 28

Table : 00

KEY WORDS : Allahabad, Checklist, New plant reports, Supplement.

Introduction

The Allahabad (Prayagraj) district is characterized by its naturally occurring vegetation, which spans an area of 5,482 square kilometers, comprising 5,365 square kilometers of rural land and 117 square kilometers of urban space. This district is situated in the region of the state, within the Ganga plain, adjacent to the Vindhyan plateau in India. Prayagraj is bordered by Sant Ravi Das Nagar (Bhadohi) and Mirzapur districts to the east, Kaushambi to the west, Pratapgarh and Jaunpur to the north, and Banda along with the state of Madhya Pradesh to all of which contribute significantly to the district's vegetational cover and rich biodiversity. In recent years, there has been an urgent need to update the flora in light of new information, which this checklist aims to address. Following an extensive survey of specimens and literature, it has become evident that certain problematic species and genera require thorough revision. In taxonomy, the documentation of vegetation is essential. Without proper documentation, many

significant plant species from the region may be overlooked. This research focuses on the inclusion of additional taxa in the floristic records of the Prayagraj district.

Materials and Methods

Regular field visits were conducted in the study area, during which a comprehensive list of plant species was compiled, and several rare specimens were collected for further identification and verification. Observations of plant characteristics were recorded, and photographs were taken. Herbarium sheets were created for future reference. The identification and authentication processes were carried out using relevant literature, research papers, reports, and various floras¹⁻⁵. Specimen examination was performed at the herbaria of the Botanical Survey of India, Central Regional Circle in Allahabad (BSA), and the Duthie Herbarium (DUTHIE) at the Department of Botany, University of Allahabad (Prayagraj). Additionally, other regional floras were

ACKNOWLEDGEMENTS : The authors wish to acknowledge the Head, Department of Botany, University of Allahabad for providing laboratory facilities, University Grant Commission for financial support and Incharge, Botanical Survey of India, Central Regional Centre, Allahabad for consulting herbarium and relevant literature

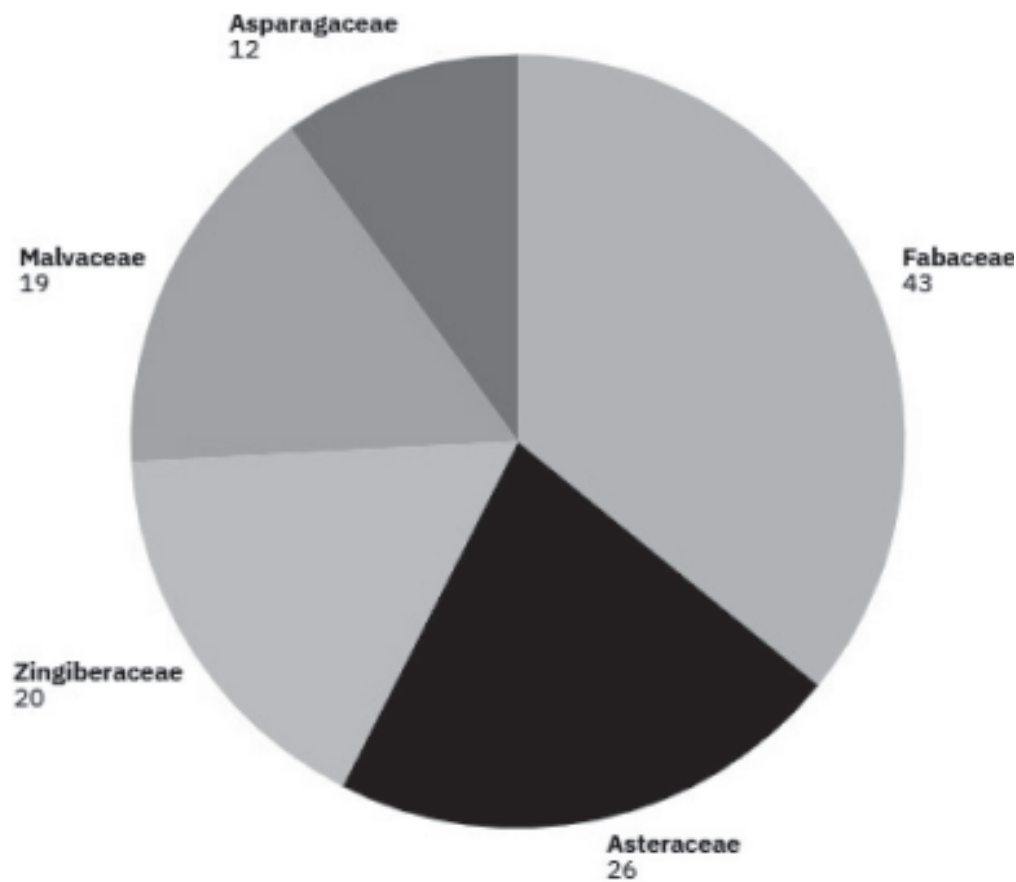


Fig. 1 : 5 Dominant families in context to novelties

consulted to facilitate rapid identification. Recent publications by scientists, researchers, and scholars in various journals were also considered in this study⁶⁻²⁸.

Result and Discussions

Consequently, there has been a notable enhancement in the botanical knowledge of Prayagraj. Through comprehensive research, the authors have identified a total of 350 species that are newly reported from the district. Among these, 256 species are classified as dicots, which are distributed across 55 dicot families, while 94 species are categorized as monocots, represented by 18 monocot families.

Five dominant families with novelties include Fabaceae, Asteraceae, Zingiberaceae, Malvaceae and Asparagaceae with 43, 26, 20, 19 and 12 species respectively in descending order. We described all the results, analyzed, identified and named it with clear enlightenments regarding the importance of the findings. We have gone through all literature related to Prayagraj flora and checked herbarium specimens for authentication of the species. We found that these species were not included earlier in the floristic studies of the Prayagraj district.

ENUMERATION
DICOTYLEDONS

ACANTHACEAE (7)

- Barleria lupulina*
- Crossandra infundibuliformis*
- Dicliptera paniculata*
- Eranthemum pulchellum*
- Justicia brandegeana*
- Justicia gendarussa*
- Thunbergia erecta*

ANACARDIACEAE (1)

- Lannea coromandelica*

ANNONACEAE (2)

- Monoon longifolium*
- Polyalthia suberosa*

APIACEAE (2)

- Apium graveolens*
- Centella asiatica*

APOCYNACEAE (17)

- Allamanda cathartica*

Alstonia macrophylla
Asclepias curassavica
Boucerosia frerei
Carissa spinarum
Cascabela thevetia
Holarrhena pubescens
Kopsia fruticosa
Nerium oleander
Plumeria alba
Plumeria rubra
Rauvolfia serpentina
Rauvolfia tetraphylla
Vallisneria spiralis
Vincetoxicum hirsutum
Vincetoxicum indicum
Wrightia arborea
ARALIACEAE (4)
Heptapleurum venulosum
 (= *Schefflera venulosa*)
Polyscias balfouriana
Polyscias fruticosa
Polyscias guilfoylei
ASTERACEAE (26)
Acmella ciliata
Acmella radicans
Ageratina adenophora
Bidens pilosa
Blainvillea acmella
Blumea eriantha
Blumea sinuata
Calyptocarpus vialis
Carthamus tinctorius
Centaurea cyanus
Chromolaena odorata
Cichorium intybus
Lophiolepis veruta
 (= *Cirsium verutum*)
Cosmos sulphureus
Cotula anthemoides
Dahlia imperialis
Dahlia pinnata
Elephantopus scaber
Emilia sonchifolia
Gaillardia pulchella

Gamochaeta pensylvanica
Glossocardia bosvallia
Sphagneticola calendulacea
Stevia rebaudiana
Tagetes erecta
Zinnia elegans
BEGONIACEAE (1)
Begonia picta
BIGNONIACEAE (9)
Crescentia cujete
Dolichandrone spathacea
Handroanthus chrysanthus
Handroanthus impetiginosus
Mansoa alliacea
Parmentiera cereifera
Radermachera xylocarpa
Tabebuia pallida
Tecoma castanifolia
BORAGINACEAE (2)
Cordia sinensis
Trichodesma zeylanicum
BRUSERACEAE (1)
Commiphora wightii
CALOPHYLLACEAE (2)
Calophyllum inophyllum
Mesua ferrea
CANNABACEAE (1)
Trema orientale
CAPPARACEAE (1)
Crateva magna
COMBRETACEAE (1)
Terminalia chebula
CONVOLVULACEAE (5)
Cuscuta campestris
Ipomoea capitellata
Ipomoea laxiflora
Ipomoea quamoclit
Ipomoea triloba
CRASSULACEAE (3)
Kalanchoe blossfeldiana
Kalanchoe daigremontiana
Kalanchoe lanceolata
DIDIEREACEAE (1)
Portulacaria afra

DILLENIACEAE (2)*Dillenia indica**Dillenia pentagyna***DIPTEROCARPACEAE (1)***Shorea robusta***EBENACEAE (2)***Diospyros melanoxylon**Diospyros montana***ELAEOCARPACEAE (1)***Elaeocarpus angustifolius***EUPHORBIACEAE (15)***Acalypha wilkesiana**Euphorbia clarkeana**Euphorbia cotinifolia**Euphorbia nivulia**Euphorbia tithymaloides**Excoecaria cochinchinensis**Jatropha curcas**Jatropha integerrima**Jatropha multifida**Jatropha podagrica**Mallotus nudiflorus**Mallotus philippensis**Manihot esculenta**Suregada multiflora**Tragia plukenetii***FABACEAE (43)***Acacia mangium**Adenanthera pavonina**Albizia lucida* (= *Albizia lucidior*)*Albizia procera**Bauhinia racemosa* (= *Piliostigma racemosum*)*Bauhinia acuminata**Bauhinia rufescens**Bauhinia tomentosa**Calliandra selloi**Calliandra haematocephala**Calpurnia aurea**Christia vespertilionis**Crotalaria spectabilis**Cullen corylifolium**Dichrostachys cinerea**Erythrina suberosa**Erythrina vespertilio**Flemingia stricta**Gleditsia triacanthos**Gliricidia sepium**Guilandina bonduc**Haematoxylum campechianum**Hardwickia binata**Indopiptadenia oudhensis**Lathyrus odoratus**Libidibia coriaria**Medicago sativa**Mimosa rubicaulis**Parkia timoriana**Pongamia pinnata* (= *Millettia pinnata*)*Prosopis cineraria**Pterocarpus marsupium**Pterocarpus santalinus**Pueraria tuberosa**Rhynchosia pulverulenta**Senna alata**Senna bicapsularis**Senna sulfurea**Trigonella foenum-graecum**Uraria lagopus**Vachellia farnesiana**Vachellia nilotica**Wisteria sinensis***LAMIACEAE (11)***Clerodendrum chinense**Coleus amboinicus* (= *Plectranthus amboinicus*)*Coleus scutellarioides* (= *Plectranthus scutellarioides*)*Gmelina arborea**Holmskioldia sanguinea**Mentha arvensis**Ocimum tenuiflorum**Rotheca serrata**Salvia splendens**Vitex negundo**Volkameria inermis***LAURACEAE (1)***Litsea glutinosa***LECYTHIDACEAE (1)***Careya arborea***LYTHRACEAE (1)***Punica granatum*

MAGNOLIACEAE (1)*Magnolia champaca***MALPIGHIACEAE (2)***Malpighia coccigera**Malpighia glabra***MALVACEAE (19)***Abroma augustum**Adansonia digitata**Alcea rosea**Dombeya burgessiae**Gossypium hirsutum**Hibiscus mutabilis**Hibiscus schizopetalus**Hibiscus syriacus**Malvastrum coromandelianum**Malvaviscus arboreus**Pentapetes phoenicea**Pterygota alata**Sida cordata**Sterculia urens**Sterculia villosa**Triumfetta annua**Triumfetta rhomboidea**Triumfetta rotundifolia**Urena lobata* subsp. *sinuata* (= *Urena sinuata*)**MARTYNIACEAE (1)***Martynia annua***MELIACEAE (2)***Swietenia macrophylla**Toona ciliata* (= *Toona hexandra*)**MORACEAE (5)***Artocarpus lacucha**Ficus amottiana**Ficus elastica**Ficus benjamina**Morus indica***MYRTACEAE (4)***Corymbia citriodora**Eucalyptus tereticornis**Melaleuca citrina**Syzygium jambos***NYCTAGINACEAE (3)***Bougainvillea glabra**Bougainvillea spectabilis**Mirabilis jalapa***NYMPHAEACEAE (1)***Nymphaea rubra***OLEACEAE (3)***Jasminum arborescens**Jasminum grandiflorum**Jasminum sambac***PANDANACEAE (1)***Pandanus odorifer***PAPAVERACEAE (1)***Papaver rhoeas***PHYLLANTHACEAE (1)***Phyllanthus amarus***PIPERACEAE (3)***Piper longum**Piper nigrum**Piper retrofractum***PLANTAGINACEAE (1)***Mecardonia procumbens***POLYGONACEAE (1)***Persicaria limbata***PORTULACACEAE (1)***Portulaca pilosa***PRIMULACEAE (2)***Ardisia solanacea**Jacquinia aculeata***RHAMNACEAE (1)***Ventilago denticulata***ROSACEAE (2)***Rosa indica**Rosa multiflora***RUBIACEAE (13)***Breonia chinensis**Coffea arabica**Coffea benghalensis**Gardenia gummifera**Hymenodictyon orixense**Ixora barbata**Ixora chinensis**Ixora coccinea**Ixora finlaysoniana**Morinda citrifolia**Mussaenda philippica**Paederia foetida*

Rondeletia odorata

RUTACEAE (8)

Citrus maxima

Glycosmis cochinchinensis

(= *Buchanania cochinchinensis*)

Bergera koenigii (= *Murraya koenigii*)

Naringi crenulata

Ravenia spectabilis

Ruta graveolens

Zanthoxylum asiaticum (= *Toddalia asiatica*)

Triphasia trifolia

SAPINDACEAE (1)

Sapindus trifoliatus

SOLANACEAE (11)

Brunfelsia americana

Cestrum diurnum

Datura innoxia

Physalis angulata

Solanum anguivi

Solanum diphyllum

Solanum grandiflorum

Solanum torvum

Solanum villosum

Solanum virginianum

Solanum seaforthianum

URTICACEAE (1)

Pilea microphylla

VERBENACEAE (2)

Duranta erecta

Lippia javanica

VITACEAE (1)

Vitis vinifera

MONOCOTYLEDONS

AMARYLLIDACEAE (2)

Crinum latifolium

Zephyranthes rosea

ARACEAE (11)

Alocasia macrorrhizos

Amorphophallus bulbifer

Amorphophallus paeoniifolius

Arisaema tortuosum

Caladium bicolor

Colocasia esculenta

Dieffenbachia seguine

Epipremnum aureum

Lemna gibba

Lemna minor

Sauromatum venosum

ARECACEAE (5)

Calamus tenuis

Caryota mitis

Cocos nucifera

Dypsis lutescens

Phoenix acaulis

ASPARAGACEAE (12)

Agave americana

Asparagus gonoclados

Asparagus racemosus

Asparagus setaceus

Chlorophytum arundinaceum

Chlorophytum borivillianum

Chlorophytum tuberosum

Cordyline fruticosa

Dracaena angolensis

Dracaena fragrans

Drimia indica

Furcraea foetida

ASPHODELACEAE (1)

Aloe vera

CANNACEAE (1)

Canna indica

COMMELINACEAE (2)

Tradescantia spathacea

Tradescantia zebrina

COSTACEAE (1)

Hellenia speciosa

CYPERACEAE (3)

Bolboschoenus glaucus

Cyperus alternifolius

Cyperus digitatus

DIOSCOREACEAE (6)

Dioscorea bulbifera

Dioscorea esculenta

Dioscorea hispida

Dioscorea oppositifolia

Dioscorea pentaphylla

Dioscorea tomentosa

HYPOXIDACEAE (1)*Curculigo orchioides***IRIDACEAE (1)***Iris domestica***ORCHIDACEAE (4)***Eulophia nuda**Geodorum densiflorum**Rhynchostylis retusa**Vanda tessellata***POACEAE (20)***Arthraxon lancifolius**Bambusa bambos**Bambusa nutans**Bambusa tulda**Bambusa vulgaris**Bothriochloa bladhii**Cenchrus americanus**Chrysopogon aciculatus**Cymbopogon citratus**Cymbopogon flexuosus**Cymbopogon martini**Dactyloctenium aristatum**Dendrocalamus strictus**Digitaria sanguinalis**Echinochloa crus-galli**Eragrostiella brachyphylla**Eragrostis coarctata**Eragrostis curvula**Eragrostis gangetica**Rottboellia cochinchinensis***SMILACACEAE (2)***Smilax ovalifolia**Smilax zeylanica***STRELITZIACEAE (1)***Ravenala madagascariensis***TYPHACEAE (1)***Typha angustifolia***ZINGIBERACEAE (20)***Alpinia calcarata**Amomum subulatum**Curcuma amada**Curcuma angustifolia**Curcuma aromatica**Curcuma caesia**Curcuma reclinata**Curcuma zedoaria**Curcuma longa**Globba marantina**Globba orixensis**Globba racemosa**Hedychium coronarium**Hedychium spicatum**Kaempferia angustifolia**Kaempferia galanga**Zingiber montanum**Zingiber officinale**Zingiber roseum**Zingiber zerumbet***References**

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