



An Annotated Checklist of Orchids of Andhra Pradesh, India

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ABSTRACT: This communication represents an updated checklist of orchid species recorded in Andhra Pradesh, India, based on studies of herbarium specimens, field observations and published literatures. A total of 102 orchid species, including one cultivated species, belonging to 45 genera are enumerated, with detailed annotations dealing with habit, phenology and distribution. The checklist reveals a diverse orchid flora, comprising of 50 epiphytic, 49 terrestrial, and 2 saprophytic species. *Habenaria* Willd. is the most dominant genus with 16 species, followed by *Eulophia* R.Br. (09 species), *Dendrobium* Sw. (07 species), *Liparis* Rich. and *Oberonia* Lindl. (05 species each) whereas, *Acampe* Lindl., *Aerides* Lour., *Bulbophyllum* Thouars, *Nervilia* Comm. ex Gaudich and *Peristylus* Bleume are represented by 04 species each and the remaining 31 genera are represented by a single species. This checklist contributes to the knowledge of orchid diversity in Andhra Pradesh and provides a reference for further taxonomic and conservation studies.

Keywords: Andhra Pradesh, Checklist, Conservation, Orchids, Threats.

INTRODUCTION

Orchids (family Orchidaceae) are among the most diverse and ecologically significant plant families, contributing substantially to biodiversity across various ecosystems (Dressler, 1993; Chase *et al.*, 2015; Singh *et al.*, 2019). The family comprises approximately 28,484 species distributed across 850 genera globally (Govaerts *et al.*, 2017). India harbours about 1,256 species belonging to 155 genera, with 307 species being endemic (Singh *et al.*, 2019). Andhra Pradesh, with its varied topography and climatic conditions, supports a rich assemblage of orchid species (Raju *et al.*, 2008; Misra *et al.*, 2008; Pullaiah *et al.*, 2018). Previous floristic studies have revealed several species from this region; however, an updated checklist incorporating recent findings from published literatures (Kothareddy *et al.*, 2019; Venkaiah *et al.*, 2020; Kumar *et al.*, 2022; Rao *et al.*, 2024), herbarium collections and field observations is the need of the hour.

MATERIALS AND METHODS

A. Study Area

Andhra Pradesh, a state located in the south-eastern part of the Indian subcontinent, lies between 12°41' to 19°07'N latitude and 77° to 84°40'E longitude. It shares

borders with Tamil Nadu, Karnataka, Telangana and Odisha, and is bounded to the east by a 970 km coastline along the Bay of Bengal. The state covers an area of 162,975 km², divided into 26 districts (Fig. 1). The state is notable for its significant biodiversity, particularly within the Eastern Ghats. This region extends from the Koundinya Wildlife Sanctuary in Chittoor district to the Palakonda Reserve Forest in Parvathipuram Manyam district. The Eastern Ghats feature diverse hill ranges, including the Araku, Papikonda, Nallamala and Seshachalam hills, which support a rich variety of flora and fauna. These discontinuous and varied hill masses generally trend northeast-southwest along the Bay of Bengal. Andhra Pradesh, characterized by the Eastern Ghats and the Krishna and Godavari River deltas, possesses a rich botanical heritage with a forest cover of 18.46%. Its diverse vegetation, primarily found in the Eastern Ghats, is classified into seven major forest types according to Champion and Seth's 1968 classification. These range from Tropical Semi-Evergreen and Moist Deciduous Forests in wetter, higher elevation areas to Dry Deciduous, Savanna, Evergreen, and Scrub Forests in drier and lower regions, reflecting the state's varied climate, topography, and soil conditions.

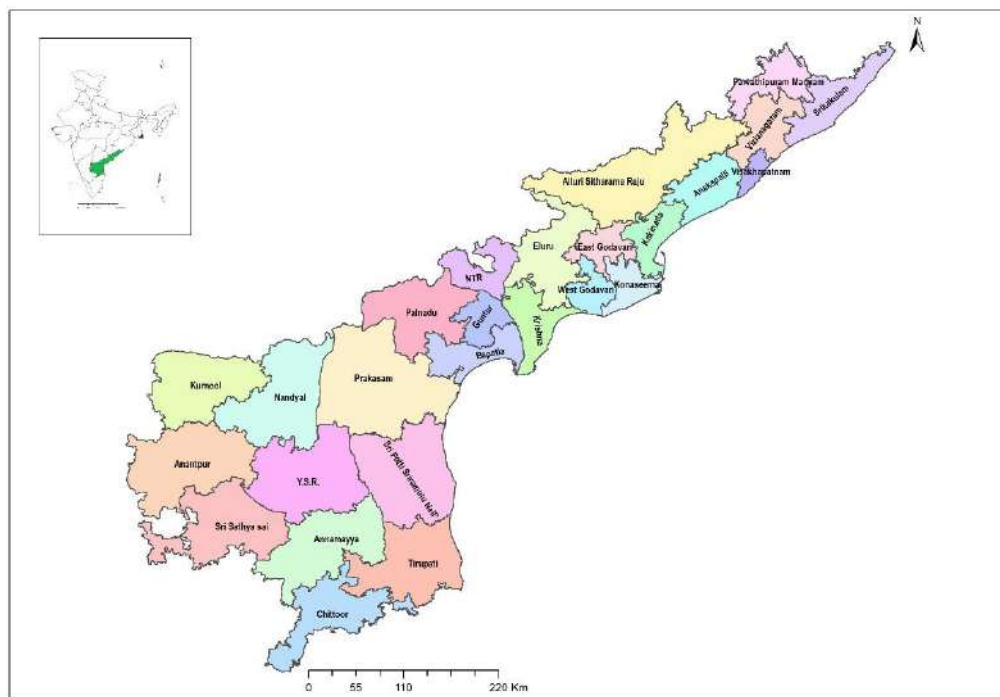


Fig. 1. District map of Andhra Pradesh.

Botanical exploration in Andhra Pradesh has a long history spanning over centuries, marked by foundational works such as Roxburgh's "Plants of the Coromandel Coast" and Wight's extensive documentation, followed by significant contributions from botanists including Beddome, Gamble and Fischer, culminating in landmark floras. The 20th century saw continued research by various scientists and the Botanical Survey of India, leading to comprehensive works that detailed the region's plant diversity. Pullaiah *et al.* (2018) reported 2880 species including 93 orchid taxa, reflecting the significant progress in understanding Andhra Pradesh's flora. However, comprehensive documentation of the orchid diversity in this region has been limited. This study aims to provide an updated annotated checklist of orchids dwelling in Andhra Pradesh, based on a thorough review of available data.

B. Data Collection and Analysis

This checklist was compiled through a comprehensive review of existing data sources. The following methods were employed:

- **Herbarium Collections:** Specimens housed in regional and national herbaria were examined to verify species identification and distribution records.
- **Field Observations:** Field surveys were conducted across various habitats in Andhra Pradesh to document orchid occurrences and collect detailed information on their phenology (flowering and fruiting periods) and habit (terrestrial or epiphytic).
- **Research Publications:** A thorough review of published literatures, including floristic surveys, taxonomic revisions, and regional floras, was undertaken to compile a comprehensive list of orchid species reported from the state (Pullaiah *et al.*, 2018;

Kothareddy *et al.*, 2019; Venkaiah *et al.*, 2020; Kumar *et al.*, 2022; Prasad, 2022a & 2022b; Rao *et al.*, 2024). Species identification was based on established taxonomic literature and expert consultation (Singh *et al.*, 2019; Agarwala *et al.*, 2023). The nomenclature of the species was updated in accordance with the International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) (Turland *et al.*, 2018; POWO, 2024). The resulting checklist includes the scientific name of each species, its habit (terrestrial or epiphytic), the observed flowering and fruiting period, and its documented occurrence within Andhra Pradesh.

RESULTS AND DISCUSSION

The present study enumerated 102 orchid species, including one cultivated species, belonging to 45 genera in Andhra Pradesh (Table 1). The orchid flora exhibited a mix of habits: epiphytic (50 species), terrestrial (49 species), and saprophytic (2 species), reflecting the diverse habitats present in the state (Fig. 2). *Habenaria* Willd. is the most dominant genus with 16 species, followed by *Eulophia* R.Br. with 09 species and *Dendrobium* Sw. with 07 species. *Liparis* Rich. and *Oberonia* Lindl. are represented by 05 species each; *Acampe* Lindl., *Aerides* Lour., *Bulbophyllum* Thouars, *Nervilia* Comm. ex Gaudich and *Peristylus* Bleume by 04 species each, while the remaining 31 genera are represented by a single species (Fig. 3). This dominance aligns with general trends observed in other tropical and subtropical regions of India, where these genera are frequently well-represented.

Visakhapatnam, East Godavari, and Chittoor districts emerge as dominant regions for orchid diversity, hosting a wide array of species adapted to various habitats. Visakhapatnam stands out with species such as *Acampe carinata* (Griff.) Panigrahi, *Aerides odorata* Lour., *Bulbophyllum sterile* (Lam.) Suresh, *Coelogyne*

imbricata (Hook.) Rchb.f., and *Dendrobium regium* Prain, thriving as epiphytes and terrestrials. East Godavari follows closely, supporting *Acampe praemorsa* (Roxb.) Blatt. & McCann, *Cymbidium aloifolium* (L.) Sw., *Dendrobium aphyllum* (Roxb.) C.E.C. Fisch. and *Eulophia recurva* (Roxb.) M.W.Chase, Kumar & Schuit., among others. Chittoor

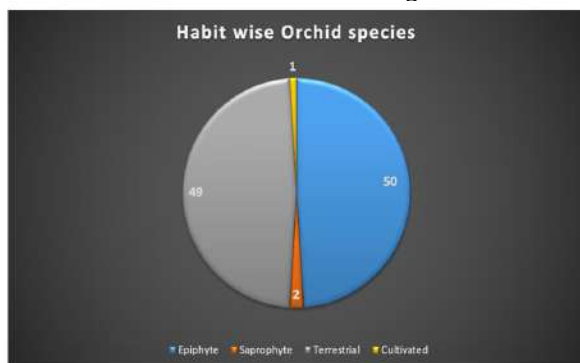


Fig. 2. Habit wise Orchids of Andhra Pradesh.

is also endowed with significant orchid diversity including *Bulbophyllum kaitiense* Rchb.f., *Habenaria longicornu* Lindl., and *Vanda tessellata* (Roxb.) Hook. ex G.Don, showcasing the region's rich ecological conditions. The orchid flora in these districts not only highlights their unique biodiversity but also underscores their importance in conservation efforts.

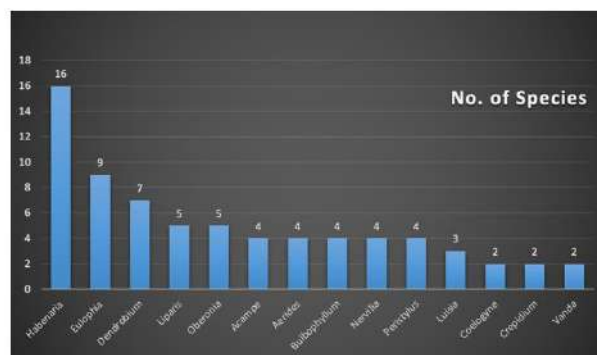


Fig. 3. Dominant genera of Orchids of Andhra Pradesh.

Table 1: List of Orchid species occurring in Andhra Pradesh State.

Sr. No.	Botanical Name	Habit	Flowering & Fruiting	Distribution (Districts)
1.	<i>Acampe carinata</i> (Griff.) Panigrahi	Epiphyte	October-November	Visakhapatnam
2.	<i>Acampe ochracea</i> (Lindl.) Hochr.	Epiphyte	December -January	Visakhapatnam
3.	<i>Acampe praemorsa</i> (Roxb.) Blatt. & McCann	Epiphyte	May - August	East Godavari, Srikakulam, Visakhapatnam, Vizianagaram
4.	<i>Acampe praemorsa</i> var. <i>longepedunculata</i> (Trimen) Govaerts [= <i>A. rigida</i> (Buch.-Ham. ex Sm.) P.F.Hunt]	Epiphyte	September -October	East Godavari
5.	<i>Acanthophippium bicolor</i> Lindl.	Terrestrial	May-June	Visakhapatnam
6.	<i>Aerides maculosa</i> Lindl.	Epiphyte	July-September	Kurnool
7.	<i>Aerides multiflora</i> Roxb.	Epiphyte	March -August	East Godavari
8.	<i>Aerides odorata</i> Lour.	Epiphyte	June - July	East Godavari, Visakhapatnam, West Godavari
9.	<i>Aerides ringens</i> (Lindl.) C.E.C. Fisch.	Epiphyte	April - July	West Godavari
10.	<i>Aphyllorchis montana</i> Rchb.f.	Terrestrial	February - August	Chittoor
11.	<i>Bambuseria bambusifolia</i> (Lindl.) Schuit., Y.P.Ng & H.A.Pedersen (= <i>Eria bambusifolia</i> Lindl.)	Epiphyte	August - November	Visakhapatnam
12.	<i>Bulbophyllum cariniflorum</i> Rchb. f.	Epiphyte	August	Visakhapatnam
13.	<i>Bulbophyllum kaitiense</i> Rchb.f.	Epiphyte	June - October	Chittoor
14.	<i>Bulbophyllum sterile</i> (Lam.) Suresh	Epiphyte	August - February	Visakhapatnam
15.	<i>Bulbophyllum umbellatum</i> Lindl.	Epiphyte	April-May	Visakhapatnam
16.	<i>Cleisostoma tenuifolium</i> (L.) Garay	Epiphyte	July - August	Chittoor
17.	<i>Coelogyne imbricata</i> (Hook.) Rchb.f. (= <i>Pholidota imbricata</i> Hook.)	Epiphyte	July - September	East Godavari, Visakhapatnam
18.	<i>Coelogyne pallida</i> (Lindl.) Rchb.f. (= <i>Pholidota pallida</i> Lindl.)	Epiphyte	June - October	East Godavari, Srikakulam, Visakhapatnam
19.	<i>Corymborkis veratrifolia</i> (Reinw.) Blume	Terrestrial	October - January	YSR District (Kadapa)
20.	<i>Cotonia peduncularis</i> (Lindl.) Rchb.f.	Epiphyte	March - May	East Godavari
21.	<i>Crepidium acuminatum</i> (D.Don) Szlach.	Terrestrial	July - August	East Godavari
22.	<i>Crepidium versicolor</i> (Lindl.) Agrawala et al. (2023) [= <i>Malaxis versicolor</i> (Lindl.) Abeyw.]	Terrestrial	September - October	Chittoor, East Godavari, Srikakulam, Visakhapatnam
23.	<i>Cymbidium aloifolium</i> (L.) Sw.	Epiphyte	March - April	East Godavari, Srikakulam, Visakhapatnam
24.	<i>Dendrobium aphyllum</i> (Roxb.) C.E.C. Fisch.	Epiphyte	September-April	East Godavari, Visakhapatnam

25.	<i>Dendrobium aqueum</i> Lindl.	Epiphyte	September-October	East Godavari
26.	<i>Dendrobium herbaceum</i> Lindl.	Epiphyte	February-March	East Godavari, West Godavari
27.	<i>Dendrobium macrostachyum</i> Lindl.	Epiphyte	May-June	Chittoor, East Godavari, Visakhapatnam
28.	<i>Dendrobium moschatum</i> (Banks) Sw.	Epiphyte	May-June	East Godavari, Visakhapatnam
29.	<i>Dendrobium ovatum</i> (L.) Kraenzl.	Epiphyte	September-October	Chittoor
30.	<i>Dendrobium regium</i> Prain	Epiphyte	May-June	Visakhapatnam
31.	<i>Didymoplexis pallens</i> Griff.	Saprophyte	June - July	West Godavari
32.	<i>Dienia ophrydis</i> (J.Koenig) Seidenf.	Epiphyte	June - August	Semi-evergreen forests
33.	<i>Diplocentrum recurvum</i> Lindl.	Epiphyte	May-July	Chittoor
34.	<i>Epipogium roseum</i> (D.Don) Lindl.	Saprophyte	January-February	Alluri Sitharama Raju
35.	<i>Eulophia diffusiflora</i> M.W.Chase, Kumar & Schuit. (= <i>Geodorum laxiflorum</i> Griff.)	Terrestrial	June-July	Kurnool
36.	<i>Eulophia epidendreae</i> (J.Koenig ex Retz.) C.E.C.Fisch	Terrestrial	February - August	Anantapuram, Chittoor, YSR District (Kadapa), Nellore, Srikakulam, Visakhapatnam
37.	<i>Eulophia explanata</i> Lindl.	Terrestrial	February- June	East Godavari, Visakhapatnam
38.	<i>Eulophia flava</i> (Lindl.) Hook.f.	Terrestrial	June-August	Chittoor, YSR District (Kadapa)
39.	<i>Eulophia graminea</i> Lindl.	Terrestrial	March - May	Chittoor, YSR District (Kadapa), Nellore
40.	<i>Eulophia nuda</i> Lindl. (= <i>E. spectabilis</i> Suresh)	Terrestrial	February - June	Chittoor, Visakhapatnam
41.	<i>Eulophia ochreatea</i> Lindl.	Terrestrial	March - July	Chittoor, YSR District (Kadapa), Visakhapatnam
42.	<i>Eulophia picta</i> (R.Br.) Ormerod [= <i>Geodorum densiflorum</i> (Lam.) Schltr.]	Terrestrial	August - November	Anantapuram, Chittoor, Kurnool
43.	<i>Eulophia recurva</i> (Roxb.) M.W.Chase, Kumar & Schuit. [= <i>Geodorum recurvum</i> (Roxb.) Alston]	Terrestrial	May - June	East Godavari, Visakhapatnam
44.	<i>Gastrochilus calceolaris</i> (Buch.-Ham. ex Sm.) D.Don	Epiphyte	October-November	Visakhapatnam
45.	<i>Goodyera procera</i> (Ker Gawl.) Hook.	Terrestrial	January, June - September	Chittoor, YSR District (Kadapa), Visakhapatnam
46.	<i>Habenaria barbata</i> Wight ex Hook.f. [= <i>H. virens</i> (Lindl.) Abeyw.]	Terrestrial	July - October	Chittoor, YSR District (Kadapa), Nellore, Visakhapatnam
47.	<i>Habenaria brachyphylla</i> (Lindl.) Aitch. (= <i>Habenaria crassifolia</i> A.Rich.)	Terrestrial	August - October	Visakhapatnam
48.	<i>Habenaria commelinifolia</i> (Roxb.) Wall. ex Lindl.	Terrestrial	October - December	Chittoor, East Godavari, Nellore
49.	<i>Habenaria digitata</i> Lindl.	Terrestrial	October-November	East Godavari, Nellore, West Godavari
50.	<i>Habenaria diphylla</i> (Nimmo) Dalzell	Terrestrial	October	Visakhapatnam
51.	<i>Habenaria furcifera</i> Lindl.	Terrestrial	September-December	Chittoor, East Godavari, Srikakulam, Visakhapatnam
52.	<i>Habenaria grandifloriformis</i> Blatt. & McCann	Terrestrial	June-August	Visakhapatnam
53.	<i>Habenaria hollandiana</i> Santapau	Terrestrial	September-December	Kurnool, Nellore
54.	<i>Habenaria longicorniculata</i> J.Graham	Terrestrial	September-October	Visakhapatnam
55.	<i>Habenaria longicoruu</i> Lindl. (= <i>H. decipiens</i> Wight)	Terrestrial	September-November	Chittoor
56.	<i>Habenaria malintana</i> (Blanco) Merr. (= <i>Odisha cleistantha</i> S.Misra)	Terrestrial	October-December	East Godavari, Visakhapatnam
57.	<i>Habenaria marginata</i> Colebr.	Terrestrial	September-November	Kurnool, Visakhapatnam
58.	<i>Habenaria panigrahiana</i> S.Misra	Terrestrial	September-January	East Godavari, Kurnool
59.	<i>Habenaria plantaginea</i> Lindl.	Terrestrial	September -October	Chittoor, East Godavari, Krishna, Nellore, Visakhapatnam, Vizianagaram
60.	<i>Habenaria rariflora</i> A. Rich.	Terrestrial	July - August	Chittoor
61.	<i>Habenaria roxburghii</i> Nicolson	Terrestrial	July - October	Chittoor, Kurnool, YSR District (Kadapa), Nellore, Pakasam, Vizianagaram

62.	<i>Liparis deflexa</i> Hook.f.	Terrestrial	July - August	East Godavari, Kurnool
63.	<i>Liparis elliptica</i> Wight	Epiphyte	November-December	Visakhapatnam
64.	<i>Liparis nervosa</i> (Thumb.) Lindl.	Terrestrial	July-January	YSR District (Kadapa), Visakhapatnam
65.	<i>Liparis odorata</i> (Willd.) Lindl. [= <i>L. paradoxa</i> (Lindl.) Rchb.f.]	Terrestrial	August-September	Chittoor, YSR District (Kadapa), Kurnool
66.	<i>Liparis viridiflora</i> (Blume) Lindl	Terrestrial	September-February	Visakhapatnam
67.	<i>Luisia trichorhiza</i> (Hook.) Blume	Epiphyte	March-April	East Godavari, Visakhapatnam
68.	<i>Luisia tristis</i> (G.Forst.) Hook.f.	Epiphyte	August-November	Srikakulam, Visakhapatnam, Vizianagaram
69.	<i>Luisia zeylanica</i> Lindl.	Epiphyte	February-May	Prakasam, Visakhapatnam
70.	<i>Micropera pallida</i> (Roxb.) Lindl.	Epiphyte	April-July	Alluri Sitharama Raju
71.	<i>Nervilia concolor</i> (Blume) Schltr.	Terrestrial	March - July	East Godavari, Visakhapatnam
72.	<i>Nervilia infundibulifolia</i> Blatt. & Mccann	Terrestrial	June	Visakhapatnam
73.	<i>Nervilia plicata</i> (Andrews) Schltr.	Terrestrial	February -November	East Godavari, Visakhapatnam
74.	<i>Nervilia simplex</i> (Thouars) Schltr. [= <i>N. crociformis</i> (Zoll. & Moritzi) Seidenf.]	Terrestrial	May-July	East Godavari, Visakhapatnam
75.	<i>Oberonia brunoniana</i> Wight	Epiphyte	September-October	East Godavari
76.	<i>Oberonia ensiformis</i> (Sm.) Lindl.	Epiphyte	March-July	East Godavari, Srikakulam, Vizianagaram, Visakhapatnam
77.	<i>Oberonia falconeri</i> Hook. f.	Epiphyte	July - November	East Godavari, Visakhapatnam
78.	<i>Oberonia mucronata</i> (D.Don) Ormerod & Seidenf.	Epiphyte	November-March	East Godavari, Visakhapatnam
79.	<i>Oberonia wightiana</i> Lindl.	Epiphyte	June-November	East Godavari, Visakhapatnam
80.	<i>Papilionanthe teres</i> (Roxb.) Schltr.	Epiphyte	June-August	Visakhapatnam
81.	<i>Pecteilis gigantea</i> (Sm.) Raf.	Terrestrial	September-December	East Godavari
82.	<i>Pelatantheria insectifera</i> (Rchb.f.) Ridl.	Epiphyte	October-December	Visakhapatnam
83.	<i>Peristylus goodyeroides</i> (D.Don) Lindl.	Terrestrial	August-November	Chittoor, Kurnool, East Godavari
84.	<i>Peristylus lawii</i> Wight	Terrestrial	June - August	East Godavari
85.	<i>Peristylus parishii</i> Rchb.f.	Terrestrial	July - September	Kurnool
86.	<i>Peristylus plantagineus</i> (Lindl.) Lindl.	Terrestrial	August - October	East Godavari, Visakhapatnam
87.	<i>Phalaenopsis deliciosa</i> Rchb.f.	Epiphyte	June-October	Visakhapatnam
88.	<i>Polystachya concreta</i> (Jacq.) Garay & H.R.Sweet	Epiphyte	October - January	Visakhapatnam
89.	<i>Pomatocalpa spicatum</i> Breda	Epiphyte	March - June	Visakhapatnam
90.	<i>Rhynchostylis retusa</i> (L.) Blume	Epiphyte	May-June	East Godavari, Srikakulam, Visakhapatnam
91.	<i>Satyrium nepalense</i> D. Don	Terrestrial	July - December	Visakhapatnam
92.	<i>Sirhookera latifolia</i> (Wight) Kuntze	Epiphyte	February - May	Visakhapatnam
93.	<i>Spiranthes sinensis</i> (Pers.) Ames	Terrestrial	March	Visakhapatnam
94.	<i>Taprobanea spathulata</i> (L.) Christenson [= <i>Vanda spathulata</i> (L.) Spreng.]	Epiphyte	March - September	Chittoor, Nellore
95.	<i>Thunia alba</i> var. <i>bracteata</i> (Roxb.) N.Pearce & P.J.Cribb	Epiphyte	September - April	Visakhapatnam
96.	<i>Trichoglottis ramosa</i> (Lindl.) Senghas [= <i>Staurochilus ramosus</i> (Lindl.) Seidenf.]	Epiphyte	April-May	East Godavari
97.	<i>Tropidia angulosa</i> (Lindl.) Blume	Terrestrial	August - September	East Godavari
98.	<i>Vanda tessellata</i> (Roxb.) Hook. ex G.Don	Epiphyte	July - August	Chittoor, East Godavari, YSR District (Kadapa), Kurnool, Nellore, Visakhapatnam
99.	<i>Vanda testacea</i> (Lindl.) Rchb.f.	Epiphyte	April-July	Chittoor, East Godavari, Nellore Visakhapatnam, Vizianagaram
100.	<i>Vanilla walkerae</i> Wight	Terrestrial	March-April	Chittoor
101.	<i>Zeuxine strateumatica</i> (L.) Schltr.	Terrestrial	December - February	Anantapur
102.	<i>Spathoglottis plicata</i> Blume	Terrestrial	Round the year	Cultivated

Certain orchid species are known to have a restricted distribution, occurring only in a single district. These species are highly localized and require conservation

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efforts to ensure their survival. Below is a list of orchid species that are found exclusively in a single district:

- *Acampe carinata* (Griff.) Panigrahi - Visakhapatnam

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- *Acampe ochracea* (Lindl.) Hochr. - Visakhapatnam
- *Acanthophippium bicolor* Lindl. - Visakhapatnam
- *Aerides maculosa* Lindl. - Kurnool
- *Aphyllorchis montana* Rchb.f. - Chittoor
- *Bambuseria bambusifolia* (Lindl.) Schuit., Y.P.Ng & H.A.Pedersen - Visakhapatnam
- *Bulbophyllum cariniflorum* Rchb. f. - Visakhapatnam
- *Bulbophyllum sterile* (Lam.) Suresh - Visakhapatnam
- *Bulbophyllum umbellatum* Lindl. - Visakhapatnam
- *Corymborkis veratrifolia* (Rieinw.) Blume - YSR District (Kadapa)
- *Dendrobium regium* Prain - Visakhapatnam
- *Didymoplexis pallens* Griff - West Godavari
- *Epipogium roseum* (D.Don) Lindl. - Alluri Sitharama Raju
- *Eulophia diffusiflora* M.W.Chase, Kumar & Schuit. – Kurnool
- *Habenaria brachyphylla* (Lindl.) Aitch. - Visakhapatnam
- *Habenaria diphylla* (Nimmo) Dalzell - Visakhapatnam
- *Habenaria grandifloriformis* Blatt & McCann - Visakhapatnam
- *Habenaria longicorniculata* J.Graham - Visakhapatnam
- *Habenaria rariflora* A. Rich. - Chittoor
- *Liparis elliptica* Wight - Visakhapatnam
- *Nervilia infundibulifolia* Blatt. & McCann - Visakhapatnam
- *Pelatantheria insectifera* (Rchb.f.) Ridl. - Visakhapatnam
- *Peristylus parishii* Rchb.f. - Kurnool
- *Phalaenopsis deliciosa* Rchb.f. - Visakhapatnam
- *Polystachya concreta* - Visakhapatnam
- *Pomatocalpa spicatum* Breda - Visakhapatnam
- *Satyrium nepalense* D. Don - Visakhapatnam
- *Sirhookera latifolia* (Wight) Kuntze - Visakhapatnam
- *Spiranthes sinensis* (Pers.) Ames - Visakhapatnam
- *Thunia alba* var. *bracteata* (Roxb.) N.Pearce & P.J.Cribb - Visakhapatnam
- *Tropidia angulosa* (Lindl.) Blume - East Godavari
- *Vanilla walkerae* Wight - Chittoor
- *Zeuxine strateumatica* (L.) Schltr. - Anantapur

These species are particularly vulnerable due to their limited geographic range. Protecting their natural habitats is essential to maintaining their ecological presence and ensuring their survival for future generations.



Plate 1. A. *Aerides odorata* Lour.; B. *Bulbophyllum umbellatum* Lindl.; C. *Coelogyne imbricata* (Hook.) Rchb.f.; D. *Cottonia peduncularis* (Lindl.) Rchb.f.; E. *Dendrobium aqueum* Lindl.; F. *Dendrobium regium* Prain; G. *Didymoplexis pallens* Griff.



Plate 2. A. *Bambuseria bambusifolia* (Lindl.) Schuit.; B. *Eulophia recurva* (Roxb.) M.W.Chase, Kumar & Schuit.; C. *Habenaria brachyphylla* (Lindl.) Aitch.; D. *Pecteilis gigantea* (Sm.) Raf; E. *Habenaria malintana* (Blanco) Merr.; F. *Phalaenopsis deliciosa* Rchb.f.

CONCLUSIONS

This annotated checklist enumerated 102 orchid species, including one cultivated species, belonging to 45 genera within the state of Andhra Pradesh, providing a baseline for understanding the state's orchid diversity. The identification of rare taxa, including *Aerides maculosa* Lindl., *Corymborkis veratrifolia* (Rieinw.) Blume, *Diplocentrum recurvum* Lindl., *Epipogium roseum* (D.Don) Lindl., *Eulophia diffusiflora* M.W.Chase, Kumar & Schuit, *Habenaria hollandiana* Santapau, *Oberonia ensiformis* (Sm.) Lindl., *Oberonia wightiana* Lindl., *Peristylus parishii* Rchb.f. and *Zeuxine strateumatica* (L.) Schltr, emphasizes the state's significance for orchid conservation. Some recent additions to the orchid flora of the Andhra Pradesh state show the potential wealth of the unexplored diversity. These findings underscore the necessity for targeted investigations into the ecological roles, population dynamics and conservation status of these species.

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Conflict of Interest. None.

REFERENCES

- Agrawala, D. K., Jalal, J. S., Bhattacharjee, A., Deori, C., Mao, A. A. and Yadav, V. K. (2023). *Wild Orchids of West Bengal*. Botanical Survey of India, Kolkata & Directorate of Forests, Government of West Bengal, pp. 522.
- Chase, M. W., Cameron, K. M., Freudenstein, J. V., Pridgeon, A. M., Salazar, G., Van den Berg, C. and Schuitman, A., (2015). An updated classification of Orchidaceae. *Botanical Journal of the Linnean Society*, 177(2), 151-174.
- Dressler, R. L. (1993). *Phylogeny and Classification of the Orchid Family*. Cambridge University Press, Cambridge, pp. 330.
- Govaerts, R., Bernet, P., Kratochvil, K., Gerlach, G., Carr, G., Alrich, P., Pridgeon, A. M., Pfahl, J., Campacci, M. A., Baptista, D. H., Tigges, H., Shaw, J., Cribb, P., George, A., Kreuz, K. and Wood, J. J. (2017). *World Checklist of Orchidaceae*. Royal Botanic Gardens, Kew, London, U.K.
- Kothareddy, P., Karuppusamy, S. and Pullaiah, T. (2019). *Orchids of Eastern Ghats, India*. Scientific Publishers, Jodhpur, pp. 304.
- Kumar, V. A., Rao, P. J., Rao, J. P., Padal, S. B. and Reddy, C. S. (2022). *Pelatantheria insectifera* (Rchb.f.) Ridl. (Orchidaceae): a new generic record for Eastern Ghats of Andhra Pradesh, India. *Journal of Threatened Taxa*, 14(6), 21311–21314.

- Misra, S., Panda, S. P. and Sahoo, D. (2008). Orchid Flora of Andhra Pradesh, India. *Bulletin of the Botanical Survey of India*, 50(1-4), 129-146.
- Plants of the World Online (POWO) (2024). Published on the Internet: <http://www.plantsoftheworldonline.org/>. Retrieved 12 March 2024.
- Prasad, K. (2022a). *Acanthophippium* (Orchidaceae), a generic record for Andhra Pradesh, India. *Richardiana*, 6, 111-115.
- Prasad, K. (2022b). Two new distributional records of endemic species of *Habenaria* (Orchidaceae) for Andhra Pradesh, India. *Indian Journal of Forestry*, 45(2), 95-97.
- Pullaiah, T., Chennaiah, E. and Sandhya Rani, S. (2018). *Flora of Andhra Pradesh Vol. 3*. Scientific Publishers, Jodhpur.
- Raju, V. S., Reddy, C. S., Reddy, K. N., Rao, K. S. and Bahadur, B. (2008). Orchid wealth of Andhra Pradesh, India. *Proceedings of the Andhra Pradesh Akademi of Sciences*, 12(1-2), 180-92.
- Rao, P. J., Rao, J. P. and Padal, S. B. (2024). *Epipogium* Borkh. (Orchidaceae): a new generic record for Andhra Pradesh, India. *Journal of Threatened Taxa*, 16(6), 25470–25473.
- Singh, S. K., Agrawala, D. K., Jalal, J. S., Dash, S. S., Mao, A. A. and Singh, P. (2019). *Orchids of India - a pictorial guide*. Botanical Survey of India, Kolkata pp. 546.
- Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W. H., Li, D. Z., Marhold, K., May, T. W., McNeill, J., Monro, A. M., Prado, J., Price, M. J., and Smith, G. F. (2018). *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China July 2017. Regnum Vegetabile 159*. Koeltz Botanical Books, Glashütten.
- Venkaiah, M., Rao, J.P., Naidu, M.T., Prameela, R., Rao, P.J., and Padal, S. B. (2020). Orchid diversity in the Eastern Ghats of northern Andhra Pradesh, India. (Eds. Khasim, S.M., Hegde, S.N., Gonzálezarnao, M.T., & Thammasiri, K.) *Orchid biology: Recent trends & challenges*, Springer, Singapore, pp. 189–206.

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