

ENDEMIC AND RARE PLANTS OF CHHATTISGARH

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A B S T R A C T

The paper deals with an account of endemic and rare plants of Chhattisgarh a newly constituted state of Indian union. Four species viz., *Staurogyne perpusilla* Henry & Balakr., *Maytenus bailadillana* (Narayan. & Mooney) Raju & Babu, *Eriocaulon rajendrababui* Ansari & Balakr. and *E. raipurensse* Khanna, Mudgal & Kumar are endemic to the state. Further, 481 taxa are rare in the state. Various conservation measures have been proposed in the paper.

INTRODUCTION

Chhattisgarh, the 26th state of India, has been recently formed on 1st November, 2000 by carving out sixteen districts of erstwhile Madhya Pradesh. It lies between 17° 46' 24° 5' N latitude and 80° 15' 84° 20' E longitude and covers an area of 1,35,194 sq. km. It is bounded in the north by Uttar Pradesh and Bihar, in the south by Andhra Pradesh, in the east by Orissa and in the west by Madhya Pradesh and Maharashtra. The state can be physiographically divided into three regions viz., Satpura hills in the north, central plain area of river Mahanadi and its tributaries and plateau of Bastar in the south. The climate is of tropical monsoon type with average rainfall of about 150 cm. The state has 62,189 sq. km of total forest cover which is 46% of the total geographical area. It has tropical moist deciduous, tropical dry deciduous, montane subtropical and northern tropical semi-evergreen forests. Although different districts of the state have been floristically surveyed and various accounts have been published (Wood, 1902; Mooney, 1942; Subramanyam and Henry, 1967; Unni, 1967; Arora, 1968; Saxena, 1973; Saxena and Khotele, 1976; Verma *et al.*, 1985; Panigrahi and Murti, 1989; Murti and Panigrahi, 1999; Kumar, in press), no attempt has been made to work out the status of endemic and rare plants of the state. The present paper deals with an account of endemic and rare plants of the state which will help in formulating strategies for their conservation and sustainable utilization.

All the endemic and rare taxa have been dealt under their respective families and the families of endemic taxa have been arranged alphabetically while those of the rare

taxa have been arranged in accordance with the Bentham and Hooker's system of classification (1862-1883) with slight modification as per recent concept. The genera and species of each family have been enumerated alphabetically for convenience. Correct name alongwith citation, basionym (if any) and reference of the Hooker's Flora of British India followed by habitat, distribution (district wise) and phenological data have been furnished for all the taxa. In addition, short description of the endemic taxa has also been provided.

ENDEMIC TAXA

Acanthaceae

Staurogyne perpusilla Henry & Balakr. in Bull. Bot. Surv. India 3: 205. 1961.

Small erect herbs, up to 10 cm high. Stems terete, appressed pubescent. Leaves opposite, ovate-oblong, 1-1.5 × 0.5-0.8 cm, entire, glabrous above, puberulous on nerves beneath, obtuse at apex, rounded at base. Flowers in terminal, lax, usually many-flowered, spiciform or condensed racemes; bracts ovate, obovate or oblong, glandular pubescent; bracteoles linear. Calyx-segments subequal, 4-6 mm long. Corolla pale blue, ca 3 mm long. Capsules ovate-oblong, ca 4 mm long, glabrous. Seeds pitted-tuberculate.

In moist places. Bastar.

Fl. & Fr.: Feb.-Mar.

Celastraceae

Maytenus bailadillana (Narayan. & Mooney) Raju & Babu in Bull. Bot. Surv. India 10: 384. 1968. *Gymnosporia bailadillana* Narayan. & Mooney in J. Indian bot. Soc. 20: 191. 1941.

Shrubs or small trees, up to 7 m high, armed or sometimes unarmed. Leaves simple, elliptic or elliptic-ovate, 4-9 × 1.5-5 cm, glaucous above, sometimes minutely glandular on margins, obtuse at apex, cuneate at base, shortly petiolate. Flowers in simple or dichotomous cymes, solitary or sometimes in fascicles of 2-4, bracteate, bracteolate. Sepals 5, broadly ovate, 0.8-1 mm long. Petals 5, 2.5-3 mm long. Stamens 5. Ovary 3-locular. Fruit a loculicidal, 3-lobed capsule. Seeds ovoid.

In dense forests. Bastar.

Fl. & Fr.: Oct. Feb.

Eriocaulaceae

Eriocaulon raipurense K.K. Khanna, V. Mudgal & Anand Kumar in Nordic J. Bot. 20(4) : 413. f. 1. 2000.

Herbs. Rootstocks absent. Leaves linear-lanceolate, up to 2 cm long. Heads grey to blackish, 2-4 mm across; peduncles 3-6.5 cm long; involucral bracts straw-coloured, elliptic or elliptic-lanceolate, 2.5-3.8 × 0.9-1.3 mm, acute or acuminate; floral bracts blackish, oblanceolate, 1.7-2 × 0.6-0.8 mm, acuter or subacute, sparsely hoary towards apical half on dorsal surface. Male flowers: Sepals 2, free, black, glabrous. Petals 3, equal. Anthers black. Female flowers: Sepals 2, black, with 2-3 white hairs at apex, eglandular. Seeds pale yellow, ovoid, 0.3-0.35 × 0.25 mm; cells of seed coat transversely elongated

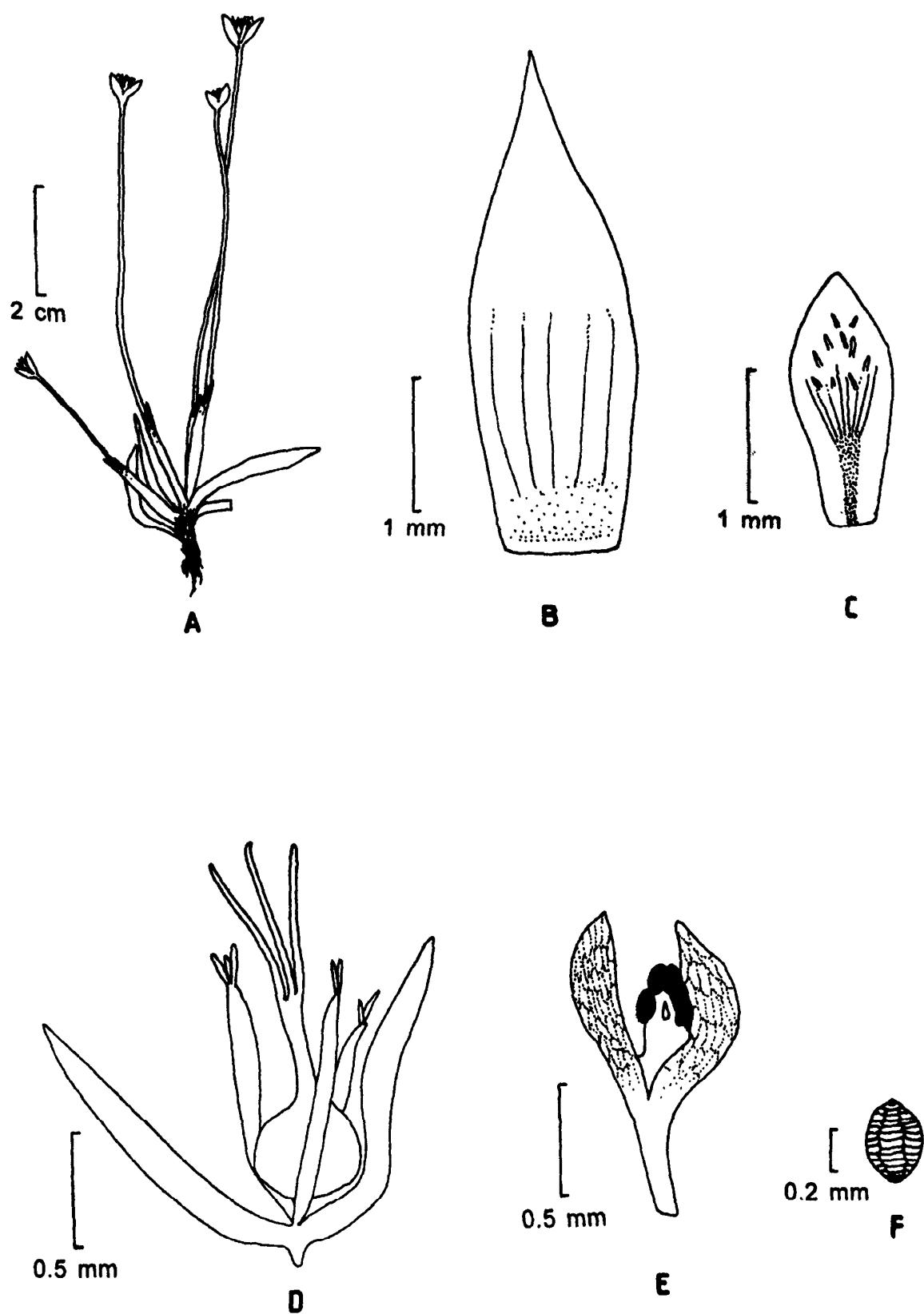


Fig. 1. *Eriocaulon raipurensis* K.K. Khanna, V. Mudgal & Anand Kumar : A. Habit; B. Involucral bract; C. Floral bract; D. Female flower; E. Male flower; F. Seed.

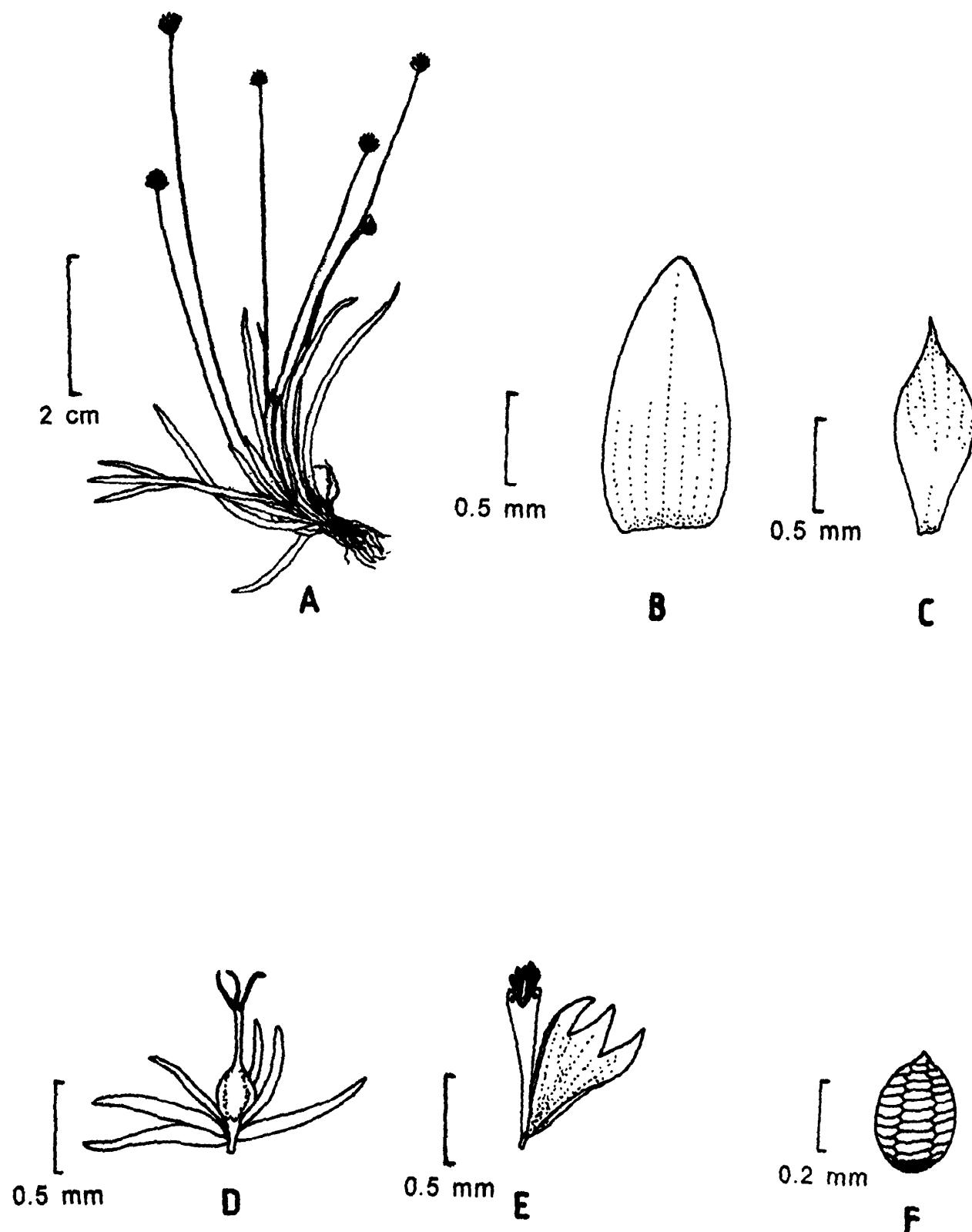


Fig. 2. *Eriocaulon rajendrababui* Ansari & Balakr. : A. Habit; B. Involucral bract; C. Floral bract; D. Female flower; E. Male flower; F. Seed.

and with appendages of a pair of continuous ribbon like bands.

In damp soil along streams. Raipur, Surguja.

Fl. & Fr.: Oct. Nov.

***Eriocaulon rajendrababui* Ansari & Balakr., Eriocaul. India 149. 1994.**

Herbs. Rootstocks absent. Leaves linear, 1-3 cm long. Heads straw-coloured, ca 3mm across; peduncles 4-7 cm long; involucral bracts straw-coloured, elliptic-lanceolate, 1.4-1.5 × 0.6-0.7 mm, obtuse or subacute; floral bracts elliptic-ob lanceolate, 1.1-1.5 × 0.5-0.6 mm, glabrous. *Male flowers:* Sepals connate into a 3-lobed spathe, straw-coloured. Petals 3, glabrous, with a black gland in each. Anthers black. *Female flowers:* Sepals 3, glabrous. Petals 3, linear, glabrous, eglandular. Seeds oblong-ovoid, ca 0.3 × 0.2 mm; cells of seed coat transversely elongated, without appendages.

In moist places. Rajnandgaon.

Fl. & Fr.: Nov.

RARE TAXA

Ranunculaceae

***Clematis roylei* Rehder in J. Arn. Arb. 22: 575. 1941. *C. nutans* Royle, Illustr. Bot. Himal. 51. 1834, *non* Crantz, 1763; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 5. 1872.**

Along hill slopes in dense forests. Bastar.

Fl. & Fr.: Dec.-April.

***Thalictrum chelidonii* DC., Prodr. 1: 11. 1824; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 11. 1872, p.p.**

In moist shady places on hills. Bastar.

Fl. & Fr.: Aug.-Sept.

***T. javanicum* Blume, Bijdr. 2. 1825; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 13. 1872.**

Amidst boulders on high hill slopes. Rajnandgaon.

Fl. & Fr.: July-Sept.

Annonaceae

***Mitrophora heyneana* (Hook. f. & Thomson) Thwaites, Enum. Pl. Zeyl. 8. 1858; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 77. 1872. *Orophea heyneana* Hook. f. & Thomson, Fl. Ind. 110. 1855.**

In valleys at higher elevations. Bastar.

Fl. & Fr.: Jan.-Mar.

***Polyalthia suberosa* (Roxb.) Thwaites, Enum. Pl. Zeyl. 398. 1864; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 66. 1872. *Uvaria suberosa* Roxb., Pl. Corom. t. 34. 1795.**

In dense subtropical forests. Bastar.

Fl. & Fr.: Apr.- Dec.

Menispermaceae

Stephania glabra (Roxb.) Miers in Ann. Nat. Hist. ser. 3. 18: 14. 1866. *Cissampelos glabra* Roxb., Fl. Ind. 3: 840. 1832. *Stephania rotunda* auct. non Lour., 1790; Hook. f. & Thomson, Fl. Ind. 197. 1855, p.p. & in Hook. f., Fl. Brit. India 1: 103. 1872, p.p.

In subtropical forests on hill slopes. Bastar.

Fl. & Fr.: July-Nov.

Violaceae

Viola betonicifolia Sm. in Rees, Cyclop. 37: Viola n. 7. 1819. *V. patrinii* auct. non DC., 1824; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 183. 1872.

In moist rock crevices. Surguja.

Fl. & Fr.: Jan.-May.

Flacourtiaceae

Homalium napaulense (DC.) Benth. in J. Proc. Linn. Soc. Bot. 4: 34. 1866; C.B. Clarke in Hook. f., Fl. Brit. India 2: 596. 1879, 'nepalense'. *Blackwellia napaulense* DC., Prodr. 2: 54. 1825.

In dense forests. Bastar (Mooney, 1942).

Fl. & Fr.: May-July.

Xylosma longifolia Clos. in Ann. Sci. Nat. Bot. ser. 4. 8: 231. 1857; Hook. f. & Thomson in Hook. f., Fl. Brit. India 1: 194. 1872.

In mixed forests on hills. Raigarh.

Fl. & Fr.: Dec.-Apr.

Polygalaceae

Polygala rosmarinifolia Wight & Arnott, Prodr. 1: 37. 1834; Bennett in Hook. f., Fl. Brit. India 1: 204. 1872.

Amongst grasses on hill slopes. Bastar.

Fl. & Fr.: Aug.- Nov.

P. telephiooides Willd., Sp. Pl. 3: 876. 1802; Bennett in Hook. f., Fl. Brit. India 1: 205. 1872.

In open fields. Bastar.

Fl. & Fr.: Jan.-Feb.

Caryophyllaceae

Drymaria cordata (L.) Willd. ex Roem. & Schult. subsp. *diandra* (Blume) Duke in Ann. Miss. Bot. Gard. 48: 253. 1961. *D. diandra* Blume, Bijdr. 62. 1825.

In moist places along streams. Bilaspur.

Fl. & Fr.: Throughout the year.

Portulacaceae

Portulaca pilosa L., Sp. Pl. 445. 1753. *P. tuberosa* Roxb., Fl. Ind. 2: 464. 1832; Dyer in Hook. f., Fl. Brit. India 1: 247. 1874.

In sandy river beds. Bilaspur.

Fl. & Fr.: July-Oct.

Elatinaceae

Bergia capensis L., Mant. Pl. 241. 1771. *B. verticillata* Willd., Sp. Pl. 2: 770. 1799;
 Dyer in Hook. f., Fl. Brit. India 1: 252. 1874.
 Along bank of ponds in muddy places. Raipur.
Fl. & Fr.: Aug.-Nov.

Theaceae

Eurya nitida Korth. in Temminck, Verh. Nat. Gesuch. Bot. 3: 115. t. 17. 1840. *E. japonica*
auct. non Thunb., 1784 var. *nitida* (Korth.) Dyer in Hook. f., Fl. Brit. India 1: 284.
 1874.
 In semi-evergreen forests on hill slopes. Bastar.
Fl. & Fr.: Most parts of the year.

Malvaceae

Abelmoschus manihot (L.) Medik. subsp. **tetraphyllus** (Roxb. ex Hornem.) Borss.
 var. **pungens** (Roxb.) Hochr. in Candollea 2: 87. 1924. *Hibiscus pungens* Roxb.,
 Fl. Ind. 3: 213. 1832; Masters in Hook. f., Fl. Brit. India 1: 341. 1874.
 Along forest roads. Bastar (Mooney, 1942).
Fl. & Fr.: Aug.-Dec.

A. moschatus Medik. subsp. **tuberosus** (Span.) Borss. in Blumea 14: 93. 1966. *Hibiscus longifolius* var. *tuberosus* Span. in Linnaea 15: 170. 1841. *H. rugosus* (Wallich ex Wight & Arnott) Steud., Nomencl. ed. 2. 760. 1840; Masters in Hook. f., Fl. Brit. India 1: 342. 1874.
 In sal and mixed forests. Rajnandgaon.
Fl. & Fr.: Sept.-Oct.

Decaschistia crotonifolia Wight & Arnott, Prodr. 52. 1834; Hook. f., Fl. Brit. India 1: 332. 1874.
 In open places on hill slopes. Bastar.
Fl. & Fr.: Oct.-Dec.

Sterculiaceae

Eriolaena quinquelocularis (Wight & Arnott) Cleghorn, Gen. Index 36. 1856; Masters
 in Hook. f., Fl. Brit. India 1: 371. 1874. *Microchlaena quinquelocularis* Wight &
 Arnott, Prodr. 71. 1834.
 In mixed forests. Surguja (Wood, 1902).
Fl. & Fr.: Feb.-Dec.

Firmiana colorata (Roxb.) R. Br. in Bennett & Br., Pl. Jav. Rar. 235. 1844. *Sterculia colorata* Roxb., Pl. Corom. 1: 26. t. 25. 1795; Masters in Hook. f., Fl. Brit. India 1: 359. 1874.
 In deciduous forests. Bilaspur.
Fl. & Fr.: Feb.-May.

Pterospermum xylocarpum (Gaertn.) Santapau & Wagh in Bull. Bot. Surv. India 5: 108. 1963. *Velago xylocarpa* Gaertn., Fruct. Sem. Pl. 2: 245. t. 133. f. 2. 1791. *Pterospermum heyneanum* Wallich ex Wight & Arnott, Prodr. 69. 1834; Masters in Hook. f., Fl. Brit. India 1: 369. 1874.
In dense forests. Bastar (Mooney, 1942).
Fl. & Fr. : May-July.

Tiliaceae

Grewia sapida Roxb. ex DC., Prodr. 1: 52. 1824; Masters in Hook. f., Fl. Brit. India 1: 387. 1874.
In open grasslands. Raigarh.
Fl. & Fr. : Apr.-Nov.

Elaeocarpaceae

Elaeocarpus lanceifolius Roxb., Fl. Ind. 2: 598. 1832; Masters in Hook. f., Fl. Brit. India 1: 402. 1874.
In semi-evergreen forests. Bastar (Mooney, 1942).
Fl. & Fr. : Aug.-Jan.

E. prunifolius (C. Muell.) Masters in Hook. f., Fl. Brit. India 1: 407. 1874. *Monocera prunifolius* C. Muell., Anot. Fam. Elaeocarp. 15. 1849.
In moist deciduous and semi-evergreen forests. Bastar (Mooney, 1942).
Fl. & Fr. : Feb.-Sept.
E. varunua Buch.-Ham. ex Masters in Hook. f., Fl. Brit. India 1: 407. 1874.
In semi-evergreen forests at high elevation. Bastar (Mooney, 1942).
Fl. & Fr. : Apr.-Oct.

Linaceae

Linum mysurensse Heyne ex Benth. in Edward's, Bot. Reg. 16. sub t. 1326. 1830; Hook. f., Fl. Brit. India 1: 411. 1874.
In fields. Raigarh.
Fl. & Fr. : Sept.-Jan.

Malpighiaceae

Aspidopterys glabriuscula (Wallich) Juss. in Ann. Sci. Nat. ser. 2. Bot. 13: 267. 1840.
A. roxburghiana var. à Hook. f., Fl. Brit. India 1: 420. 1874.
Twining on shrubs and trees. Bastar.
Fl. & Fr. : May-Nov.

Rutaceae

Glycosmis arborea (Roxb.) DC., Prodr. 1: 538. 1824. *Limonia arborea* Roxb., Pl. Corom. t. 85. 1798.
In dense forests. Bastar.
Fl. & Fr. : Dec.-Feb.

Toddalia asiatica (L.) Lam., Tab. Encycl. Meth. 2: 116. 1797. *Paullinia asiatica* L., Sp. Pl. 365. 1753. *Toddalia aculeata* (Sm.) Pers., Syn. Pl. 1: 249. 1805; Hook. f., Fl. Brit. India 1: 497. 1875.

On hill slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Sept.

Zanthoxylum armatum DC., Prodr. 1: 727. 1824. *Z. alatum* Roxb., Fl. Ind. 3: 768. 1832; Hook. f., Fl. Brit. India 1: 493. 1875.

In subtropical forests. Raigarh.

Fl. & Fr.: Apr.-Oct.

Z. rhetsa (Roxb.) DC., Prodr. 1: 728. 1824; Hook. f., Fl. Brit. India 1: 495. 1875. *Fagara rhetsa* Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 438. 1820.

In subtropical forests. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Oct.

Ochnaceae

Ochna integerrima (Lour.) Merr. in Trans. Am. Phil. Soc. n.s. 24 (2), 2: 265. 1935.

O. wallichii Planch. in Hook., Lond. J. Bot. 5: 650. 1846; Bennett in Hook. f., Fl. Brit. India 1: 524. 1875.

Along forest roads. Raigarh.

Fl. & Fr.: Mar.-Apr.

O. obtusata DC. var. *gamblei* (King ex Brandis) Kanis in Blumea 16: 34. 1968.

In mixed forests. Raigarh.

Fl. & Fr.: Mar.-June.

Burseraceae

Bursera serrata Wallich ex Colebr. in Trans. Linn. Soc. 15: 361. t. 4. 1827; Bennett in Hook. f., Fl. Brit. India 1: 528. 1875.

In sal and mixed forests. Raipur.

Fl. & Fr.: Mar.-June.

Meliaceae

Aglaia elaeagnoidea (A. Juss.) Benth. var. *beddomei* (Gamble) K.K.N. Nair in J. Bombay Nat. Hist. Soc. 78: 426. 1981. *A. roxburghiana* (Wight & Arnott) Miq. var. *beddomei* Gamble, Fl. Pres. Madras 1: 180. 1915.

In subtropical forests. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Dec.-Feb.

Melia dubia Cav., Diss. 7: 364. 1789; Hiern in Hook. f., Fl. Brit. India 1: 545. 1875.

In dense forests. Bastar.

Fl. & Fr.: Mar.-Apr.

Trichilia connaroides (Wight & Arnott) Benth. in Acta Bot. Neerl. 11: 13. 1962. *Zanthoxylum connaroides* Wight & Arnott, Prodr. 148. 1834. *Heynea trijuga* Roxb. ex Sims in Curtis, Bot. Mag. 41: t. 1738. 1815; Hiern in Hook. f., Fl. Brit. India 1: 565. 1875.

In mixed forests. Raigarh.

Fl. & Fr.: Mar.-Dec.

Erythropalaceae

Erythropalum scandens Blume, Bijdr. 921. 1826; Masters in Hook. f., Fl. Brit. India 1: 578. 1875.

In dense semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: May-Dec.

Celastraceae

Maytenus senegalensis (Lam.) Exell. in Bol. Soc. Brot., ser. 2, 26: 223. 1952. *Celastrus senegalensis* Lam., Encycl. 1: 661. 1783. *Gymnosporia montana* (Roth) Benth., Fl. Austral. 1: 400. 1863; Lawson in Hook. f., Fl. Brit. India 1: 621. 1875.

In subtropical forests. Bastar.

Fl. & Fr.: Oct.-Mar.

Rhamnaceae

Gouania liliaefolia Lam., Encycl. 3: 6. 1789. *G. leptostachya* DC., Prodr. 2: 40. 1825; Lawson in Hook. f., Fl. Brit. India 1: 643. 1875.

Climber on hill slopes. Bastar.

Fl. & Fr.: Aug.-Dec.

Rhamnus virgatus Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 351. 1824. *R. dahuricus* Lawson in Hook. f., Fl. Brit. India 1: 639. 1875, *non* Pall., 1815.

In mixed forests. Bilaspur.

Fl. & Fr.: Mar.-Oct.

Vitaceae

Ampelocissus divaricata (Wallich ex Lawson) Planch. in Vigne Amer. Vitic. Eur. 8: 375. 1884 & in A. & C. DC., Monogr. Phan. 5: 378. 1887. *Vitis divaricata* Wallich ex Lawson in Hook. f., Fl. Brit. India 1: 657. 1875.

Climber in semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: July-Oct.

Cissus vitiginea L., Sp. Pl. 117. 1753. *Vitis linnaei* Wallich ex Wight & Arnott, Prodr. 126. 1834; Lawson in Hook. f., Fl. Brit. India 1: 649. 1875.

Climber on hill slopes. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: July-Feb.

Tetrastigma leucostaphylum (Dennst.) Alston ex Mabb. in Taxon 26: 539. 1977. *Cissus leucostaphyla* Dennst., Schluess. Hort. Malab. 17, 19, 33. 1818 & in Forst., Allg. Teutsch. Gart.-Mag. 3: 35, 37, 81. 1818. *Vitis lanceolaria* (Roxb.) Wallich, Num. List. 206, no. 6013. 1831-32; Lawson in Hook. f., Fl. Brit. India 1: 660. 1875.

Climber in subtropical forests. Bastar (Mooney, 1942).

Fl. & Fr.: Jan.-May.

Vitis campylocarpa Kurz ex Lawson in Hook. f., Fl. Brit. India 1: 657. 1875.

Climber on hill slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Nov.-Apr.

Leeaceae

Leea alata Edgew. in Trans. Linn. Soc. London 20: 36. 1846; Lawson in Hook. f., Fl. Brit. India 1: 665. 1875.

In mixed forests. Bilaspur.

Fl. & Fr.: June-Sept.

L. indica (Burm. f.) Merr. in Philip. J. Sci. Bot. 14: 245. 1919. *L. sambucina* (L.) Willd., Sp. Pl. 1: 1177. 1797; Lawson in Hook. f., Fl. Brit. India 1: 666. 1875.
As forest undergrowth. Bilaspur.

Fl. & Fr.: June-Dec.

L. macrophylla Roxb. ex Hornem., Hort. Hafn. 1: 231. 1813; Lawson in Hook. f., Fl. Brit. India 1: 664. 1875.
As forest undergrowth. Raipur.
Fl. & Fr.: Oct.-Jan.

Sapindaceae

Lepisanthes rubiginosa (Roxb.) Leenh. in Blumea 17: 82. 1969. *Sapindus rubiginosus* Roxb., Pl. Corom. 1: 44. t. 62. 1795. *Erioglossum edule* Blume, Bijdr. 229. 1825; Hiern in Hook. f., Fl. Brit. India 1: 672. 1875.
In dense hilly forests. Bastar (Saxena and Khotele, 1976).
Fl. & Fr.: Jan.-May.

Fabaceae

Alysicarpus bupleurifolius (L.) DC. var. *gracilis* (Edgew.) Baker in Hook. f., Fl. Brit. India 2: 158. 1876. *A. gracilis* Edgew. in J. Linn. Soc. Bot. 9: 312. 1866.
In mixed forests. Raipur.
Fl. & Fr.: Oct.-Jan.

Atylosia platycarpa Benth. in Miq., Pl. Jungh. 243. 1852; Baker in Hook. f., Fl. Brit. India 2: 216. 1876.
In mixed forests. Bastar.
Fl. & Fr.: Aug.-Sept.

Cajanus cajanifolius (Haines) van der Maesen, Agric. Univ. Wageningen Pap. 85-4: 91. 1985. *Atylosia cajanifolia* Haines in J. Asiat. Soc. Bengal (n.s.) 15: 312. 1920.
In dense forests. Bastar (Tiwari, 1979).
Fl. & Fr.: Nov.-Apr.

C. rugosus (Wight & Arnott) van der Maesen, Agric. Univ. Wageningen Pap. 85-4: 179. 1985. *Atylosia rugosa* Wight & Arnott, Prodr. 257. 1834; Baker in Hook. f., Fl. Brit. India 2: 215. 1876.
At higher elevations. Bastar (Tiwari, 1979).
Fl. & Fr.: Nov.-Feb.

- Crotalaria chinensis** L., Syst. Nat. ed. 10. 1158. 1759; Baker in Hook. f., Fl. Brit. India 2: 73. 1876. As forest undergrowth. Bilaspur (Tiwari, 1979).
Fl. & Fr.: Sept.-Dec.
- C. laburnifolia** L., Sp. Pl. 715. 1753; Baker in Hook. f., Fl. Brit. India 2: 84. 1876.
As forest undergrowth. Bastar (Saxena and Khotele, 1976).
Fl. & Fr.: Sept.-Jan.
- C. notonii** Wight & Arnott, Prodr. 192. 1834; Baker in Hook. f., Fl. Brit. India 2: 82. 1876.
In mixed forests. Raipur.
Fl. & Fr.: Oct.-Nov.
- C. pusilla** Heyne ex Roth, Nov. Pl. Sp. 235. 1821; Baker in Hook. f., Fl. Brit. India 2: 70. 1876.
In open forests. Bastar (Subramanyam and Henry, 1967).
Fl. & Fr.: Sept.-Jan.
- C. sessiliflora** L., Sp. Pl. 714. 1753; Baker in Hook. f., Fl. Brit. India 2: 73. 1876. var. **anthylloides** (Lam.) A.A. Ansari & Thoth. forma **lineariformis** A.A. Ansari & Thoth. in J. Econ. Tax. Bot. 6: 745. 1985.
In mixed forests. Surguja.
Fl. & Fr.: Oct.-Dec.
var. **sessiliflora**
In mixed forests. Surguja.
Fl. & Fr.: Sept.-Dec.
- Derris scandens** (Roxb.) Benth. in J. Linn. Soc. London (Bot.) 4(suppl.): 103. 1860;
Baker in Hook. f., Fl. Brit. India 2: 240. 1876. *Dalbergia scandens* Roxb., Pl. Corom. 2: 29. t. 192. 1805.
In dense forests. Bastar (Tiwari, 1979).
Fl. & Fr.: July-Oct.
- Desmodium biarticulatum** (L.) F.v. Muell., Fragm. Phyt. Austr. 2: 121. 1861; Baker in Hook. f., Fl. Brit. India 2: 163. 1876. *Hedysarum biarticulatum* L., Sp. Pl. 747. 1753.
As forest undergrowth. Bastar (Mooney, 1942).
Fl. & Fr.: Sept.-Dec.
- D. heterophyllum** (Willd.) DC., Prodr. 2: 334. 1825; Baker in Hook. f., Fl. Brit. India 2: 173. 1876. *Hedysarum heterophyllum* Willd., Sp. Pl. 3: 620. 1820.
As forest undergrowth. Bastar (Mooney, 1942).
Fl. & Fr.: Aug.-Oct.
- D. triangulare** (Retz.) Merr. in J. Arn. Arb. 23: 170. 1942. *Hedysarum triangulare* Retz., Observ. Bot. 3: 40. 1783. *Desmodium cephalotes* (Roxb.) Wight & Arnott, Prodr. 224. 1834; Baker in Hook. f., Fl. Brit. India 2: 161. 1876.
In sal forests. Raipur.
Fl. & Fr.: Sept.-Jan.
- Dumasia villosa** DC. in Ann. Sci. Nat. 4: 96. 1825; Baker in Hook. f., Fl. Brit. India 2: 183. 1876.

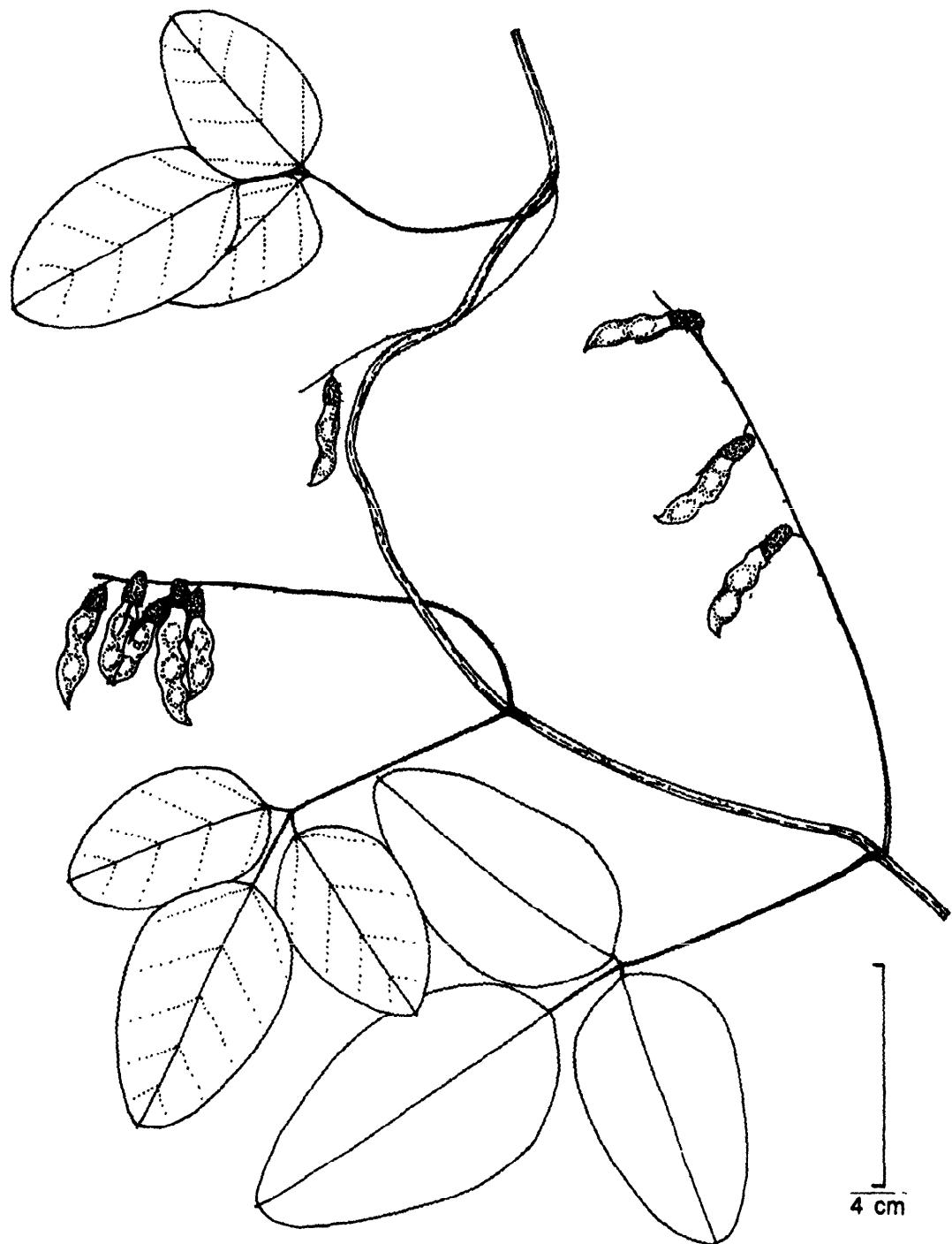


Fig. 3. *Dumasia villosa* DC.

Climbing over bushes at the edge of forests. Bilaspur.

Fl. & Fr.: Aug.- Nov.

Eriosema himalaicum Ohashi in J. Jap. Bot. 41: 96. 1966. *E. chinense* auct. non Vogel., 1843: Baker in Hook. f., Fl. Brit. India 2: 219. 1876, p.p.

At the edge of forests. Surguja.

Fl. & Fr.: Sept.-Oct.

Erythrina suberosa Roxb., Fl. Ind. 3: 253. 1832; Baker in Hook. f., Fl. Brit. India 2: 189. 1876.

In mixed forests. Durg.

Fl. & Fr.: Mar.-Apr.

Flemingia grahamiana Wight & Arnott, Pordr. 1: 242. 1834; Baker in Hook. f., Fl. Brit. India 2: 228. 1876.

As forest undergrowth. Raigarh.

Fl. & Fr.: Jan.-May.

F. procumbens Roxb., Fl. Ind. 3: 338. 1832. *F. vestita* Benth. ex Baker in Hook. f., Fl. Brit. India 2: 230. 1876. *Moghania procumbens* (Roxb.) Mukerjee in Bull. Bot. Soc. Bengal 6: 12. 1952.

As forest undergrowth. Bastar (Tiwari, 1979).

Fl. & Fr.: Jan.-Mar.

F. prostrata Roxb., Fl. Ind. 3: 338. 1832. *F. congesta* var. *semialata* Baker in Hook. f., Fl. Brit. India 2: 229. 1876, p.p.

As forest undergrowth in subtropical forests. Bastar.

Fl. & Fr.: Aug.-Dec.

F. stricta Roxb., Pl. Corom. 3. t. 248. 1815 & Fl. Ind. 3: 340. 1832; Baker in Hook. f., Fl. Brit. India 2: 228. 1876. subsp. *pteropus* (Baker) K.K. Khanna & Anand Kumar in Indian J. For. 24(2): 223. 2001. *F. stricta* Roxb. var. *pteropus* Baker in Hook. f., Fl. Brit. India 2: 228. 1876.

As forest undergrowth. Bastar.

Fl. & Fr.: Mar.-May.

subsp. *stricta*

In rocky soil. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Mar.-May.

F. wightiana Grah. ex Wight & Arnott, Prodr. 242. 1834. *F. congesta* Roxb. ex Aiton f. var. *wightiana* (Grah. ex Wight & Arnott) Baker in Hook. f., Fl. Brit. India 2: 229. 1876. At lower elevations in forests. Bastar (Mooney, 1942).

Fl. & Fr.: Mar.-June.

Indigofera angulosa Edgew. in J. Asiat. Soc. Bengal 21: 168. 1853; Baker in Hook. f., Fl. Brit. India 2: 97. 1876.

In open moist places and hill slopes in mixed forests. Rajnandgaon.

Fl. & Fr.: Sept.-Nov.

Indigofera hamiltonii Grah. ex Duthie & Prain in Ann. Roy. Bot. Gard. Calcutta 9(1):

22. t. 29. 1901.

In sal forests. Raigarh.

Fl. & Fr.: Mar.-May.

I. parviflora Heyne ex Wight & Arnott, Prodr. 201. 1834; Baker in Hook. f., Fl. Brit.

India 2: 97. 1876.

In wastelands. Bastar (Tiwari, 1979).

Fl. & Fr.: Sept.-Jan.

Leptodesmia congesta Benth. ex Baker in Hook. f., Fl. Brit. India 2: 152. 1876. Along forest roads. Raigarh (Wood, 1902).

Lespedeza juncea (L. f.) Pers., Syn. Pl. 2: 318. 1807; Baker in Hook. f., Fl. Brit. India 2: 142. 1876.

In mixed forests. Raigarh.

Fl. & Fr.: Nov.-Jan.

Mucuna monosperma DC. ex Wight in Bot. Misc. 2: 346. 1831; Baker in Hook. f., Fl. Brit. India 2: 185. 1876.

In hilly forests. Bastar (Tiwari, 1979).

Fl. & Fr.: Nov.-Apr.

Nogra filicaulis (Kurz) Merr. in Trans. Amer. Phil. Soc. 11, 25(2): 201. 1935. *Grona filicaulis* Kurz in J. Asiat. Soc. Bengal 42: 232. 1874; Baker in Hook. f., Fl. Brit. India 2: 191. 1876.

On lateritic soil in sal forests. Raigarh (Panigrahi and Tiwari, 1975).

Fl. & Fr.: Sept.-Oct.

N. grahamii (Wallich ex Benth.) Merr. in Trans. Amer. Phil. Soc. ser. 2, 24: 201. 1935.

Glycine grahamii Wallich ex Benth. in Miq., Pl. Jungh. 233. 1852. *Grona grahamii* (Wallich ex Benth.) Baker in Hook. f., Fl. Brit. India 2: 191. 1876.

In hilly forests. Surguja (Tiwari, 1979).

Fl. & Fr.: Aug.-Dec.

Paracalyx scariosus (Roxb.) Ali in Univ. Stud. Karachi 5(3): 95. 1968. *Cylista scariosa* Roxb., Pl. Corom. 1: 64. t. 92. 1795; Baker in Hook. f., Fl. Brit. India 2: 219. 1876.

In subtropical forests. Bastar.

Fl. & Fr.: Nov.-Mar.

Phaseolus subramanyamus Babu ex Raizada in Suppl. Duthie's Fl. Upp. Gang. Pl. 56.

1976.

In fields. Surguja.

Fl. & Fr.: Sept.-Nov.

Pueraria phaseoloides (Roxb.) Benth. in J. Linn. Soc. London (Bot.) 9: 124. 1867; Baker in Hook. f., Fl. Brit. India 2: 199. 1876. *Dolichos phaseoloides* Roxb., Fl. Ind. 3:

316. 1832.

On hill slopes. Bastar (Tiwari, 1979).

Fl. & Fr.: Aug.-Dec.

Pycnospora lutescens (Poir.) Schindl. in J. Bot. 64: 145. 1926. *Hedysarum lutescens* Poir. in Lam., Encycl. Meth. 6: 417. 1805. *Pycnospora hedysarioides* R. Br. ex

Wight & Arnott, Prodr. 197. 1834; Baker in Hook. f., Fl. Brit. India 2: 153. 1876.
As forest undergrowth. Surguja.

Fl. & Fr.: Aug.-Dec.

Rhynchosia rufescens (Willd.) DC., Prodr. 2: 387. 1825; Baker in Hook. f., Fl. Brit. India 2: 220. 1876. *Glycine rufescens* Willd., Nov. Act. Berol. 222. 1803.

As undergrowth in forests over bushes. Bastar (Tiwari, 1979).

Fl. & Fr.: Dec.-Mar.

R. suaveolens (L. f.) DC., Prodr. 2: 387. 1825; Baker in Hook. f., Fl. Brit. India 2: 221. 1876. *Glycine suaveolens* L. f., Suppl. Pl. 326. 1782.

In outskirt of forests. Raipur (Tiwari, 1979).

Fl. & Fr.: Oct.-Dec.

Rothia indica (L.) Druce, Bot. Exch. Club Soc. Brit. Isles 3: 423. 1914. *Trigonella indica* L., Sp. Pl. 778. 1753. *Rothia trifoliata* (Pers.) DC., Prodr. 2: 382. 1825; Baker in Hook. f., Fl. Brit. India 2: 63. 1876.

In fallow fields. Surguja.

Fl. & Fr.: Aug.-Dec.

Smithia ciliata Royle, Illustr. Bot. Himal. 3: 201. t. 35. f. 2. 1835; Baker in Hook. f., Fl. Brit. India 2: 150. 1876.

In moist places. Bastar (Mooney, 1942).

Fl. & Fr.: Oct.-Dec.

Sophora bakeri C.B. Clarke ex Prain in J. Asiat. Soc. Bengal 64: 466. 1906.

In sal forests at higher elevations. Surguja (Tiwari, 1979).

Fl. & Fr.: May-Mar.

S. glauca Lesch ex DC. in Ann. Sci. Nat. ser. 1, 4: 98. 1825; Baker in Hook. f., Fl. Brit. India 2: 249. 1876.

On hill slopes. Raigarh.

Fl. & Fr.: Mar.-May.

Teramnus mollis Benth. in J. Linn. Soc. Bot. 8: 265. 1865. *T. labialis* (L. f.) Spreng.

var. *mollis* (Benth.) Baker in Hook. f., Fl. Brit. India 2: 184. 1876.

Over bushes on hill slopes. Bastar.

Fl. & Fr.: July-Dec.

Trigonella occulta Delile ex DC., Prodr. 2: 185. 1825; Baker in Hook. f., Fl. Brit. India 2: 87. 1876.

In roadside ditches. Bastar.

Fl. & Fr.: Feb.-Apr.

Uraria lagopus DC. var. *neglecta* (Prain) Ohashi in Hara, Fl. East. Himal. 3: 70. 1975.

U. neglecta Prain in J. Asiat. Soc. Bengal 66: 382. 1897.

As forest undergrowth. Bastar.

Fl. & Fr.: Feb.-May.

U. prunellaefolia Grah. ex Baker in Hook. f., Fl. Brit. India 2: 157. 1876.

As forest undergrowth. Bastar (Tiwari, 1979).

Fl. & Fr.: Apr.-May.

Vigna adenantha (G.F. Meyer) Marech, Masch. & Stain. in Taxon 27: 202. 1978. *Phaseolus adenanthus* G.F. Meyer, Prim. Fl. Esseq. 239. 1818; Baker in Hook. f., Fl. Brit. India 2: 200. 1876.

In wastelands. Bastar (Arora, 1968).

Fl. & Fr.: Sept.-Dec.

V. pilosa (Willd.) Baker in Hook. f., Fl. Brit. India 2: 207. 1876. *Dolichos pilosus* Willd., Sp. Pl. 3: 1043. 1802.

In dense forests. Bastar (Tiwari, 1979).

Fl. & Fr.: Oct.-Mar.

Zornia gibbosa Span. var. *zelonensis* Baker in Hook. f., Fl. Brit. India 2: 148. 1876.

In wastelands. Raigarh (Wood, 1902).

Caesalpiniaceae

Wagatea spicata Dalz. in Hook., J. Bot. Kew Gard. Misc. 3: 90. 1831; Baker in Hook. f., Fl. Brit. India 2: 261. 1878.

In mixed forests. Raigarh.

Fl. & Fr.: Sept.-Nov.

Mimosaceae

Acacia intsia (L.) Willd. in DC., Prodr. 2: 404. 1825; Baker in Hook. f., Fl. Brit. India 2: 297. 1878. *Mimosa intsia* L., Sp. Pl. 522. 1753.

In sal forests. Raigarh-Jashpur (Wood, 1902).

Fl. & Fr.: Aug.-Apr.

A. lenticularis Buch.-Ham. ex Baker in Hook. f., Fl. Brit. India 2: 296. 1878.

In mixed forests. Bilaspur.

Fl. & Fr.: May-Dec.

Albizia chinensis (Osb.) Merr. in Amer. J. Bot. 3: 575. 1916. *Mimosa chinensis* Osb., Degbok Ostind. Resa 233. 1757. *Albizia stipulata* (Roxb.) Boivin in Encycl. 19(2): 33. 1838; Baker in Hook. f., Fl. Brit. India 2: 300. 1878.

In dry deciduous forests. Bastar.

Fl. & Fr.: Apr.-Sept.

A. lathamii Hole in Indian For. Rec. 4(4): 153. 1913.

In dry deciduous forests. Bastar (Tiwari, 1979).

Fl. & Fr.: Sept.-Mar.

Entada phaseoloides (L.) Merr. in Philipp. J. Sci. 9: 86. 1914. *Lens phaseoloides* L., Herb. Amboin. 18. 1754. *Entada scandens* (L.) Benth. in Hook., Lond. J. Bot. 4: 332. 1841; Baker in Hook. f., Fl. Brit. India 2: 287. 1878.

In damp valleys. Bilaspur.

Fl. & Fr.: Jan.-Dec.

Mimosa barberi Gamble in Kew Bull. 1920: 5. 1920.

In open forests. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Mar.-May.

Neptunia oleracea Lour., Fl. Cochinch. 654. 1790; Baker in Hook. f., Fl. Brit. India 2: 285. 1878.

In drains. Raipur.

Fl. & Fr.: Sept.-Apr.

Rosaceae

Potentilla sundaica (Blume) Kuntze, Revis. Gen. Pl. 1: 219. 1891. *Fragara sundaica* Blume, Bijdr. 1106. 1826. *Potentilla kleniana* Wight & Arnott in Wight, Illustr. Ind. Bot. 1: t. 85. 1831; Hook. f., Fl. Brit. India 2: 359. 1878.

In the outskirt of forests. Surguja.

Fl. & Fr.: Apr.-Sept.

Prunus ceylanica (Wight) Miq., Fl. Ind. Bat. 1, 1: 365. 1855. *Polydontia ceylanica* Wight, Illustr. Ind. Bot. 1: 203. 1840. *Pygeum acuminatum* Colebr. in Trans. Linn. Soc. London 12: 306. t. 18. 1818, *non* Michx., 1803, *nec* (Wallich) D. Dietr., 1842; Hook. f., Fl. Brit. India 2: 318. 1878.

In subtropical forests. Bastar (Mooney, 1942).

Fl. & Fr.: May-Dec.

P. pygeoides Koeh. in Engler, Bot. Jahrb. 52: 297. 1915. *Pygeum andersonii* Hook. f., Fl. Brit. India 2: 320. 1878.

In damp ravines. Bastar.

Fl. & Fr.: Nov.-Jan.

Pyrus pashia Buch.-Ham. ex D. Don, Prodr. Fl. Nepal. 236. 1825; Hook. f., Fl. Brit. India 2: 374. 1878.

In dense forests. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Feb.-Dec.

Vahliaceae

Vahlia digyna (Retz.) Kuntze, Revis. Gen. Pl. 227. 1891. *Oldenlandia digyna* Retz., Observ. Bot. 4: 23. 1786. *Vahlia viscosa* Roxb., Fl. Ind. 2: 89. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 2: 399. 1878.

In sandy river beds. Raipur.

Fl. & Fr.: Mar.-May.

Callitrichaceae

Callitriche stagnalis Scop., Fl. Carn. ed. 2, 2: 251. 1772; C.B. Clarke in Hook. f., Fl. Brit. India 2: 434. 1878.

In ponds. Surguja.

Fl. & Fr.: June-Aug.

Combretaceae

Anogeissus acuminata (Roxb. ex DC.) Guill. & Perr., Fl. Seneg. Tent. 7: 280. 1832. *Conocarpus acuminata* Roxb. ex DC., Prodr. 3: 16. 1828. *A. acuminata* (Roxb. ex DC.) Guill. & Perr. var. *lanceolata* Wallich ex C.B. Clarke in Hook. f., Fl. Brit.

India 2: 451. 1878.

In teak forests. Bastar.

Fl. & Fr.: Feb.-Apr.

Terminalia gella Dalz. in Hook., J. Bot. 3: 227. 1851.

In hilly forests. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Mar.-Nov.

Lythraceae

Nesaea brevipes Koehne in Engler, Bot. Jahrb. Syst. 3: 326. 1882. *Ammannia cordata*

Wight & Arnott, Prodr. 304. 1834; Hiern in Hook. f., Fl. Brit. India 2: 570. 1879.

As forest undergrowth. Bastar.

Fl. & Fr.: Dec.-Feb.

Rotala illecebroides (C.B. Clarke) Koehne in Engler, Bot. Jahrb. Syst. 1: 167. 1880.

Ammannia pentandra var. *illecebroides* C.B. Clarke in Hook. f., Fl. Brit. India 2: 569. 1879.

In moist places. Raipur.

Fl. & Fr.: Sept.-Oct.

R. verticillaris L., Mant. Pl. 175. 1771, p.p. *Ammannia rotala* F. Muell., Fragm. 3: 108.

1863; C.B. Clarke in Hook. f., Fl. Brit. India 2: 567. 1879.

In swampy places. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Dec.-Feb.

Cucurbitaceae

Cucumis prophetarum L., Cent. Pl. 33. 1755; C.B. Clarke in Hook. f., Fl. Brit. India 2: 619. 1879.

In mixed forests. Raipur.

Fl. & Fr.: Apr.-Oct.

Luffa echinata Roxb., Fl. Ind. 3: 716. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 2: 615. 1879.

In wastelands. Raipur.

Fl. & Fr.: Sept.-Jan.

Trichosanthes bracteata (Lam.) Voigt., Hort. Suburb. Calc. 58. 1845. *Modecca bracteata* Lam., Encycl. 4: 210. 1767. *Trichosanthes palmata* Roxb., Fl. Ind. 3: 704. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 2: 606. 1879.

On roadside bushes. Surguja.

Fl. & Fr.: July-Dec.

T. tricuspidata Lour. var. **strigosa** Mitra & Bandyop. in J. Bombay Nat.

Hist. Soc. 95: 374-375. 1998.

In wastelands. Bastar

Fl. & Fr.: Aug.-Oct.

Aizoaceae

Trianthema portulacastrum L., Sp. Pl. 223. 1753. *T. monogyna* L., Mant. Pl. 69. 1767; C.B. Clarke in Hook. f., Fl. Brit. India 2: 660. 1879.

In wastelands. Raipur.

Fl. & Fr.: Aug.-Oct.

Molluginaceae

Mollugo cerviana (L.) Seringe in DC., Prodr. 1: 392. 1824; C.B. Clarke in Hook. f., Fl. Brit. India 2: 663. 1879.

In moist places along ponds. Raipur.

Fl. & Fr.: May-July.

Apiaceae

Heracleum nepalense D. Don, Prodr. Fl. Nepal.

185. 1825; C.B. Clarke in Hook. f., Fl. Brit. India 2: 714. 1879.

As forest undergrowth. Bilaspur.

Fl. & Fr.: July-Oct.

Ligisticum alboalatum Haines in J. Asiat. Soc. Bengal II. 15: 314. 1920.

In mixed forests. Surguja.

Fl. & Fr.: May-June.

Oenanthe javanica (Blume) DC., Prodr. 4: 138. 1830. *Sium javanicum* Blume, Bijdr.

15: 881. 1826. *Oenanthe stolonifera* DC., Prodr. 4: 138. 1830; C.B. Clarke in Hook. f., Fl. Brit. India 2: 696. 1879.

In mixed forests. Bilaspur.

Fl. & Fr.: May-Oct.

Pimpinella bracteata Haines in J. Asiat. Soc. Bengal 15: 314. 1920 & Bot. Bihar Orissa 2: 427. 1922.

As forest undergrowth. Surguja.

Fl. & Fr.: Oct.-Jan.

Pycnocycla glauca Lindl. in Royle, Illustr. Bot. Himal. 232. t. 51. 1835; C.B. Clarke in Hook. f., Fl. Brit. India 2: 694. 1879.

Along forest roads. Bilaspur.

Fl. & Fr.: May-Nov.

Seseli diffusum (Roxb. ex Sm.) Sant. & Wagh in Bull. Bot. Surv. India 5: 108. 1963.

Ligisticum diffusum Roxb. ex Sm. in Rees, Cyclop. 21: 11. 1812. *Seseli indicum* Wight & Arnott, Prodr. 371. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 2: 693. 1879.

In wastelands. Durg.

Fl. & Fr.: Apr.-June.

Trachyspermum roxburghianum (DC.) Craib., Fl. Siam. Enum. 1: 788. 1931. *Ptychotis roxburghiana* DC., Prodr. 4: 109. 1830. *Carum roxburghianum* Kurz in J. Asiat.

Soc. Bengal 46(2): 114. 1877; C.B. Clarke in Hook. f., Fl. Brit. India 2: 682. 1879.

In hilly forests. Bastar.

Fl. & Fr.: Jan.-May.

Araliaceae

Schefflera roxburghii Gamble, Fl. Pres. Madras 570. 1919. *Heptapleurum venulosum* sensu C.B. Clarke in Hook. f., Fl. Brit. India 2: 729. 1879, p.p. non Seem, 1885.

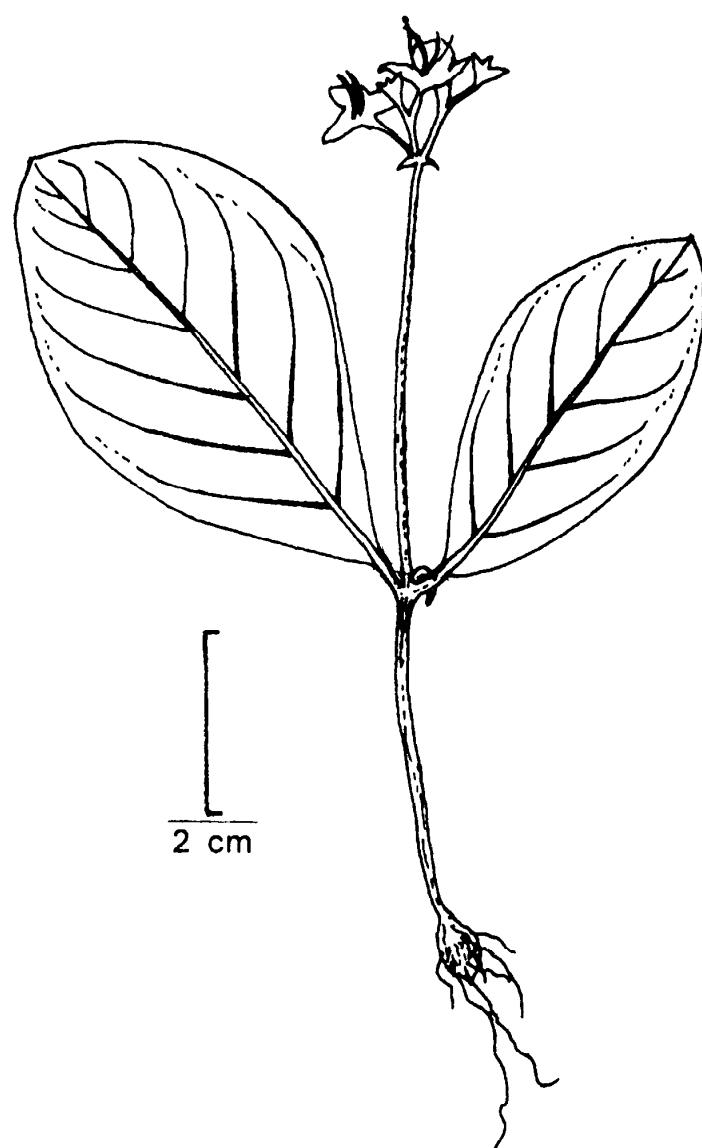


Fig. 4. *Argostemma sarmentosum* Wallich

In semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: June-Aug.

Rubiaceae

Argostemma courtallense Arnott in Ann. Nat. Hist. 3: 22. 1839; Hook. f., Fl. Brit. India 3: 42. 1880.

In moist places. Raigarh.

Fl. & Fr.: July-Sept.

A. sarmentosum Wallich in Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 324. 1824; Hook. f., Fl. Brit. India 3: 42. 1880.

In moist sandy alluvium near streams. Bilaspur.

Fl. & Fr.: Aug.-Nov.

A. verticillatum Wallich in Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 325. 1824; Hook. f., Fl. Brit. India 3: 43. 1880.

In moist places. Bastar (Mooney, 1942).

Fl. & Fr.: July-Aug.

Canthium angustifolium Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 169. 1824; Hook. f., Fl. Brit. India 3: 135. 1880.

On hill slopes. Bilaspur.

Fl. & Fr.: Mar.-Aug.

C. dicoccum (Gaertn.) Teijsm. & Binn. var. **umbellata** (Wight) Sant. & Merch. in Bull. Bot. Surv. India 3: 107. 1961. *C. umbellata* Wight, Icon. Pl. Ind. Orient. t. 1034. 1845; Hook. f., Fl. Brit. India 3: 132. 1880.

Along the streams. Bilaspur.

Fl. & Fr.: Jan.-Mar.

C. rheedii DC., Prodr. 4: 474. 1830; Hook. f., Fl. Brit. India 3: 134. 1880.

In mixed forests. Bilaspur.

Fl. & Fr.: Aug.-Oct.

Dentella serpyllifolia Wallich ex Craib in Fl. Siam. Enum. 2: 27. 1932. *D. repens* auct. non G. Forster, 1776; Hook. f., Fl. Brit. India 3: 42. 1880, p.p.

In river beds and along streams. Raipur.

Fl. & Fr.: Apr.-Oct.

Hedyotis auricularia L., Sp. Pl. 101. 1753; Hook. f., Fl. Brit. India 3: 58. 1880.

In wastelands. Bastar.

Fl. & Fr.: Mar.-Apr.

H. verticillata (L.) Lam., Encycl. 1: 271. 1792. *Oldenlandia verticillata* L., Mant. Pl. 40. 1767. *Hedyotis hispida* Retz., Observ. Bot. 4: 23. 1786; Hook. f., Fl. Brit. India 3: 60. 1880.

In moist places. Bilaspur.

Fl. & Fr.: Oct.-Nov.

Meyna spinosa Roxb. ex Link in Jahrb. Gewachsk 1(3): 32. 1820. *Vangueria spinosa* Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 172. 1824; Hook. f., Fl. Brit. India 3: 136. 1880, p.p.

- In mixed forests. Bilaspur.
Fl. & Fr.: July-Aug.
- Meyna velutina** Robyns in Bull. Jard. Bot. Brux. 11: 237. 1928.
In mixed forests. Bilaspur.
Fl. & Fr.: Apr.-May.
- Morinda umbellata** L., Sp. Pl. 176. 1753; Hook. f., Fl. Brit. India 3: 157. 1880.
In mixed forests. Bastar.
Fl. & Fr.: June-Sept.
- Neonauclea purpurea** (Roxb.) Merr., Int. Rumph. 483. 1917. *Nauclea purpurea* Roxb.,
Pl. Corom. 1: 41. t. 54. 1795.
As forest undergrowth. Bastar.
Fl. & Fr.: Feb.-Apr.
- Oldenlandia pusilla** Rottler in Verh., Ges. Naturf. Fr. Neue. Schr. 4: 216. 1803. *O. brachiata*
Hook. f., Fl. Brit. India 3: 66. 1880.
In wastelands. Durg.
Fl. & Fr.: Sept.-Oct.
- O. umbellata** L., Sp. Pl. 119. 1753; Hook. f., Fl. Brit. India 3: 66. 1880.
In moist places. Bastar.
Fl. & Fr.: A.-Sept.
- Ophiorrhiza hirsutula** Wight ex Hook. f., Fl. Brit. India 3: 81. 1880.
As forest undergrowth. Bastar (Mooney, 1942).
Fl. & Fr.: Apr.-Nov.
- O. pectinata** Arnott in Nov. Act. Cur. 18(1): 338. 1836; Hook. f., Fl. Brit.
India 3: 81. 1880.
As forest undergrowth. Bastar (Mooney, 1942).
Fl. & Fr.: Mar.-Apr.
- Wendlandia coriacea** DC., Prodr. 4: 412. 1830; Hook. f., Fl. Brit. India 3: 39. 1880.
In hilly forests. Bastar.
Fl. & Fr.: Feb.-Apr.
- W. gamblei** Cowan in Not. Roy. Bot. Gard. Edinb. 26: 271. 1932.
At higher elevations. Bastar (Subramanyam and Henry, 1967).
Fl. & Fr.: Mar.-May.
- W. heyneana** Wallich ex Wight & Arnott, Prodr. 1: 403. 1834. *W. glabrata* auct. non
DC., 1830: Hook. f., Fl. Brit. India 3: 39. 1880, p.p.
In semi-evergreen forests. Bastar (Mooney, 1942).
Fl. & Fr.: Feb.-May.
- W. thyrsoides** (Schult.) Steud., Nom. ed. 2. 2: 786. 1841. *Canthium thyrsoides* Schult.
in Roem. & Schult., Syst. Veg. 6: 207. 1820. *Wendlandia notoniana* Wallich ex Wight
& Arnott, Prodr. 1: 403. 1834; Hook. f., Fl. Brit. India 3: 40. 1880.
On hill slopes. Bastar.
Fl. & Fr.: Feb.-Apr.

Asteraceae

Adenostemma angustifolium Arnott in Nova Acta Phys. Med. Acad. Cases. Leap. Carol. Nat. Cur. 18: 347. 1836. *A. viscosum* G. Forster var. *typica* Hook. f., Fl. Brit. India 3: 242. 1881.

In moist shady places, Bilaspur.

Fl. & Fr.: Jan.-Feb.

A. lavenia (L.) Kuntze, Revis. Gen. Pl. 1: 304. 1891. *Verbesina lavenia* L., Sp. Pl. 902. 1753. *Adenostemma viscosum* G. Forster, Char. Gen. 90. 1776; Hook. f., Fl. Brit. India 3: 242. 1881.

var. *lavenia*

In moist shady places. Surguja.

Fl. & Fr.: Nov.-Dec.

var. *latifolium* (D. Don) Panigrahi in Kew Bull. 30: 651. 1975. *A. latifolium* D. Don, Prodr. Fl. Nepal. 181. 1825. *A. viscosum* J.R. Forster & G. Forster var. *latifolium* (D. Don) C.B. Clarke, Comp. Ind. 29. 1876; Hook. f., Fl. Brit. India 3: 242. 1881. In moist shady places of dense forests. Bastar (Mooney, 1942).

Fl. & Fr.: Nov.-Feb.

Anaphalis adnata DC., Prodr. 6: 274. 1838; Hook. f., Fl. Brit. India 3: 282. 1881.

On shady slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Aug.-Mar.

Artemisia japonica Thunb., Fl. Jap. 310. 1784. *A. parviflora* Buch.-Ham. ex D. Don, Prodr. Fl. Nepal. 181. 1825; Hook. f., Fl. Brit. India 3: 322. 1881.

On rocky slopes. Surguja.

Fl. & Fr.: Nov.-Feb.

A. nilagirica (C.B. Clarke) Pampan., Nuov. Giorn. Bot. Ital. n.s. 33: 452. 1926. *A. vulgaris* L. var. *nilagirica* C.B. Clarke, Comp. Ind. 162. 1876. *A. vulgaris* auct. non L., 1753: Thwaites, Enum. Pl. Zeyl. 165. 1860; Hook. f., Fl. Brit. India 3: 325. 1881. In mixed forests. Rajnandgaon.

Fl. & Fr.: Sept.-Oct.

Blumea clarkei Hook. f., Fl. Brit. India 3: 267. 1881.

On moist hilly slopes. Bastar.

Fl. & Fr.: Feb.-Mar.

Conyza aegyptiaca (L.) Ait., Hort. Kew. ed. 1. 3: 183. 1789; Hook. f., Fl. Brit. India 3: 258. 1881. *Erigeron aegyptiacus* L., Mant. Pl. 112. 1767.

In open places. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Oct.-Feb.

C. japonica (Thunb.) Less., Syn. Comp. 204. 1832; Hook. f., Fl. Brit. India 3: 258. 1881. *Erigeron japonicus* Thunb., Fl. Jap. 312. 1784.

Along streams. Bilaspur.

Fl. & Fr.: Feb.-Mar.

Dichrocephala integrifolia (L. f.) Kuntze, Revis. Gen. Pl. 1: 333. 1891. *Hippia integrifolia* L. f., Suppl. Pl. 389. 1782. *Dichrocephala latifolia* DC. in Wight, Contrib. Bot. Ind.

11. 1834; Hook. f., Fl. Brit. India 3: 245. 1881.

On slopes. Bilaspur.

Fl. & Fr.: Aug.-Oct.

Galinsoga parviflora Cav., Ic. Descr. Pl. 3: 41. t. 281. 1796; Hook. f., Fl. Brit. India 3: 311. 1881.

Along streams. Surguja.

Fl. & Fr.: Feb.-Mar.

Gynura lycopersicifolia DC., Prodr. 6: 300. 1838; Hook. f., Fl. Brit. India 3: 334. 1881.

In dense forests. Bastar (Mooney, 1942).

Fl. & Fr.: Feb.-Mar.

Jurinea ceratocarpa Benth. in Gen. Pl. 2: 474. 1873; Hook. f., Fl. Brit. India 3: 378. 1881.

On slopes in dry places. Bilaspur.

Fl. & Fr.: Mar.-Apr.

Laggera aurita Schultz-Bip. ex Schw., Beitr. Fl. Aethiop. 151. 1867; Hook. f., Fl. Brit. India 3: 271. 1881.

On roadsides. Surguja.

Fl. & Fr.: Feb.-Mar.

Pentanema cernua (Dalz. & Gibbs.) Ling in Acta Phytotax. Sin. 10: 180. 1965. *Vicoa cernuus* Dalz. & Gibbs., Bombay Fl. 126. 1861; Hook. f., Fl. Brit. India 3: 297. 1881.

In shady places of hill slopes. Bastar.

Fl. & Fr.: Jan.-Feb.

Pulicaria angustifolia DC., Prodr. 5: 479. 1836; Hook. f., Fl. Brit. India 3: 299. 1881.

In wastelands. Raipur.

Fl. & Fr.: Aug.-Nov.

Scorzonera virgata DC., Prodr. 7: 125. 1838. *S. divaricata* (DC.) Hook. f., Fl. Brit. India 3: 418. 1881, non Turcz, 1832.

On hill slopes. Surguja (Wood, 1902).

Fl. & Fr.: June-Sept.

Senecio corymbosus Wallich ex DC. in Wight, Contrib. Bot. Ind. 22. 1834; Hook. f., Fl. Brit. India 3: 351. 1881.

Along the banks of streams. Bastar.

Fl. & Fr.: Sept.-Oct.

Spilanthes paniculata Wallich ex DC., Prodr. 5: 625. 1836.

In moist places of mixed forests. Surguja.

Fl. & Fr.: Mar.-Apr.

Vernonia cinerea (L.) Less. var. **montana** C.B. Clarke, Comp. Ind. 21. 1876.

On swampy soil in mixed forests. Bastar.

Fl. & Fr.: Feb.-Mar.

V. squarrosa (D. Don) Less. in Linnaea 6: 627. 1831. *Acilepis squarrosa* D.

Don, Prodr. Fl. Nepal. 169. 1825. *Vernonia teres* Wallich ex DC., Prodr. 5: 15. 1836;

Hook. f., Fl. Brit. India 3: 229. 1881.

As an undergrowth in sal forests. Bastar.

Fl. & Fr.: Jan.-Feb.

Youngia japonica (L.) DC., Prodr. 7: 194. 1838. *Prenanthes japonica* L., Mant. Pl. 107. 1767. *Crepis japonica* Benth., Fl. Hongk. 194. 1861; *Hook. f.*, Fl. Brit. India 3: 395. 1881.

In moist shady places near drains and along roadsides. Bilaspur.

Fl. & Fr.: Mar.-Apr.

Styliaceae

Stylium tenellum Sw. in Mag. Ges. Naturf. Fr. Berlin 1: 51. t.2. f.3. 1807, *non* R. Br., 1810; C.B. Clarke in *Hook. f.*, Fl. Brit. India 3: 420. 1881.

In moist places of mixed forests. Rajnandgaon.

Fl. & Fr.: Sept.-Mar.

Campanulaceae

Lobelia nicotinaefolia Roxb. ex Roem. & Schult. var. *trichandra* (Wight) C.B. Clarke in *Hook. f.*, Fl. Brit. India 3: 427. 1881. *Lobelia trichandra* Wight, Icon. Pl. Ind. Orient. t. 1171. 1850.

As forest undergrowth. Bastar.

Fl. & Fr.: May-July.

Primulaceae

Lysimachia decurrens G. Forster, Fl. Ins. Austr. 12. 1786. *L. javanica* Blume, Bijdr. 14: 736. 1826; *Hook. f.*, Fl. Brit. India 3: 502. 1882.

In moist places. Bilaspur.

Fl. & Fr.: Mar.-Apr.

L. leschenaultii Duby in DC., Prodr. 8: 61. 1844; *Hook. f.*, Fl. Brit. India 3: 501. 1882.

In sandy alluvial core on gneissic rocks near water falls. Surguja

Fl. & Fr.: Apr.

Primula umbellata (Lour.) Bentvelzen, Fl. Males. ser. 1. 6: 191. 1962. *Drosera umbellata* Lour., Fl. Cochinch. 186. 1790. *Androsace saxifragaefolia* Bunge, Enum. Pl. China Bor. 53. 1831 & in Mem. Sav. Etr. Acad. Petersb. 2: 127. 1835; *Hook. f.*, Fl. Brit. India 3: 496. 1882.

In shady places. Bilaspur.

Fl. & Fr.: Mar.-Apr.

Myrsinaceae

Ardisia depressa C.B. Clarke in *Hook. f.*, Fl. Brit. India 3: 522. 1882.

In semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: Mar.-June.

Ardisia quinquegona Blume, Bijdr. 13: 689. 1826. *A. pauciflora* Heyne ex Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 279. 1824; C.B. Clarke in Hook. f., Fl. Brit. India 3: 529. 1882.

In semi-evergreen forests. Bastar.

Fl. & Fr.: Dec.-Feb.

A. thyrsiflora D. Don, Prodr. Fl. Nepal. 148. 1825. *A. neriifolia* A. DC. in Trans. Linn. Soc. Bot. 17: 118. t. 8. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 3: 522. 1882. As forest undergrowth. Bastar (Saxena and Khotele, 1976).]

Fl. & Fr.: May-Nov.

Embelia ribes Burm. f., Fl. Ind. 62. t. 23. 1768; C.B. Clarke in Hook. f., Fl. Brit. India 3: 513. 1882.

In dense forests. Bastar.

Fl. & Fr.: Feb.-Apr.

Sapotaceae

Xantolis tomentosa (Roxb.) Raf., Sylva Tellur. 35. 1838. *Sideroxylon tomentosum* Roxb., Pl. Coromandel 1: 28. t. 28. 1795 & Fl. Ind. 1: 602. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 3: 538. 1882.

var. **elengioides** (Bedd.) Ram Lal in Bull. Bot. Surv. India 9: 267. 1967. *Achras elengioides* Bedd., Sylv. S. India t. 235. 1872.

In subtropical forests. Bastar.

Fl. & Fr.: Oct.-Feb.

var. **tomentosa**

In subtropical forests. Bastar.

Fl. & Fr.: Oct.-Feb.

Ebenaceae

Diospyros lancifolia Roxb., Fl. Ind. 2: 537. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 3: 562. 1882, "lanceaefolia"

In mixed forests. Bilaspur.

Fl. & Fr.: Mar. following Mar.

Oleaceae

Chionanthus mala-elengi (Dennst.) Green in Bull. Bot. Surv. India 26: 124. (1984) 1985.

Forsythia mala-elengi Dennst., Schluessel Hortus Malab. 12. 21 & 31. 1818. *Linociera malabarica* Wallich ex G. Don, Gen. Hist. 4: 53. 1837-1838; C.B. Clarke in Hook. f., Fl. Brit. India 3: 607. 1882.

Along rocky drains. Bastar.

Fl. & Fr.: Feb.-Apr.

Jasminum elongatum (Bergius) Willd., Sp. Pl. 1: 37. 1797. *Nyctanthes elongata* Bergius in Phil. Trans. 61: 289. t. 11. 1772 & Phil. Trans. Abrev. (Hutton) 13: 147. t. 4. 1809. *J. undulatum* Ker-Gawl., Bot. Reg. 6: t. 436. 1820, non Willd., 1797; C.B.

Clarke in Hook. f., Fl. Brit. India 3: 592. 1882.

In mixed forests. Bastar.

Fl. & Fr.: Aug.-Apr.

Jasminum flexile Vahl, Symb. Bot. 3: 1. 1794; C.B. Clarke in Hook. f., Fl. Brit. India 3: 601. 1882.

In mixed deciduous forests. Raigarh.

Fl. & Fr.: Oct.-Nov.

J. malabaricum Wight, Icon. Pl. Ind. Orient. 4(1): t. 1250. 1848; C.B. Clarke in Hook. f., Fl. Brit. India 3: 594. 1882. *J. malabaricum* var. *lawii* C.B. Clarke in Hook. f., Fl. Brit. India 3: 594. 1882.

On the outskirt of forests. Bastar.

Fl. & Fr.: Apr.-July.

J. scandens (Retz.) Vahl, Symb. Bot. 3: 2. 1794; C.B. Clarke in Hook. f., Fl. Brit. India 3: 595. 1882. *Nyctanthes scandens* Retz., Observ. Bot. 5: 9. 1788.

Along forest roads. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Jan.-May.

Apocynaceae

Alstonia venenata R. Br. in Mem. Werner. Soc. 1: 75. 1811; Hook. f., Fl. Brit. India 3: 642. 1882, "venenatus".

In mixed forests. Raipur.

Fl. & Fr.: Aug.- Oct.

Anodendron paniculatum(Roxb.) A. DC. in DC., Prodr. 8: 444. 1844; Hook. f., Fl. Brit. India 3: 668. 1882. *Echites paniculata* Roxb., Fl. Ind. 2: 17. 1832, *non* Poir., 1812.

In hilly forests. Bastar (Mooney, 1942).

Fl. & Fr.: Mar.-May.

Rauvolfia serpentina (L.) Benth. ex Kurz, Forest Fl. Burma 2: 171. 1877; Hook. f., Fl. Brit. India 3: 632. 1882. *Ophioxylon serpentinum* L., Sp. Pl. 1043. 1753.

In mixed and sal forests. Bastar, Raipur.

Fl. & Fr.: Nov.-Sept.

Wrightia arborea (Dennst.) Mabberley in Taxon 26: 533. 1977. *Periploca arborea* Dennst., Schlüssel Hortus Malab. 13, 23, 25. 1818. *Wrightia tomentosa* Roem. & Schult., Syst. Veg. 4: 414. 1819; Hook. f., Fl. Brit. India 3: 653. 1882.

In dry mixed deciduous forests. Raipur.

Fl. & Fr.: May- June.

Asclepiadaceae

Ceropegia bulbosa Roxb., Pl. Coromandel 1: 11. t. 7. 1795; Hook. f., Fl. Brit. India 4: 67. 1883.

In mixed forests. Rajnandgaon.

Fl. & Fr.: Oct.

Ceropegia candelabrum L., Sp. Pl. 211. 1753; Hook. f., Fl. Brit. India 4: 70. 1883.

In mixed forests. Rajnandgaon.

Fl. & Fr.: Oct.

C. hirsuta Wight & Arnott in Wight, Contr. Bot. India 30. 1834; Hook. f., Fl. Brit. India

4: 71. 1883.

Climber on grasses and *Flemingia* sp. in sal forests. Raipur.

Fl. & Fr.: Oct.

Cryptolepis elegans Wallich ex G. Don, Gen. Hist. 4: 82. 1837-1838; Hook. f., Fl. Brit.

India 4: 6. 1883.

In mixed forests. Raipur.

Fl. & Fr.: Oct.

Cryptostegia grandiflora R. Br. in Bot. Reg. 5: t. 435. 1820; Hook. f., Fl. Brit. India

4: 6. 1883.

In mixed forests. Bastar.

Fl. & Fr.: June-Sept.

Cynanchum callialata Buch.-Ham. ex Wight, Contr. Bot. India 56. 1834; Hook. f., Fl.

Brit. India 4: 24. 1883.

On hill slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Nov.-Jan.

Holostemma ada-kodien Schult. in Roem. & Schult., Syst. Veg. 6: 95. 1820. *H. rheedei*

Wallich, Pl. Asiat. Rar. 2: 51. 1831; Hook. f., Fl. Brit. India 4: 21. 1883.

In sal forest clearings. Raipur.

Fl. & Fr.: June-Aug.

Tylophora macrantha Hook. f., Fl. Brit. India 4: 40. 1883.

In wastelands. Raipur.

Fl. & Fr.: May-Sep.

Loganiaceae

Mitrasacme pygmaea R. Br. var. **malaccensis** (Wight) Hara in J. Jap. Bot. 30: 24.

1955. *M. malaccensis* Wight, Icon. Pl. Ind. Orient. 1601. 1850. *M. polymorpha* auct. non R. Br., 1810: C.B. Clarke in Hook. f., Fl. Brit. India 4: 80. 1883, p. p.

In mixed forests. Raigarh.

Fl. & Fr.: Sept.-Oct.

Strychnos nux-vomica L., Sp. Pl. 189. 1753; C.B. Clarke in Hook. f., Fl. Brit. India

4: 90. 1883.

In mixed forests. Raipur.

Fl. & Fr.: Mar.-Jan.

S. potatorum L. f., Suppl. Pl. 148. 1782; C.B. Clarke in Hook. f., Fl. Brit. India

4: 90. 1883.

In mixed forests. Raipur.

Fl. & Fr.: Apr.-July.

Gentianaceae

Canscora heteroclita (L.) Gilg in Engl. & Prantl, Nat. Pflanzenfam. 4(2): 76. 1875.

Gentiana heteroclita L., Mant. Pl. 560. 1771. *Canscora sessiliflora* Roem. & Schult., Syst. Veg. Mant. 3. 230. 1827; C.B. Clarke in Hook. f., Fl. Brit. India 4: 104. 1883. In moist places. Bastar (Kumar, 1993).

Fl. & Fr.: Oct.-Mar.

Centaurium meyeri (Bunge) Druce in Rep. Bot. Exch. Club Brit. Isles 1916: 613. 1919.

Erythraea meyeri Bunge in Ledeb. Fl. Alt. 1: 220. 1829; C.B. Clarke in Hook. f., Fl. Brit. India 4: 102. 1883. *E. roxburghii* G. Don, Gen. Hist. 4: 206. 1837-1838; C.B. Clarke in Hook. f., Fl. Brit. India 4: 102. 1883.

In harvested paddy fields. Raipur.

Fl. & Fr.: Aug.-Sept.

Exacum perrottetii Griseb. in DC., Prodr. 9: 45. 1845; Hook. f., Fl. Brit. India 4: 95. 1883.

On slopes amidst grasses. Bastar (Arora, 1968).

Fl. & Fr.: Feb.-Mar.

Swertia angustifolia Buch.-Ham. ex D. Don, Prodr. Fl. Nepal. 127. 1825; C.B. Clarke in Hook. f., Fl. Brit. India 4: 125. 1883.

var. **angustifolia**

Amidst grasses in moist open places. Bilaspur.

Fl. & Fr.: Oct.-Jan.

var. **pulchella** Burkhill in J. Proc. Asiat. Soc. Bengal. 2: 375. 1906. *Swertia pulchella* Buch.-Ham. ex C.B. Clarke in Hook. f., Fl. Brit. India 4: 125. 1883.

In moist places. Bastar.

Fl. & Fr.: Sept.-Nov.

S. corymbosa (Griseb.) C.B. Clarke in Hook. f., Fl. Brit. India 4: 126. 1883. *Ophelia corymbosa* Griseb., Gen. Sp. Gent. 317. 1839.

In mixed forests. Raipur.

Fl. & Fr.: Jan.-Feb.

Boraginaceae

Cordia grandis Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 335. 1824 & Fl. Ind. 1: 593. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 4: 137. 1883.

In semi-evergreen forests. Bastar.

Fl. & Fr.: Feb.-Mar.

C. macleodii (Griff.) Hook. f. & Thomson in J. Linn. Soc. Bot. 2: 128. 1858; C.B. Clarke in Hook. f., Fl. Brit. India 4: 139. 1883. *Hemigymnia macleodii* Griff., Calc. J. Nat. Hist. 3: 363. 1843.

In dry mixed deciduous forests. Bilaspur.

Fl. & Fr.: Mar.-May.

C. monoica Roxb., Pl. Coromandel 1: 43. t. 58. 1796; C.B. Clarke in Hook. f., Fl. Brit. India 4: 137. 1883.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: July-Oct.

Convolvulaceae

Argyreia nervosa (Burm. f.) Bojer, Hortus Maurit. 224. 1837. *Convolvulus nervosus* Burm. f., Fl. Ind. 48. t. 201. 1768. *Argyreia speciosa* Sweet, Hort. Brit. ed. 2. 373. 1830; C.B. Clarke in Hook. f., Fl. Brit. India 4: 185. 1883.

In mixed and sal forests. Bastar.

Fl. & Fr.: Apr.-Sept.

Convolvulus prostratus Forssk., Fl. Aegypt.-Arab. 203. 1775. *C. pluricaulis* Choisy, Convolv. Orient. 95. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 4: 218. 1883. *C. pluricaulis* var. *macra* C.B. Clarke in Hook. f., Fl. Brit. India 4: 218. 1883.

In open fields, sandy and rocky places. Surguja.

Fl. & Fr.: Dec.-Feb.

Ipomoea dichroa (Roem. & Schult.) Choisy in DC., Prodr. 9: 364. 1845. *Convolvulus dichrous* Roem. & Schult., Syst. Veg. 4: 263. 1819, *nom. illegit.* *Ipomoea pilosa* Sweet, Hort. Brit. ed. 1. 289. 1826 & ed. 2. 372. 1830, *non* Houtt., 1777, *nom. illegit.*; C.B. Clarke in Hook. f., Fl. Brit. India 4: 213. 1883.

In wastelands. Raipur.

Fl. & Fr.: Aug.-Nov.

I. sinensis (Desr.) Choisy in Mem. Soc. Phys. Hist. Nat. Geneve 6: 459. 1834.

Convolvulus sinensis Desr. in Lam., Encycl. 3: 557. 1792. *Ipomoea calycina* (Roxb.) Benth. ex C.B. Clarke in Hook. f., Fl. Brit. India 4: 201. 1883.

On hedges and bushes. Bilaspur.

Fl. & Fr.: Oct.-Nov.

Merremia aegyptia (L.) Urb., Symb. Antill. 4: 505. 1910. *Ipomoea aegyptia* L., Sp. Pl. 162. 1753. *I. pentaphylla* (L.) Jacq., Collectanea 2: 297. (1788) 1789; C.B. Clarke in Hook. f., Fl. Brit. India 4: 202. 1883.

On hedges. Bilaspur.

Fl. & Fr.: Sept.-Nov.

M. tridentata (L.) Hall. f. in Engl., Bot. Jahrb. Syst. 16: 552. 1893. *Convolvulus tridentatus* L., Sp. Pl. 157. 1753. *Ipomoea tridentata* (L.) Roth in Roem., Arch. Bot. 1(2): 38. 1798; C.B. Clarke in Hook. f., Fl. Brit. India 4: 205. 1883.

subsp. hastata (Desr.) Ooststroom in Blumea 3: 317. 1939. *Convolvulus hastatus* Desr. in Lam., Encycl. 3: 542. 1792, *non* Forssk., 1775, Thunb., 1794 *nec* Sieber ex Choisy, 1845. *Ipomoea angustifolia* Jacq., Icon. Pl. Rar. 2. 10. t. 317. 1786-93; C.B. Clarke in Hook. f., Fl. Brit. India 4: 205. 1883.

In open places and near streams. Bilaspur.

Fl. & Fr.: July September.

subsp. tridentata

In wastelands and river beds. Surguja.

Fl. & Fr.: Sept.-Dec.

Operculina petaloidea (Choisy) Ooststroom in Blumea 3: 369. 1939. *Ipomoea petaloidea* Choisy in Mem. Soc. Phys. Hist. Nat. Geneve 6: 451. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 4: 212. 1883.

In mixed forests. Rajnandgaon.

Fl. & Fr.: Apr.

Solanaceae

Lycianthes laevis (Dunal) Bitter in Abh. Naturwiss. Ver. Bremen 24: 484. 1920. *Solanum laeve* Dunal, Solan. Syn. 22. 1816; C.B. Clarke in Hook. f., Fl. Brit. India 4: 231. 1883. As forest undergrowth. Bastar (Mooney, 1942).

Fl. & Fr.: July-Dec.

Scrophulariaceae

Bacopa hamiltoniana (Benth.) Wettst. in Engl. & Prantl, Nat. Pflanzenfam. IV. 3b: 77. 1891. *Herpestis hamiltoniana* Benth., Scroph. Ind. 30. 1835; Hook. f., Fl. Brit. India 4: 272. 1884.

In moist and wet places. Surguja.

Fl. & Fr.: Oct.-Nov.

Glossostigma diandra (L.) Kuntze, Revis. Gen. Pl. 2: 461. 1891. *Limosella diandra* L., Mant. Pl. 252. 1771. *Glossostigma spathulatum* (Hook.) Wight & Arnott ex Arnott, Nova Acta Acad. Leop. Nat. Cur. 18: 355. 1836; Hook. f., Fl. Brit. India 4: 288. 1884. In aquatic and swampy habitats. Raipur.

Fl. & Fr.: Mar.-Sept.

Limnophila chinensis (Osb.) Merr. var. *clarkii* (Haines) Murti in Bangladesh J. Bot. 10(1): 34. 1981. *Limnophila hirsuta* var. *clarkii* Haines, Bot. Bihar Orissa 4: 628. 1922. *L. hirsuta* (Heyne ex Benth.) Benth. in DC., Prodr. 10: 388. 1846; Hook. f., Fl. Brit. India 4: 268. 1884, p. p.

In moist habitats. Bilaspur.

Fl. & Fr.: Nov.

L. connata (Buch.-Ham. ex D. Don) Hand.-Mazz., Symb. Sin. 7: 837. 1936.

Cybanthera connata Buch.-Ham. ex D. Don, Prodr. Fl. Nepal. 87. 1825. *Limnophila hypericifolia* (Benth.) Benth. in DC., Prodr. 10: 386. 1846; Hook. f., Fl. Brit. India 4: 269. 1884.

Along the streams. Bilaspur.

Fl. & Fr.: Sept.-Nov.

Lindernia nummulariifolia (D. Don) Wettst. in Engl. & Prantl, Nat. Pflanzenfam. IV. 3b: 79. 1891, "nummulariifolia". *Vandellia nummulariifolia* D. Don, Prodr. Fl. Nepal. 86. 1825, "nummulariifolia"; Hook. f., Fl. Brit. India 4: 282. 1884.

In moist sandy alluvium on hill slopes. Raigarh.

Fl. & Fr.: July-Oct.

Lentibulariaceae

Utricularia baouleensis A. Chev. in Bull. Soc. Bot. Fr. Mem. 8. 1912. *U. scandens* auct. non Benj., 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 332. 1884.

Along ponds and in paddy fields. Raipur.

Fl. & Fr.: Sept.-Oct.

Utricularia hirta Klein ex Link in Jahrb. 1. 3: 55. 1820; C.B. Clarke in Hook. f., Fl. Brit. India 4: 332. 1884.

In marshy places. Surguja.

Fl. & Fr.: Dec.-Jan.

U. polygaloides Edgew. in Proc. Linn. Soc. 1: 351. 1847. *U. reticulata* Sm. var. *uliginosa* C.B. Clarke in Hook. f., Fl. Brit. India 4: 331. 1884.

In marshy places. Durg.

Fl. & Fr.: Dec.-Apr.

Gesneriaceae

Didymocarpus pygmaea C.B. Clarke in A. DC., Monogr. Phan. 5: 82. 1883 & in Hook. f., Fl. Brit. India 4: 345. 1884.

In mixed forests on hill slopes and in rock crevices. Rajnandgaon.

Fl. & Fr.: Aug.-Oct.

Bignoniaceae

Stereospermum colais (Dillwyn) Mabberley in Taxon 27: 553. 1978. *Bignonia colais* Dillwyn, Rev. Hortus Malab. 28. 1839. *Stereospermum chelonoides* DC., Bibl. Univ. Geneve II. 17. 124. 1838, *p. p. quoad ref* Rheede, t. 26 & DC., Prodr. 9: 210. 1845; C.B. Clarke in Hook. f., Fl. Brit. India 4: 382. 1884.

var. *angustifolium* (Haines) Bennet & Raizada in Indian J. For. 4: 67. 1981.

Stereospermum chelonoides var. *angustifolium* Haines, Descr. List Trees South Circle. C. P. 169. 1916. *S. angustifolium* (Haines) Haines in Kew Bull. 1922: 121. 1922 & Bot. Bihar Orissa 4: 656. 1922.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Dec.

var. *colais*

In mixed forests or hill slopes. Raipur.

Fl. & Fr.: May-Aug.

Acanthaceae

Aechmanthera gossypina (Nees) Nees in Wallich, Pl. Asiat. Rar. 3: 87. 1832. *Ruellia gossypina* Nees in Wallich, Pl. Asiat. Rar. 1: 38. t. 42. 1830. *Aechmanthera tomentosa* Nees in Wallich, Pl. Asiat. Rar. 3: 87. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 4: 428. 1884. *A. tomentosa* var. *wallichii* (Nees) C.B. Clarke in Hook. f., Fl. Brit. India 4: 428. 1884.

In rocky places. Raigarh.

Fl. & Fr.: Nov.-Mar.

Andrographis ovata (T. Anderson ex Bedd.) Benth. ex C.B. Clarke in Hook. f., Fl. Brit. India 4: 502. 1884. *Gymnostachyum ovatum* T. Anderson ex Bedd., Icon. Pl.

Ind. Or. t. 250. 1874.

In wastelands and as undergrowth in mixed forests. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Oct.-June.

Barleria courtallica Nees in DC., Prodr. 11: 226. 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 489. 1884.

As undergrowth in mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Dec.-Mar.

Carvia callosa (Nees) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 187. 1944. *Strobilanthes callosa* Nees in Wallich, Pl. Asiat. Rar. 3: 85. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 4: 451. 1884.

var. callosa

In dry mixed deciduous forests. Bastar. *Fl. & Fr.*: September - April.

var. hispida (C.B. Clarke) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 187. 1944. *Strobilanthes callosa* Nees var. *hispida* C.B. Clarke in Hook. f., Fl. Brit. India 4: 451. 1884.

Near patches of semi-evergreen forests. Bastar (Arora, 1968).

Fl. & Fr.: Sept.-Dec.

Dicliptera beddomei C.B. Clarke in Hook. f., Fl. Brit. India 4: 551. 1885.

In wastelands. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Dec.-Mar.

D. cuneata Nees in Wallich, Pl. Asiat. Rar. 3: 111. 1832 & in DC., Prodr. 11: 481. 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 552. 1885.

In rock crevices and wastelands. Bastar.

Fl. & Fr.: Feb.-Mar.

Hemigraphis venosa C.B. Clarke in Hook. f., Fl. Brit. India 4: 423. 1884.

In moist shady places. Bastar.

Fl. & Fr.: Feb.-Apr.

Hygrophila erecta (Burm. f.) Hochr. in Candollea 5: 230. 1934. *Ruellia erecta* Burm. f., Fl. Ind. 135. 1768. *Hygrophila quadrivalvis* (Buch.-Ham.) Nees in Wallich, Pl. Asiat. Rar. 3: 80. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 4: 408. 1884.

In sandy soil and moist places. Surguja.

Fl. & Fr.: Dec.-Mar.

H. heinei Sreemadh. in Bull. Bot. Surv. India 10: 223. 1969. *Cardanthera uliginosa* (L. f.) Benth. ex C.B. Clarke in Hook. f., Fl. Brit. India 4: 403. 1884.

In fields. Raipur.

Fl. & Fr.: Jan.-Mar.

Justicia latispica Gamble, Fl. Madras 2: 1080. 1924. *J. procumbens* L. var. *latispica* C.B. Clarke in Hook. f., Fl. Brit. India 4: 539. 1885.

Along the water streams. Surguja.

Fl. & Fr.: Jan.-Feb.

Nilgirianthus lupulinus (Nees) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 173. 1944. *Strobilanthes lupulina* Nees in Wallich, Pl. Asiat. Rar. 3: 85. 1832

& in DC., Prodr. 11: 184. 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 443. 1884.
In semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: Aug.-Sept.

Nilgirianthus neilgherrensis (Bedd.) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 173. 1944. *Strobilanthes neilgherrensis* Bedd., Icon. Pl. Ind. Or. 1: 45. t. 196. 1874; C.B. Clarke in Hook. f., Fl. Brit. India 4: 438. 1884.

In semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: Dec.-Jan.

N. reticulatus (Stapf) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 173. 1944. *Strobilanthes reticulatus* Stapf in Kew Bull. 1894: 347. 1894.

In rock crevices. Bastar.

Fl. & Fr.: Feb.-May.

Phlebophyllum jeyporense (Bedd.) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 169. 1944. *Strobilanthes jeyporensis* Bedd., Icon. Pl. Ind. Or. t. 214. 1874; C.B. Clarke in Hook. f., Fl. Brit. India 4: 436. 1884.

As forest undergrowth. Bastar.

Fl. & Fr.: Feb.-Apr.

P. versicolor (Wight) Bremek. in Verh. Acad. Wet. Afd. Natuurk. sect. 2. 41(1): 169. 1944. *Endopogon versicolor* Wight, Icon. Pl. Ind. Orient. t. 1497. 1849 & Ill. Ind. Bot. t. 164. 1850. *Strobilanthes cuspidatus* (Benth.) T. Anderson in J. Linn. Soc. Bot. 9: 465. 1867; C.B. Clarke in Hook. f., Fl. Brit. India 4: 435. 1884.

As forest undergrowth. Bastar (Mooney, 1942).

Fl. & Fr.: Dec.-Apr.

Rhaphidospora glabra (Koenig ex Roxb.) Nees in Wallich, Pl. Asiat. Rar. 3: 115. 1832 & in DC., Prodr. 11: 499. 1847. *Justicia glabra* Koenig ex Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 132. 1820; C.B. Clarke in Hook. f., Fl. Brit. India 4: 535. 1885.

In mixed forests. Bastar.

Fl. & Fr.: Nov.-Jan.

Staurogyne polybotrya (Nees) Kuntze, Revis. Gen. Pl. 497. 1891. *Ebermaiera polybotrya* Nees in DC., Prodr. 11: 74. 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 396. 1884.
In moist sandy soil. Raigarh.

Fl. & Fr.: Dec.-Mar.

Strobilanthes asperimus Nees in DC., Prodr. 11: 183. 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 443. 1884. *S. lupulinus* T. Anderson in J. Linn. Soc. Bot. 9: 469. 1867, non Nees, 1832.

Along forest roads. Bastar (Mooney, 1942).

Fl. & Fr.: Oct.-Dec.

Verbenaceae

Caryopteris bicolor (Hardw.) Mabberley in Bot. Hist. Hort. Malab. 83. 1980. *Volkameria bicolor* Hardw. in Asiat. Res. 6: 366. 1799. *C. wallichiana* Schauer in DC., Prodr. 11: 625. 1847, nom. illeg.; C.B. Clarke in Hook. f., Fl. Brit. India 4: 597. 1885.
In sal and mixed forests. Surguja.

Fl. & Fr.: Dec.-Feb.

Premna barbata Wallich ex Schauer in DC., Prodr. 11: 636. 1847; C.B. Clarke in Hook. f., Fl. Brit. India 4: 579. 1885.

On hill slopes and between rock boulders. Bilaspur.

Fl. & Fr.: July-Aug.

P. tomentosa Willd., Sp. Pl. 3: 314. 1800; C.B. Clarke in Hook. f., Fl. Brit. India 4: 576. 1885.

In deciduous forests and river embankments. Surguja.

Fl. & Fr.: Aug.-Oct.

Vitex heterophylla Roxb., Fl. Ind. 3: 75. 1832; C.B. Clarke in Hook. f., Fl. Brit. India 4: 585. 1885.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Mar.-July.

Lamiaceae

Leucas biflora (Vahl) R. Br. var. **procumbens** (Desf.) Gamble, Fl. Madras 2: 1151. 1924. *Leucas procumbens* Desf. in Mem. Mus. Hist. Nat. Paris 11: 7. t. 3. f. 2. 1824; Hook. f., Fl. Brit. India 4: 683. 1885.

In moist places. Surguja.

Fl. & Fr.: Sept.-Feb.

L. lanata Wallich ex Benth. in Wallich, Pl. Asiat. Rar. 1: 61. 1830; Hook. f., Fl. Brit. India 4: 681. 1885.

As forest undergrowth on hill slopes, near streams and along roadsides. Bastar.

Fl. & Fr.: Oct.-Dec.

Nepeta graciliflora Benth. in Wallich, Pl. Asiat. Rar. 1: 65. 1830; Hook. f., Fl. Brit. India 4: 663. 1885.

In moist habitat along the bank of channels. Surguja.

Fl. & Fr.: Jan.-Mar.

Orthosiphon aristatus (Blume) Miq., Fl. Ind. Bat. 2: 943. 1858. *Ocimum aristatum* Blume, Bijdr. 833. 1855.

As forest undergrowth. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Mar.-May.

Platostoma africanum P. Beauv., Fl. Oware 2: 61. t. 95. 1805. *P. flaccidum* Benth., Gen. Pl. 2: 1173. 1876; Hook. f., Fl. Brit. India 4: 611. 1885.

In dense forests. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Jan.-Feb.

Pogostemon cruciata (Benth.) Kuntze, Revis. Gen. Pl. 2: 530. 1891. *Dysophylla cruciata* Benth. in Wallich, Pl. Asiat. Rar. 1: 30. 1830; Hook. f., Fl. Brit. India 4: 639. 1885.

In moist soil near streams. Raigarh.

Fl. & Fr.: Oct.-Mar.

P. griffithii (Hook. f.) J.R. Press in Bull. Brit. Mus. Nat. Hist. Bot. 10(1): 73. 1982.

Dysophylla griffithii Hook. f., Fl. Brit. India 4: 641. 1885.

In moist places. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Dec.-Jan.

Pogostemon myosuroides (Benth.) K.K. Khanna & Anand Kumar in Khanna *et al.*, Suppl. Flora Madhya Pradesh 157. 2001. *Dysophylla myosuroides* Benth. in Wallich, Pl. Asiat. Rar. 1: 30. 1830; Hook. f., Fl. Brit. India 4: 638. 1885.

In hilly areas. Bastar (Mooney, 1942).

Fl. & Fr.: Dec.-Jan.

P. pubescens Benth. in DC., Prodr. 12: 152. 1848. *P. parviflorus* Benth. in Wallich, Pl. Asiat. Rar. 1: 31. 1830, *p.p.*; Hook. f., Fl. Brit. India 4: 632. 1885, *p.p.*

Along roadsides. Bastar.

Fl. & Fr.: Feb.-May.

P. purpurascens Dalzell in Hook., J. Bot. Kew Gard. Misc. 2: 337. 1850; Hook. f., Fl. Brit. India 4: 632. 1885.

On forest floor. Bastar.

Fl. & Fr.: Feb.-May.

P. quadrifolius (Benth.) Kuntze, Revis. Gen. Pl. 2: 530. 1891. *Dysophylla quadrifolia* Benth. in Wallich, Pl. Asiat. Rar. 1: 30. 1830; Hook. f., Fl. Brit. India 4: 639. 1885.

In rock crevices on hilltops. Bastar.

Fl. & Fr.: Nov.-Feb.

Plantaginaceae

Plantago asiatica L., Sp. Pl. 113. 1753; *P. major* *auct. non* L., 1753; Hook. f., Fl. Brit. India 4: 705. 1885, *p. p.*

Along embankments of streams. Surguja.

Fl. & Fr.: Jan.-Mar.

Nyctaginaceae

Boerhavia procumbens Banks ex Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 146. 1820.

B. repens L. var. *procumbens* (Banks ex Roxb.) Hook. f., Fl. Brit. India 4: 709. 1885.

On roadsides, forests floor and in rock crevices. Bastar.

Fl. & Fr.: Sept.-June.

Amaranthaceae

Alternanthera philoxeroides (Mart.) Griseb. in Abh. Koen. Ges. Wiss. Goett. Phys. Cl. 24: 36. 1879. *Bucholzia philoxeroides* Mart., Beitr. Amarantac. 107. 1825 & in Nova Acta Leop. 13: 315. 1826.

In ponds. Raipur.

Fl. & Fr.: Aug.-Oct.

Amaranthus lividus L., Sp. Pl. 990. 1753. *A. blitum* L., Sp. Pl. 990. 1753, *nom. conf.*; Hook. f., Fl. Brit. India 4: 721. 1885, *excl. var. sylvestris*. *A. oleraceus* L., Sp. Pl. ed. 2. 1403. 1763.

subsp. lividus

In wastelands. Bastar.

Fl. & Fr.: February.

subsp. polygonoides (Moq.) Probst, Wolladventivflmitteleur. 74. 1949. *Euxolus viridis*

(L.) Moq. var. *polygonoides* Moq. in DC., Prodr. 13(2): 274. 1849.

In wastelands. Bilaspur.

Fl. & Fr.: Aug.-Oct.

Deeringia amaranthoides (Lam.) Merr., Bur. Sci. Publ. Manila 9: 247. 1917. *Achyranthes amaranthoides* Lam., Encycl. 1: 548. 1785. *Deeringia celosioides* R. Br., Prodr. 413. 1810; Hook. f., Fl. Brit. India 4: 714. 1885.
In mixed forests. Bastar (Saxena and Khotele, 1976).
Fl. & Fr.: Sept.-Dec.

Chenopodiaceae

Chenopodium ambrosioides L., Sp. Pl. 219. 1753; Hook. f., Fl. Brit. India 5: 4. 1886.
On river bank. Bastar.
Fl. & Fr.: Feb.-Apr.

Polygonaceae

Polygonum auriculatum Meisn., Monogr. Polyg. 59. t. 6. 1826. *P. chinense* var. *ovalifolium* Meisn. in Wallich, Pl. Asiat. Rar. 3: 60. 1832; Hook. f., Fl. Brit. India 5: 45. 1886.
Usually near drains on slopes. Bastar.
Fl. & Fr.: Oct.-Apr.

P. barbatum L. subsp. *gracile* Danser in Bull. Jard. Bot. Buit. ser. 3. 8: 146. f. 2. 1927.
Polygonum barbatum L. var. *gracile* (Danser) Steward, Contr. Gray Herb. 5(88): 55. 1930. *P. serrulatum* auct. non Lag., 1816: Hook. f., Fl. Brit. India 5: 38. 1886, excl. var. *donii*.

In marshy places along the streams. Surguja.

Fl. & Fr.: July-Nov.

P. minus Huds., Fl. Engl. ed. I. 148. 1762; Hook. f., Fl. Brit. India 5: 36. 1886.
On wet sandy soil near streams. Raigarh.
Fl. & Fr.: Nov.-Feb.

P. plebeium R. Br., Prodr. 420. 1810, "*plebejum*"; Hook. f., Fl. Brit. India 5: 27. 1886.

var. **brevifolia** Hook. f., Fl. Brit. India 5: 28. 1886.

On alluvial soil in dried drains. Bilaspur.

Fl. & Fr.: Aug.-Nov.

var. **elegans** (Roxb.) Hook. f., Fl. Brit. India 5: 29. 1886. *Polygonum elegans* Roxb., Fl. Ind. 2: 291. 1832.

In moist rock crevices near river bank. Bilaspur.

Fl. & Fr.: July-Nov.

var. **scindica** Hook. f., Fl. Brit. India 5: 29. 1886; Blatt. & Hallberg in J. Bombay Nat. Hist. Soc. 26(4): 969. 1920.

On alluvial soil in dried drains. Bilaspur.

Fl. & Fr.: Sept.-Dec.

Podostemaceae

Dalzellia zeylanica (Gardn.) Wight, Icon. Pl. Ind. Orient. 5(2): 34. 1852. *Tristicha zeylanica* Gardner in Calc. J. Nat. Hist. 7: 177. 1846. *Terniola zeylanica* (Gardner) Tul. in Arch. Mus. Hist. Nat. Paris 6: 190-192. t. 13. f. 3. 1852; Hook. f., Fl. Brit. India 5: 62. 1886.

On smooth rocky substratum of running water in streams and rivers. Bastar (Roy and Dixit, 1987).

Fl. & Fr.: Aug.-Feb.

Podostemum barberi Willis in Ann. Roy. Bot. Gard. Peradeniya 1(3): 230. 1902.

Attached to rocks in running water. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Not recorded.

Polypleurum dichotomum (Gardn.) J.B. Hall in Kew Bull. 26: 131. 1971. *Podostemon dichotomus* Gardn. in Calc. J. Nat. Hist. 7: 185. 1847; Hook. f., Fl. Brit. India 5: 64. 1886.

Attached to rocks in running water. Bastar.

Fl. & Fr.: Jan.-Mar.

P. stylosum (Wight) J.B. Hall in Kew Bull. 26: 131. 1971. *Dicraea stylosa* Wight, Icon. Pl. Ind. Orient. t. 1917. f. 2. 1852. *Podostemon stylosus* Benth. ex Hook. f., Fl. Brit. India 5: 64. 1886.

In slow flowing stream on rocks and boulders. Raipur.

Fl. & Fr.: Oct.

Piperaceae

Peperomia tetraphylla (G. Forster) Hook. & Arnott, Bot. Beechey Voy. 97. 1832. *Piper tetraphylla* G. Forster, Fl. Ins. Austr. 5. 1786. *Peperomia reflexa* A. Dietr., Sp. Pl. ed. 6. 180. 1831, *non* Kunth, 1815; Hook. f., Fl. Brit. India 5: 99. 1886.

In shady places of mixed forests. Bastar (Mooney, 1942; Subramanyam and Henry, 1967).

Fl. & Fr.: Nov.-Apr.

Lauraceae

Neolitsea cassia (L.) Kosterm. in J. Sci. Res. Indones. 1: 85. 1952. *Laurus cassia* L., Sp. Pl. 369. 1753. *Litsea zeylanica* Nees, Amoen. Bot. Bonn. fasc. 1: 58. t. 5. 1823; Hook. f., Fl. Brit. India 5: 178. 1886.

In semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: Jan.-Apr.

Elaeagnaceae

Elaeagnus conferta Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 460. 1820 & 1: 440. 1832.

E. latifolia auct. *non* L., 1753; Hook. f., Fl. Brit. India 5: 202. 1886, p. p.

On hilltops in dense forests. Bastar (Mooney, 1942).

Fl. & Fr.: Dec.-Mar.

Loranthaceae

Loranthus cordifolius Wallich in Roxb., Fl. Ind. (Carey & Wallich ed.) 2: 222. 1824;
Hook. f., Fl. Brit. India 5: 209. 1886.

Parasite on trees in mixed forests. Bastar.

Fl. & Fr.: Oct.-Mar.

Santalaceae

Osyris quadripartita Salzm. ex Decne. in Ann. Sci. Nat. Bot. ser. 2. 6: 65. 1836. *O. arborea* Wallich ex A. DC. in DC., Prodr. 14: 633. 1857; Hook. f., Fl. Brit. India 5: 232. 1886.

In dry mixed deciduous forests, often in association with *Gardenia* sp. Bastar.

Fl. & Fr.: July-Jan.

Euphorbiaceae

Alchornea mollis Muell. Arg. in Linnaea 34: 168. 1865; Hook. f., Fl. Brit. India 5: 420. 1887.

In hilly forests. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Oct.

A. tiliifolia (Benth.) Muell. Arg. in Linnaea 34: 168. 1865; Hook. f., Fl. Brit. India 5: 421. 1887, "tiliaeefolia". *Stipellaria tiliaefolia* Benth. in Hook., J. Bot. Kew Misc. 6: 4. 1854.

In dense forests on hill slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Oct.

Antidesma acuminatum Wight, Icon. Pl. Ind. Orient. 6. t. 1991. 1853; Hook. f., Fl. Brit. India 5: 363. 1887, p. p.

In mixed and sal forests. Bastar (Mooney, 1942).

Fl. & Fr.: May-Aug.

A. bunius (L.) Spreng., Syst. Veg. 1: 826. 1825; Hook. f., Fl. Brit. India 5: 358. 1887.

Stilago bunius L., Mant. Pl. 122. 1767.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Aug.

A. menasu Miq. ex Tul. in Ann. Sci. Nat. Bot. ser. III. 15: 215. 1851; Hook. f., Fl. Brit. India 5: 364. 1887.

In mixed forests and along streams. Rajnandgaon.

Fl. & Fr.: Sept.-Oct.

Bridelia montana Willd., Sp. Pl. 4: 978. 1806; Hook. f., Fl. Brit. India 5: 269. 1887, p. p. In sal and mixed forests. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Oct.-Dec.

B. pubescens Kurz in J. Asiat. Soc. Bengal 42: 241. 1873 & Forest Fl. Burma 2: 367. 1877; Hook. f., Fl. Brit. India 5: 270. 1887.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Feb.

Cleistanthus patulus (Roxb.) Muell. Arg. in DC., Prodr. 15(2.2): 505. 1866; Hook. f., Fl. Brit. India 5: 279. 1887. *Cluytia patula* Roxb., Pl. Coromandel 2: 37. t. 170. 1802. In dry mixed deciduous forests. Bastar (Saxena, 1973; Saxena and Khotele, 1976). *Fl. & Fr.*: Feb.-May.

Euphorbia caducifolia Haines in Indian For. 40: 154. 1914 & Bot. Bihar Orissa 2:143. 1921.

In hilly regions. Bastar.

Fl. & Fr.: Nov.-Dec.

E. cristata Heyne ex Roth, Nov. Pl. Sp. 226. 1821; Hook. f., Fl. Brit. India 5: 247. 1887, p. p.

On rocky hill slopes. Surguja.

Fl. & Fr.: Oct.-Jan.

E. elegans Spreng., Syst. Veg. 3: 794. 1886; Hook. f., Fl. Brit. India 5: 246. 1887.

On rocky and slopy lands. Bastar.

Fl. & Fr.: Sept.-Mar.

E. fusiformis Buch.-Ham. in D. Don, Prodr. Fl. Nepal. 62. 1825; Hook. f., Fl. Brit. India 5: 257. 1887.

In hilly areas. Bastar.

Fl. & Fr.: Apr.-June.

E. granulata Forssk., Fl. Aegypt.-Arab. 94. 1775; Hook. f., Fl. Brit. India 5: 252. 1887.

On sandy gravelly soil. Bilaspur.

Fl. & Fr.: Oct.-Nov.

E. royleana Boiss. in DC., Prodr. 15(2.1): 83. 1862; Hook. f., Fl. Brit. India 5: 257. 1887.

In arid and drier hilly regions. Bilaspur.

Fl. & Fr.: Apr.-June.

E. tirucalli L., Sp. Pl. 452. 1753; Hook. f., Fl. Brit. India 5: 254. 1887.

In drier places of hilly or rocky regions. Raipur.

Fl. & Fr.: Aug.-Sept.

Glochidion assamicum Hook. f., Fl. Brit. India 5: 319. 1887. *Phyllanthus assamicus* Muell. Arg. in Flora 48: 378. 1865.

On hill slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-Dec.

G. hirsutum (Roxb.) Voigt, Hort. Suburb. Calc. 153. 1845; Hook. f., Fl. Brit. India 5: 311. 1887. *Bradleia hirsuta* Roxb., Fl. Ind. 3: 699. 1832.

In mixed forests. Raigarh.

Fl. & Fr.: Nov.-Dec.

G. lanceolarium (Roxb.) Voigt, Hort. Suburb. Calc. 153. 1845; Hook. f., Fl. Brit. India 5: 308. 1887. *Bradleia lanceolaria* Roxb., Fl. Ind. 3: 697. 1832.

Along roadsides. Rajnandgaon.

Fl. & Fr.: Jan.-Oct.

Glochidion zeylanicum (Gaertn.) Adr. Juss., Euphorb. Gen. 107. t. 3. 1824; Hook. f., Fl. Brit. India 5: 310. 1887. *Bradleia zeylanica* Gaertn., Fruct. Sem. Pl. 2: 128. t. 109. 1790.

On hill slopes along the bank of drains and in mixed forests. Bilaspur.

Fl. & Fr.: Mar.-July.

Macaranga denticulata (Blume) Muell. Arg. in DC., Prodr. 15(2.2): 1000. 1866; Hook. f., Fl. Brit. India 5: 446. 1887. *Mappa denticulata* Blume, Bijdr. 625. 1826. In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Aug.-Dec.

M. indica Wight, Icon. Pl. Ind. Orient. t. 1883. 1852; Hook. f., Fl. Brit. India 5: 446. 1887.

In dense forests on hill slopes. Bastar (Mooney, 1942).

Fl. & Fr.: Aug.-Dec.

M. peltata (Roxb.) Muell. Arg. in DC., Prodr. 15(2.2): 1010. 1866. *Osyris peltata* Roxb., Fl. Ind. 3: 755. 1832. *Macaranga roxburghii* Wight, Icon. Pl. Ind. Orient. t. 1949. f. 4. 1853; Hook. f., Fl. Brit. India 5: 448. 1887.

In mixed and sal forests. Bastar.

Fl. & Fr.: Jan.-Mar.

Phyllanthus missionis Hook. f., Fl. Brit. India 5: 297. 1887.

Along roadsides. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: July August.

P. rheedii Wight, Icon. Pl. Ind. orient. 5(2): t. 1895. f. 1. 1852; Hook. f., Fl. Brit. India 5: 293. 1887.

In wastelands. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Dec.-Feb.

Sauvagesia quadrangularis Muell. Arg. in Linnaea 32: 73. 1863 & in DC., Prodr. 15(2.2): 242. 1866; Hook. f., Fl. Brit. India 5: 335. 1887.

Along the river bank, in sal forests and on rocky drain beds. Raipur.

Fl. & Fr.: Aug.-Nov.

Urticaceae

Boehmeria glomerulifera Miq. in Zoll., Syst. Verz. 101, 104. 1854. *B. malabarica* Wedd. in Nouv. Arch. Mus. Hist. Nat. Paris 8: 355. 1855-56; Hook. f., Fl. Brit. India 5: 575. 1888.

In mixed forests. Bastar.

Fl. & Fr.: Jan.-Feb.

B. scabrella Gaud., Voy. Uranie 499. 1830. *B. platyphylla* var. *scabrella* (Gaud.) Wedd. in Nouv. Arch. Mus. Hist. Nat. Paris 9: 365. 1856; Hook. f., Fl. Brit. India 5: 578. 1888.

Along streams and in forest clearings. Bastar.

Fl. & Fr.: Sept.-Dec.

Laportea interrupta (L.) Chew. in Gard. Bull. Singapore 21: 200. 1965. *Urtica interrupta* L., Sp. Pl. 985. 1753. *Fleurya interrupta* (L.) Gaud., Voy. Uranie 497. 1830; Hook.

f., Fl. Brit. India 5: 548. 1888.

In moist places of mixed forests, hill slopes and riverbeds. Bastar.

Fl. & Fr.: Aug.-Dec.

Neodistemon indicum (Wedd.) Babu & Henry in Taxon 19: 651. 1970. *Distemon indicum* Wedd. in Nouv. Arch. Mus. Hist. Nat. Paris 9: 551. t. 20A. 1857; Hook. *f.*, Fl. Brit. India 5: 588. 1888.

In mixed forests. Rajnandgaon.

Fl. & Fr.: Nov.

Oreocnide integrifolia Miq., Pl. Jungh. 1: 39. 1851. *Villebrunea integrifolia* Gaud., Voy. Bouite. Bot. t. 91. 1866; Hook. *f.*, Fl. Brit. India 5: 589. 1888.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Mar.-Aug.

Pilea microphylla (L.) Liebm. in Vid. Selsk. Skr. 5(2): 302. 1851. *Parietaria microphylla* L., Syst. Nat. ed. 10. 2: 1308. 1759. *Pilea muscosa* Lindl., Coll. Bot. t. 4. 1821; Hook. *f.*, Fl. Brit. India 5: 551. 1888.

In moist places. Raigarh.

Fl. & Fr.: Dec.-Jan.

P. scripta (Buch.-Ham. ex D. Don) Wedd. in Nouv. Arch. Mus. Hist. Nat. Paris 9: 222. 1856; Hook. *f.*, Fl. Brit. India 5: 556. 1888. *Urtica scripta* Buch.-Ham. ex D. Don, Prodr. Fl. Nepal. 59. 1825.

In moist places. Bastar (Mooney, 1942).

Fl. & Fr.: Aug.-Nov.

Pouzolzia auriculata Wight, Icon. Pl. Ind. Orient. t. 1980. f. 2. 1853; Hook. *f.*, Fl. Brit. India 5: 582. 1888.

As forest undergrowth. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Oct.-Dec.

P. wightii Benn., Pl. Jav. Rar. 1: 66. 1838; Hook. *f.*, Fl. Brit. India 5: 584. 1888.

As forest undergrowth. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: June-Oct.

P. zeylanica (L.) Benn., Pl. Jav. Rar. 1: 67. 1838. *Parietaria zeylanica* L., Sp. Pl. 1052. 1753. *Pouzolzia indica* (L.) Gaud., Voy. Uranie 503. 1830; Hook. *f.*, Fl. Brit. India 5: 581. 1888.

In mixed forests. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Sept.-Oct.

Ulmaceae

Celtis timorensis Spanoghe in Linnaea 15: 343. 1841. *C. cinnamomea* Lindl. ex Planch. in Ann. Sci. Nat. Bot. ser. III. 10: 303. 1848; Hook. *f.*, Fl. Brit. India 5: 482. 1888.

In mixed forests. Bastar.

Fl. & Fr.: Mar.-May.

Moraceae

Ficus concinna Miq. var. **subsessilis** Corner in Gard. Bull. Singapore 17: 376. 1959.

F. glabella auct. non Blume, 1825: King in Hook. f., Fl. Brit. India 5: 511. 1888,
p. p.

In mixed forests. Bastar.

Fl. & Fr.: Apr.-June.

Ficus lanceolata Buch.-Ham. ex Roxb., Fl. Ind. 3: 557. 1832; King in Hook. f., Fl. Brit. India 5: 536. 1888.

On bank of drains. Surguja.

Fl. & Fr.: Apr.-June.

F. nervosa Heyne ex Roth in Roem. & Schult., Syst. Veg. 1: 513. 1817; King in Hook. f., Fl. Brit. India 5: 512. 1888.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Feb.-Mar.

F. tinctoria G. Forster subsp. **gibbosa** (Blume) Corner in Gard. Bull. Singapore 17: 476. 1959 var. **gibbosa**. *F. gibbosa* Blume, Bijdr. 466. 1825; King in Hook. f., Fl. Brit. India 5: 496. 1888.

Along roadsides in mixed and sal forests. Bilaspur.

Fl. & Fr.: July-Dec.

Plecospermum spinosum (Heyne ex Willd.) Trécul in Ann. Sci. Nat. Bot. ser. 3. 8: 124. 1847; Hook. f., Fl. Brit. India 5: 491. 1888. *Trophis spinosa* Heyne ex Willd., Sp. Pl. 4: 734. 1806.

In mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: Feb.-Apr.

Hydrocharitaceae

Blyxa echinosperma (C.B. Clarke) Hook. f., Fl. Brit. India 5: 661. 1888. *Hydrotrophus echinospermus* C.B. Clarke in J. Linn. Soc. London (Bot.) 14: 8. t. 1. 1875. *Blyxa talbotii* Hook. f., Fl. Brit. India 5: 661. 1888.

In shallow and deep water of ponds and streams. Surguja.

Fl. & Fr.: Feb. .

Orchidaceae

Acampe congesta Lindl., Fol. Orchid. Acampe 2. 1853. *Saccolabium congestum* (Lindl.) Hook. f., Fl. Brit. India 6: 63. 1890.

Epiphyte on trees in deciduous forests. Surguja (Tiwari and Maheshwari, 1963).

Fl. & Fr.: Aug.-Dec.

A. papillosa (Lindl.) Lindl., Fol. Orchid. Acampe 2. 1853. *Saccolabium papillosum* Lindl. in Edward's, Bot. Reg. 18: t. 1552. 1833; Hook. f., Fl. Brit. India 6: 63. 1890. Epiphyte on trees in deciduous forests. Surguja.

Fl. & Fr.: Oct.-Dec.

A. praemorsa (Roxb.) Blatter & McCann in J. Bombay Nat. Hist. Soc. 35: 495. 1932. *Epidendrum praemorsum* Roxb., Pl. Coromandel 34. t. 43. 1795. *Saccolabium praemorsum* (Roxb.) Hook. f., Fl. Brit. India 6: 62. 1890.

Epiphyte on *Mangifera indica* and other trees in deciduous forests. Raigarh.

Fl. & Fr.: Aug.-Dec.

Acanthephippium bicolor Lindl. in Edward's, Bot. Reg. 20: t. 1730. 1835; Hook. f., Fl. Brit. India 5: 815. 1890.

In semi-evergreen forests. Bastar.

Fl. & Fr.: Dec.-Feb.

A. striatum Lindl. in Edward's, Bot. Reg. Misc. 24: 45.1838; Hook. f., Fl. Brit. India 5: 816. 1890.

In dense forests on hill slopes. Bastar (Mooney, 1942; Tiwari and Maheshwari, 1963).
Fl.: July-Aug.

Aerides maculosum Lindl. in Edward's, Bot. Reg. 31: t. 58. 1845; Hook. f., Fl. Brit. India 6: 45. 1890.

In open deciduous forests on *Terminalia* sp., *Acacia catechu* and *Mangifera indica*. Bastar (Tiwari and Maheshwari, 1963).

Fl. & Fr.: May-Sept.

Ascocentrum micranthum (Lindl.) Holttum, Gard. Bull. Sing. 11: 275. 1947. *Saccolabium micranthum* Lindl., Gen. Sp. Orchid. Pl. 220. 1833; Hook. f., Fl. Brit. India 6: 59.1890.

Epiphyte on trees in mixed forests. Surguja (Tiwari and Maheshwari, 1963).

Fl.: June-July.

Bulbophyllum triste Rchb. f. in Walp. , Ann. Bot. Syst. 6: 253. 1861; Hook. f., Fl. Brit. India 5: 768. 1890. *B. micranthum* Hook. f., Fl. Brit. India 5: 768. 1890. *B. alopecurum* Rchb. f. in Gard. Chron. 2: 70. 1880; Hook. f., Fl. Brit. India 5: 770.1890.

Epiphyte on trees in mixed forests. Surguja (Tiwari and Maheshwari, 1963).

Fl.: Feb.-May.

Cymbidium aloifolium (L.) Sw. in Nova Acta Regiae Soc. Sci. Upsal. 6: 73. 1799; Hook. f., Fl. Brit. India 6: 10. 1890. *Epidendrum aloifolium* L., Sp. Pl. 953. 1753. *Cymbidium bicolor* Lindl., Gen. Sp. Orchid. Pl. 164. 1833; Hook. f., Fl. Brit. India 6: 11. 1890.

On trees near water fall. Bastar.

Fl. & Fr.: Feb.-May.

C. ensifolium (L.) Sw. var. **haematodes** (Lindl.) Trimen, Syst. Cat. Fl. Pl. Ceylon 89. 1885. *C. haematodes* Lindl., Gen. Sp. Orchid. Pl. 162. 1833. *C. cyperifolium* Wallich ex Lindl., Gen. Sp. Orchid. Pl. 163. 1833; Hook. f., Fl. Brit. India 6: 13.1890.

On sandy soil of drainage bank. Bilaspur.

Fl. & Fr.: Oct.-Dec.

Dendrobium aphyllum (Roxb.) Fischer in Gamble, Fl. Madras 3: 1416. 1928. *Limodorum aphyllum* Roxb., Pl. Coromandel 1: 34. t. 41. 1795. *Dendrobium pierardi* Roxb. in

Hook., Exot. Fl. 1. t. 9. 1823; Hook. f., Fl. Brit. India 5: 738. 1890.

In dense forests. Bastar.

Fl. & Fr.: Dec.-Feb.

D. crepidatum Lindl. in Paxt., Fl. Gard. 1: 63. f. 45. 1850; Hook. f., Fl. Brit. India 5: 740. 1890.

In sal forests. Bastar (Mooney, 1942; Tiwari and Maheshwari, 1963).

Fl. & Fr.: Mar.-Apr.

D. fimbriatum Hook., Exot. Fl. 1. t. 71. 1823; Hook. f., Fl. Brit. India 5: 745. 1890.

In mixed forests. Surguja (Tiwari and Maheshwari, 1963).

Fl. & Fr.: Apr.-June.

Dendrobium formosum Roxb. in Wallich, Pl. Asiat. Rar. 1(2): 34. t. 39. 1830 & Fl. Ind. 3: 485. 1832; Hook. f., Fl. Brit. India 5: 721. 1890.

On *Shorea robusta* and *Diospyros melanoxylon*. Surguja.

Fl. & Fr.: Nov.-Mar.

D. macrostachyum Lindl., Gen. Sp. Orchid. Pl. 78. 1830; Hook. f., Fl. Brit. India 5: 735. 1890.

On *Shorea robusta* and *Diospyros melanoxylon*. Surguja.

Fl. & Fr.: Dec.-Feb.

D. moschatum (Buch.-Ham.) Sw. in Schrad., Neu. J. Bot. 1: 94. 1805. *Epidendrum moschatum* Buch.-Ham. in Syme's, Embassy Ava. ed. 2, 3: 315. 1800. *Dendrobium calceolaria* Carey ex Hook., Exot. Fl. 3: t. 184. 1825-1826; Hook. f., Fl. Brit. India 5: 744. 1890.

In mixed forests. Surguja (Tiwari and Maheshwari, 1963).

Fl.: May - July.

D. nobile Lindl., Gen. Sp. Orchid. Pl. 79. 1830; Hook. f., Fl. Brit. India 5: 740. 1890.

In dense forests. Bastar.

Fl. & Fr.: Dec.-Feb.

D. transparens Wallich ex Lindl., Gen. Sp. Orchid. Pl. 79. 1830; Hook. f., Fl. Brit. India 5: 738. 1890.

In deciduous forests. Surguja (Tiwari and Maheshwari, 1963).

Fl.: Apr.-May.

D. wightii A.D. Hawkes & A.H. Heller in Orquidea 24: 16. 1962. *D. graminifolium* Wight, Icon. Pl. Ind. Orient. 5(1): 6. t. 1649. 1851, non Willd. , 1805; Hook. f., Fl. Brit. India 5: 718. 1890.

In mixed forests. Bastar (Mooney, 1942; Tiwari and Maheshwari, 1963).

Fl. & Fr.: May-Jan.

Eria pubescens (Hook.) Lindl. ex Steud., Nomencl. Bot. ed. 2. 1: 566. 1840. *Dendrobium pubescens* Hook., Exot. Fl. 2: t. 124. 1824. *Eria flava* Lindl., Gen. Sp. Orchid. Pl. 65. 1830; Hook. f., Fl. Brit. India 5: 801. 1890.

In mixed forests. Bastar (Mooney, 1942; Tiwari and Maheshwari, 1963).

Fl.: April.

Eulophia graminea Lindl., Gen. Sp. Orchid. Pl. 182. 1833; Hook. f., Fl. Brit. India 6: 2. 1890.

In mixed forests. Raipur.

Fl. & Fr.: Oct.-Dec.

E. mackinnonii Duthie in J. Asiat. Soc. Bengal 71: 40. 1902.

In mixed forests. Raipur.

Fl.: July-Aug.

E. ochreata Lindl. in J. Linn. Soc. London (Bot.) 3: 24. 1859; Hook. f., Fl. Brit. India 6: 2. 1890.

As forest undergrowth. Raipur.

Fl. & Fr.: June -Oct.

Gastrochilus inconspicuus (Hook. f.) Kuntze, Revis. Gen. Pl. 2: 661. 1891. *Saccolabium inconspicuum* Hook. f., Fl. Brit. India 6: 56. 1890.

On *Shorea robusta*. Bilaspur.

Fl. & Fr.: Aug.-Dec.

Habenaria barbata Wight ex Hook. f., Fl. Brit. India 6: 133. 1890.

In moist shady places. Raigarh.

Fl. & Fr.: Sept.-Dec.

H. dentata (Sw.) Schlechter in Fedde, Repert. Beih. 4: 125. 1919. *Orchis dentata* Sw. in Vet. Acad. Handl. Stockh. 21: 207. 1800. *Habenaria geniculata* D. Don, rodri. Fl. Nepal. 25. 1825; Hook. f., Fl. Brit. India 6: 138. 1890.

In moist places. Bilaspur.

Fl. & Fr.: Oct.-Dec.

H. diphylla Dalzell in Hook., J. Bot. 2: 262. 1850; Hook. f., Fl. Brit. India 6: 151. 1890.

In moist shady places. Bastar (Mooney, 1942; Tiwari and Maheshwari, 1963).

Fl. & Fr.: July-Oct.

H. roxburghii Nicolson in Saldanha & Nicolson, Fl. Hassan Dist. 834. 1976. *H. platyphylla* (Willd.) Spreng., Syst. Veg. 3: 690. 1826, nom. superfl.; Hook. f., Fl. Brit. India 6: 140. 1890. *Orchis platyphyllos* Willd., Sp. Pl. 4: 10. 1805, nom. superfl.

In mixed deciduous forests. Rajnandgaon.

Fl. & Fr.: Aug.-Oct.

Liparis bituberculata (Hook.) Lindl. in Edward's, Bot. Reg. 11: t. 882. 1825; Hook. f., Fl. Brit. India 5: 696. 1890. *Cymbidium bituberculatum* Hook., Exot. Fl. 2: t. 116. 1824.

In moist places. Surguja (Tiwari and Maheshwari, 1963).

Fl. & Fr.: Aug.-Nov.

L. nervosa (Thunb.) Lindl., Gen. Sp. Orchid. Pl. 26. 1830. *Ophrys nervosa* Thunb., Fl. Jap. 27. 1784. *Empusa paradoxa* Lindl., Gen. Sp. Orchid. Pl. 17. 1830. *Liparis paradoxa* (Lindl.) Rchb. f. in Walp., Ann. Bot. Syst. 6: 218. 1861; Hook. f., Fl. Brit. India 5: 697. 1890.

In mixed forests. Surguja (Tiwari and Maheshwari, 1963).

Fl. & Fr.: Aug.-Oct.

L. viridiflora (Blume) Lindl., Gen. Sp. Orchid. Pl. 31. 1830. *Malaxis viridiflora* Blume, Bijdr. 392. 1825. *Liparis longipes* Lindl. in Wallich, Pl. Asiat. Rar. 1: 31. t. 35. 1830; Hook. f., Fl. Brit. India 5: 703. 1890.

In moist shady places. Bastar (Tiwari and Maheshwari, 1963).

Fl. & Fr.: Sept.-Dec.

Luisia brachystachys (Lindl.) Blume, Rumphia 4: 50. 1849; Hook. f., Fl. Brit. India 6: 23. 1890. *Mesoclastes brachystachys* Lindl., Gen. Sp. Orchid. Pl. 45. 1830.

On *Shorea robusta*. Bilaspur.

Fl. & Fr.: Apr.-June.

Malaxis latifolia Sm. in Rees, Cycl. 22: n 3. 1812. *Microstylis congesta* Rchb. f. in Walp., Ann. Bot. Syst. 6: 206. 1861; Hook. f., Fl. Brit. India 5: 689. 1888.
In moist shady places. Surguja (Tiwari and Maheshwari, 1963).
Fl. & Fr.: June-Dec.

M. rheedii Sw. in Vet. Akad. Nya Handl. Stockh. 21: 235. 1800. *Microstylis rheedii* (Sw.) Lindl., Gen. Sp. Orchid. Pl. 21. 1830, p. p.; Hook. f., Fl. Brit. India 5: 690. 1890.

In moist places. Surguja.

Fl. & Fr.: July-Oct.

Nervilia aragoana Gaud., Voy. Uranie 422. t. 35. 1829. *Pogonia flabelliformis* Lindl., Gen. Sp. Orchid. Pl. 415. 1840; Hook. f., Fl. Brit. India 6: 121. 1890. *P. carinata* Lindl., Gen. Sp. Orchid. Pl. 414. 1840; Hook. f., Fl. Brit. India 6: 121. 1890. *P. scottii* Rchb. f. in Flora 55: 276. 1872; Hook. f., Fl. Brit. India 6: 120. 1890.

In sal forests. Raipur.

Fl. & Fr.: July-Sept.

Peristylus goodyeroides (D. Don) Lindl., Gen. Sp. Orchid. Pl. 299. 1835. *Habenaria goodyeroides* D. Don, Prodr. Fl. Nepal. 25. 1825; Hook. f., Fl. Brit. India 6: 161. 1890.
In sandy humus soil. Bilaspur.

Fl. & Fr.: July - Nov.

Pholidota imbricata Lindl. in Hook., Exot. Fl. sub. t. 138. 1825; Hook. f., Fl. Brit. India 5: 845. 1890.

In mixed forests. Surguja.

Fl. & Fr.: June-Dec.

Pomatocalpa ramosum (Lindl.) Summerh. in Kew Bull. 1948: 56. 1948. *Saccolabium ramosum* Lindl., Gen. Sp. Orchid. Pl. 224. 1833. *Cleisostoma ramosum* (Lindl.) Hook. f., Fl. Brit. India 6: 72. 1890.

In dense forests. Bastar (Tiwari and Maheshwari, 1963).

Fl. & Fr.: Apr.-May.

Thunia alba (Lindl.) Rchb. f. in Bot. Zeit. 1852: 764. 1852. *Phajus albus* Lindl., Gen. Sp. Orchid. Pl. 128. 1831; Hook. f., Fl. Brit. India 5: 818. 1890, p. p.

On rocks and boulders. Surguja.

Fl. & Fr.: July-Apr.

Tropidia angulosa Blume, Coll. Orchid. 122. 1858; Hook. f., Fl. Brit. India 6: 92. 1890.
In humus of forest floor. Bastar.

Fl. & Fr.: Aug.-Dec.

Zeuxine strateumatica (L.) Schlechter in Fedde, Repert. Beih. 1: 77. 1911. *Orchis strateumatica* L., Sp. Pl. 943. 1753. *Zeuxine sulcata* Lindl., Gen. Sp. Orchid. Pl. 485. 1840; Hook. f., Fl. Brit. India 6: 106. 1890.

In moist sandy soil. Raigarh.

Fl. & Fr.: Dec.-Mar.

Zingiberaceae

Alpinia malaccensis (Burm. f.) Roscoe in Trans. Linn. Soc. London 8: 345. 1807; Baker in Hook. f., Fl. Brit. India 6: 255. 1892. *Maranta malaccensis* Burm. f., Fl. Ind. 2. 1768. *Alpinia nutans* Roscoe var. *sericea* Baker in Hook. f., Fl. Brit. India 6: 256. 1892.

In semi-evergreen forests. Bastar (Mooney, 1942).

Fl. & Fr.: Apr.-May.

Amomum dealbatum Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 42. 1820; Baker in Hook. f., Fl. Brit. India 6: 239. 1892.

In mixed forests. Bastar.

Fl. & Fr.: June-Dec.

Curcuma ferruginea Roxb. in Asiat. Res. 11: 336. 1810 & Fl. Ind. (Carey & Wallich ed.) 1: 27. 1820; Baker in Hook. f., Fl. Brit. India 6: 213. 1890.

In mixed forests. Raipur.

Fl.: June.

Globba orixensis Roxb. in Asiat. Res. 11: 358. 1810 & Pl. Coromandel. t. 229 1815; Baker in Hook. f., Fl. Brit. India 6: 201. 1890.

In sal and mixed forests. Bastar (Mooney, 1942).

Fl. & Fr.: July-Oct.

Zingiber rubens Roxb. in Asiat. Res. 11: 348. 1810 & Fl. Ind. (Carey & Wallich ed.) 1: 51. 1820; Baker in Hook. f., Fl. Brit. India 6: 243. 1892.

In sal forests. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Aug.-Sept.

Marantaceae

Phrynum placentarium (Lour.) Merr. in Philipp. J. Sci. 15: 230. 1919. *Phyllodes placentaria* Lour., Fl. Cochinch. 1: 13. 1790. *Phrynum parviflorum* Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 7. 1820; Baker in Hook. f., Fl. Brit. India 6: 259. 1892. In moist shady places on hill slopes or under dense sal forests. Bastar.

Fl. & Fr.: July-Sept.

P. pubinerve Blume, Enum. Pl. Javae 1: 38. 1827. *P. capitatum* auct. non Willd., 1797; Baker in Hook. f., Fl. Brit. India 6: 258. 1892.

In moist shady places of sal forests. Bastar (Mooney, 1942).

Fl. & Fr.: Aug.-Sept.

Dioscoreaceae

Dioscorea alata L., Sp. Pl. 1033. 1753; Hook. f., Fl. Brit. India 6: 296. 1892.

In dense forests on hill slopes. Bastar (Saxena & Khotele, 1976).

Fl. & Fr.: Oct.-Dec.

D. pentaphylla L. var. **communis** Prain & Burkhill in Ann. Roy. Bot. Gard. Calc. 14(1): 168. 1936.

In mixed forests and along roadsides. Surguja.

Fl. & Fr.: Nov.- Dec.

Dioscorea spicata Roth, Nov. Pl. Sp. 371. 1821; Hook. f., Fl. Brit. India 6: 291. 1892.

In sal forests. Surguja.
Fl. & Fr.: Dec.- Jan.

Liliaceae

Chlorophytum laxum R. Br., Prodr. 277. 1810; Hook. f., Fl. Brit. India 6: 336. 1892.

In mixed forests. Dantewada.
Fl. & Fr.: Sept.-Oct.

Disporum calcaratum D. Don in Trans. Linn. Soc. London 18: 516. 1841; Hook. f., Fl. Brit. India 6: 359. 1892.

In the forest floor. Bastar.
Fl. & Fr.: July-Oct.

Iphigenia pallida Baker in J. Linn. Soc. London (Bot.) 17: 451. 1879; Hook. f., Fl. Brit. India 6: 357. 1892.

In the forest floor usually in moist places. Bilaspur.
Fl. & Fr.: Aug.-Nov.

Xyridaceae

Xyris indica L., Sp. Pl. 42. 1753; Hook. f., Fl. Brit. India 6: 364. 1892. *X. robusta*

Mart. in Wallich, Pl. Asiat. Rar. 3: 30. 1832; Hook. f., Fl. Brit. India 6: 364. 1892.
In damp places. Raigarh.

Fl. & Fr.: Oct.-Nov.

Commelinaceae

Commelina clavata C.B. Clarke, Commelyn. Cyrtandr. Bengal. 15. t. 5. 1874; Hook. f., Fl. Brit. India 6: 371. 1892.

In moist shady places. Bastar (Tiwari and Maheshwari, 1965).
Fl. & Fr.: June-Aug.

Cyanotis arachnoidea C.B. Clarke in A. DC., Monogr. Phan. 3: 250. 1881; Hook. f., Fl. Brit. India 6: 386. 1892.

Among rock boulders and on alluvial soil under shade. Bastar.
Fl. & Fr.: Aug.-Sept.

C. tuberosa (Roxb.) Schult. & J.H. Schult. in Roem. & Schult., Syst. Veg. 7: 1153. 1830; Hook. f., Fl. Brit. India 6: 386. 1892. *Tradescantia tuberosa* Roxb.,

Pl. Coromandel 2: 5. t. 108 1799 & Fl. Ind. 2: 119. 1832.

In moist shady places. Bastar (Tiwari and Maheshwari, 1965).
Fl. & Fr.: Throughout the year.

Murdannia japonica (Thunb.) Faden in Taxon 26: 142. 1977. *Commelina japonica* Thunb. in Trans. Linn. Soc. London 2: 332. 1794. *Aneilema lineolatum* (Blume) Kunth, Enum.

Pl. 4: 69. 1843; Hook. f., Fl. Brit. India 6: 376. 1892.

In moist shady places. Bastar (Tiwari and Maheshwari, 1965).
Fl. & Fr.: Aug.-Sept.

Flagellariaceae

Flagellaria indica L., Sp. Pl. 333. 1753; Hook. f., Fl. Brit. India 6: 391. 1892.

In dense moist deciduous forests. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: Mar.-Nov.

Araceae

Acorus calamus L., Sp. Pl. 324. 1753; Hook. f., Fl. Brit. India 6: 555. 1893.

In marshy places. Surguja.

Fl. & Fr.: July-Sept.

Amorphophallus paeoniifolius (Dennst.) Nicolson in Taxon 26: 338. 1977. *Dracontium paeoniifolius* Dennst., Schlüssel Hortus Malab. 13, 21, 38. 1818. *Amorphophallus campanulatus* (Roxb.) Blume ex Decne. in Ann. Mus. Hist. Nat. Paris 3: 366. 1834; Hook. f., Fl. Brit. India 6: 513. 1893.

In shady places. Raipur.

Fl. & Fr.: July October.

Arisaema decipiens Schott in Oester. Bot. Zeitsch. 373. 1857; Hook. f., Fl. Brit. India 6: 503. 1893.

In valleys. Bastar.

Fl. & Fr.: Aug.-Apr.

A. griffithii Schott, Syn. Aroid. 26. 1856; Hook. f., Fl. Brit. India 6: 499. 1893.

In shady places. Bastar.

Fl. & Fr.: Aug.-Oct.

Typhonium trilobatum (L.) Schott in Wien. Zeitschr. 3: 72. 1829; Hook. f., Fl. Brit. India 6: 09. 1893. *Arum trilobatum* L., Sp. Pl. 965. 1753.

In shady places. Bilaspur.

Fl. & Fr.: May June.

Alismataceae

Caldesia oligococca (F.v. Muell.) Buchenau in Engl., Bot. Jahrb. 2: 479. 1882. *Alisma oligococcum* F.v. Muell., Fragm. 1: 23. 1858; Hook. f., Fl. Brit. India 6: 560. 1893.

Along the bank of ponds in muddy places and shallow water. Rajnandgaon.

Fl. & Fr.: Dec.-May.

Aponogetonaceae

Aponogeton crispum Thunb., Nov. Gen. Pl. 4: 73. 1784; Hook. f., Fl. Brit. India 6: 564. 1893, p. p.

In tanks and ponds. Bilaspur.

Fl. & Fr.: July-Aug.

Potamogetonaceae

Potamogeton malaianus Miq., Ill. Fl. Archip. Ind. 46. 1871. *P. mucronatus* K. Presl, Epimel. Bot. 245. 1849; Hook. f., Fl. Brit. India 6: 567. 1893.

In ponds. Raipur.

Fl. & Fr.: Apr.-June.

Potamogeton octandrus Poir. in Lam., Encyl. Suppl. 4: 534. 1816. *P. javanicus* Hassk.

in Verh. Nat. Ver. Ned. Ind. 1: 26. 1856; Hook. f., Fl. Brit. India 6: 566. 1893.

In ponds. Surguja.

Fl.: Feb.

P. perfoliatus L., Sp. Pl. 126. 1753; Hook. f., Fl. Brit. India 6: 566. 1893.

In ponds and tanks. Bilaspur.

Fl. & Fr.: Nov.-Mar.

Eriocaulaceae

Eriocaulon cuspidatum Dalzell in Hook., J. Bot. Kew Gard. Misc. 3: 281. 1851; Hook.

f., Fl. Brit. India 6: 581. 1893.

In sandy wet soil near running stream. Bastar (Arora, 1968).

Fl. & Fr.: Aug.-Oct.

E. hamiltonianum Mart. in Wallich, Pl. Asiat. Rar. 3: 29. 1832; Hook. *f.*, Fl.

Brit. India 6: 579. 1893. (*quoad syn.* under *E. oryzetorum*). *E. hamiltonianum* Mart. var. *minor* Fyson in J. Ind. Bot. 2: 313. 1921.

In marshy places. Raipur.

Fl. & Fr.: Sept.-Oct.

E. longicuspis Hook. *f.*, Fl. Brit. India 6: 573. 1893. *E. polycephalum* Hook.

f., Fl. Brit. India 6: 573. 1893. *E. longicuspis* Hook. *f.* var. *polycephalum* (Hook. *f.*) Fyson in J. Ind. Bot. 2: 308. 1921.

In swamps. Korba.

Fl. & Fr.: Dec.-Feb.

E. martianum Wallich ex Koern. in Linnaea 27: 642. 1856. *E. quinquangulare*

L. var. *martiana* (Wallich) Fyson in J. Ind. Bot. 2: 204. 1921.

In moist shady places usually in sandy soil. Bilaspur.

Fl. & Fr.: Oct.-Dec.

E. nepalense Prescott ex Bong. in Act. Acad. Petrop. ser. 6, 1: 610. 1831;

Hook. *f.*, Fl. Brit. India 6: 581. 1893. *E. luzulaefolium* Mart. in Wallich, Pl. Asiat. Rar. 3: 28. 1832; Hook. *f.*, Fl. Brit. India 6: 582. 1893.

In damp places. Surguja.

Fl. & Fr.: Nov.-Dec.

Cyperaceae

Bulbostylis densa (Wallich) Hand.-Mazz. in G. Karst. & Schenk, Vegetationsb. 20. 7:

16. 1930. *Scirpus densus* Wallich in Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 231. 1820.

Bulbostylis capillaris Kunth var. *trifida* (Nees) C.B. Clarke in Hook. *f.*, Fl.

Brit. India 6: 652. 1893. *Isolepis trifida* Nees in Wight, Contr. Bot. India 108. 1834.

In wastelands and around ditches. Raipur.

Fl. & Fr.: Sept.

- Carex baccans** Nees in Wight, Contr. Bot. India 122. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 6: 722. 1894.
 As forest undergrowth. Bastar.
Fl. & Fr.: September.
- C. filicina** Nees in Wight, Contr. Bot. India 123. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 6: 717. 1894.
 In moist places as forest undergrowth. Bastar.
Fl. & Fr.: Sept.
- C. myosurus** Nees in Wight, Contr. Bot. India 122. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 6: 723. 1894, *incl.* var. *eminens* (Nees) C.B. Clarke. *C. eminens* Nees in Wight, Contr. Bot. India 122. 1834.
 As forest undergrowth. Bastar (Tiwari and Maheshwari, 1964).
Fl. & Fr.: Jan.-Mar.
- C. phacota** Spreng., Syst. 3: 826. 1826; C.B. Clarke in Hook. f., Fl. Brit. India 6: 708. 1894.
 As forest undergrowth. Bastar.
Fl. & Fr.: Feb.-Mar.
- C. praelonga** C.B. Clarke var. *angustior* C.B. Clarke in Hook. f., Fl. Brit. India 6: 707. 1894.
 As forest undergrowth. Bastar (Tiwari & Maheshwari, 1964).
Fl. & Fr.: Apr.-May.
- C. stramentitia** Boott ex Boeck. in Linnaea 40: 351. 1876; C.B. Clarke in Hook. f., Fl. Brit. India 6: 717. 1894.
 As forest undergrowth. Bastar (Tiwari & Maheshwari, 1964).
Fl. & Fr.: Apr.-June.
- Cyperus castaneus** Willd., Sp. Pl. 1: 278. 1797; C.B. Clarke in Hook. f., Fl. Brit. India 6: 598. 1893.
 In wastelands. Raipur.
Fl. & Fr.: Aug.
- C. corymbosus** Rottb., Descr. Icon. Rar. Pl. 42. t.7. f. 4. 1773; C.B. Clarke in Hook. f., Fl. Brit. India 6: 612. 1893.
 In moist places of mixed forests. Raipur.
Fl. & Fr.: Dec.-Jan.
- C. digitatus** Roxb., Fl. Ind. (Carey & Wallich ed.)1: 209. 1820; C.B. Clarke in Hook. f., Fl. Brit. India 6: 618. 1893.
 In wastelands and among rock boulders. Bastar (Saxena and Khotele, 1976).
Fl. & Fr.: May December.
- C. dubius** Rottb., Descr. Icon. Rar. Pl. 20 t. 4. f. 5. 1773. *Mariscus dregeanus* Kunth, Enum. Pl. 2: 120. 1837; C.B. Clarke in Hook. f., Fl. Brit. India 6: 620. 1893. *M. dubius* Fischer in Gamble, Fl. Madras 3: 1644. 1931.
 In moist soil near ponds. Bilaspur.
Fl. & Fr.: Oct.-Nov.

Cyperus melanospermus (Nees) Valck. Suring., Cyperus 50. t. 2. f. 8. 1898. *Kyllinga melanosperma* Nees in Wight, Contr. Bot. India 91. 1834; C.B. Clarke in Hook. f., Fl. Brit. India 6: 588. 1893.

In mixed forests. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Sept.-Dec.

C. nutans Vahl, Enum. Pl. 2: 363. 1805; C.B. Clarke in Hook. f., Fl. Brit. India 6: 607. 1893.

var. **nutans**

Along drains and rivers. Bastar (Subramanyam and Henry, 1967).

Fl. & Fr.: May.

C. polystachyos Rottb., Descr. Pl. Rar. 21. 1772 & Descr. Icon. Rar. Pl. 39.

t. 21. f. 1. 1773. *Pycreus polystachyos* P. Beauv., Fl. Oware 2: 48. t. 86. f. 2. 1807; C.B. Clarke in Hook. f., Fl. Brit. India 6: 592. 1893.

In moist places. Surguja.

Fl. & Fr.: Aug.-Nov.

C. pulchellus R. Br., Prodr. 213. 1810; Kern in Steenis, Fl. Males. ser. I. 7(3):

632. 1974. *C. leucocephalus* Nees in Hook., J. Bot. 21: 107. 1841, p. p.; C.B. Clarke in Hook. f., Fl. Brit. India 6: 602. 1893, *non* Retz., 1789.

In moist places of forest floor. Bilaspur.

Fl. & Fr.: Sept.-Nov.

Eleocharis geniculata (L.) Roem. & Schult., Syst. Veg. 2: 150. 1817. *Scirpus geniculatus* L., Sp. Pl. 48. 1753. *Eleocharis capitata* R. Br., Prodr. 225. 1810; C.B. Clarke in Hook. f., Fl. Brit. India 6: 627. 1893.

In stream beds. Raipur.

Fl. & Fr.: Jan.

E. palustris (L.) R. Br., Prodr. 224. 1810; C.B. Clarke in Hook. f., Fl. Brit.

India 6: 628. 1893. *Scirpus palustris* L., Sp. Pl. 47. 1753.

Along drains. Durg.

Fl. & Fr.: Apr.

E. spiralis (Rottb.) Roem. & Schult., Syst. Veg. 2: 155. 1817; C.B. Clarke in

Hook. f., Fl. Brit. India 6: 627. 1893. *Scirpus spiralis* Rottb., Descr. Icon. Rar. Pl. 45. t. 15. f. 1. 1773.

In wastelands. Raipur.

Fl. & Fr.: Sept.

Fimbristylis alboviridis C.B. Clarke in Hook. f., Fl. Brit. India 6: 638. 1893.

Along river banks. Raipur.

Fl. & Fr.: October.

Fimbristylis argentea (Rottb.) Vahl, Enum. Pl. 2: 294. 1805; C.B. Clarke in Hook. f.,

Fl. Brit. India 6: 640. 1893. *Scirpus argenteus* Rottb., Descr. Pl. Rar. 27. 1772.

In moist places of mixed forests. Bastar (Saxena and Khotele, 1976).

Fl. & Fr.: Dec.-Jan.

F. cinnamometorum (Vahl) Kunth, Enum. Pl. 2: 229. 1837. *Scirpus cinnamometorum* Vahl, Enum. Pl. 2: 278. 1805. *Fimbristylis cyperoides* R. Br., Prodr.

228. 1810; C.B. Clarke in Hook. f., Fl. Brit. India 6: 650. 1893. *F. cyperoides* var. *cinnamometorum* C.B. Clarke, Ill. Cyper. t. 44. f. 1-4. 1909.
In moist places. Bastar (Mooney, 1942).

Fimbristylis complanata (Retz.) Link, Hort. Berol. 1: 292. 1827; C.B. Clarke in Hook. f., Fl. Brit. India 6: 646. 1893. *Scirpus complanatus* Retz., Observ. Bot. 5: 14. 1789.
In moist places near ponds and around fields. Bilaspur.
Fl. & *Fr.*: Sept.-Oct.

F. eragrostis (Nees) Hance in J. Linn. Soc. London (Bot.) 13: 132. 1873.

Abildgaardia eragrostis Nees in Wight, Contr. Bot. India 95. 1834. *Fimbristylis nigrobrunnea* Thwaites, Enum. Pl. Zeyl. 434. 1864; C.B. Clarke in Hook. f., Fl. Brit. India 6: 648. 1893.

In moist places. Bastar (Sahni *et al.*, 1972).

Fl. & *Fr.*: Apr.- Sept.

F. ferruginea (L.) Vahl, Enum. Pl. 2: 291. 1805; C.B. Clarke in Hook. f., Fl. Brit. India 6: 638. 1893. *Scirpus ferrugineus* L., Sp. Pl. 50. 1753.

In moist shady places. Dantewada.

Fl. & *Fr.*: Oct.

F. hookeriana Boeck. In Linnaea 37: 22. 1871; C.B. Clarke in Hook. f., Fl. Brit. India 6: 641. 1893.

In moist places. Bastar (Dixit and Roy, 1991).

Fl. & *Fr.*: Aug.-Feb.

F. intonsa S.T. Blake in J. Arnold Arb. 35: 221. f. 2. 1954. *F. disticha* var. *kurzii* C.B. Clarke in Hook. f., Fl. Brit. India 6: 651. 1893.

Along ponds and streams. Surguja.

Fl. & *Fr.*: Nov.

F. squarrosa Vahl, Enum. Pl. 2: 289. 1805; C.B. Clarke in Hook. f., Fl. Brit. India 6: 635. 1893. *F. aestivalis* (Retz.) Vahl var. *squarrosa* Koyama in J. Fac. Sci. Univ. Tokyo III. 8: 116. 1962.

In moist places of forest roads. Bastar (Subramanyam and Henry, 1967).

Fl. & *Fr.*: May-June.

Lipocarpha sphacelata (Vahl) Kunth, Enum. Pl. 2: 267. 1837; C.B. Clarke in Hook. f., Fl. Brit. India 6: 667. 1893. *Hypaelyptum sphacelatum* Vahl, Enum. Pl. 2: 283. 1805.
Along streams and drains. Raigarh.

Fl. & *Fr.*: Sept.-Nov.

Rhynchospora rubra (Lour.) Makino in Bot. Mag. Tokyo 17: 180. 1903. *Schoenus ruber* Lour., Fl. Cochinch. 1: 41. 1790. *Rhynchospora wallichiana* Kunth, Enum. Pl. 2: 289. 1837; C.B. Clarke in Hook. f., Fl. Brit. India 6: 668. 1893.

In marshy places. Bastar.

Fl. & *Fr.*: Oct.

Scirpus maritimus L., Sp. Pl. 51. 1753; C.B. Clarke in Hook. f., Fl. Brit. India 6: 658. 1893, p. p.

Along the banks of rivers. Raipur.

Fl. & *Fr.*: May-June.

Scirpus microcephalus (Steud.) Dandy in F.W. Andrews, Fl. Pl. Sudan 3: 366. 1956.
Kyllinga microcephala Steud. in Flora 25: 597. 1842. *Scirpus kyllingioides* (A. Rich.) Boeck. In Linnaea 36: 733. 1870; C.B. Clarke in Hook. f., Fl. Brit. India 6: 662. 1893. *Kyllingiella microcephala* (Steud.) R. Haines & K. Lye in Bot. Not. 131(1): 175-177. 1978.

In moist depressions. Raipur.

Fl. & Fr.: Oct.

S. tuberosus Desf., Fl. Atlant. 1: 50. 1798.

In marshy places. Raipur.

Fl. & Fr.: Feb.-June.

Scleria lithosperma (L.) Sw., Prodr. 18. 1788; C.B. Clarke in Hook. f., Fl. Brit. India 6: 685. 1894. *Scirpus lithospermus* L., Sp. Pl. 51. 1753.

In sal forests. Raipur.

Fl. & Fr.: Throughout the year.

Poaceae

Aristida depressa Retz., Observ. Bot. 4: 22. 1786; Bor, Grass. Burm. Ceyl. Ind. Pak. 409. 1960.

In sandy alluvium, edges of dry forest and forest clearings. Bilaspur.

Fl. & Fr.: July-Dec.

A. redacta Stapf in Kew Bull. 1892: 85. 1892; Hook. f., Fl. Brit. India 7: 227. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 412. 1960.

In grasslands. Raigarh.

Fl. & Fr.: Aug.-Dec.

Arundinella ciliata (Roxb.) Nees ex Miq. in Verh. Konink. Nederl. Inst. 3. pt. 4: 30. 1851; Bor, Grass. Burm. Ceyl. Ind. Pak. 421. 1960. *Holcus ciliatus* Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 321. 1820. *Arundinella agrostoides* auct. non Trin., 1836: Hook. f., Fl. Brit. India 7: 71. 1896.

As forest undergrowth. Bastar.

Fl. & Fr.: Sept.- Nov.

A. holcoides (Kunth) Trin. in Bull. Acad. Sci. Pétersb. 1: 71. 1836; Bor, Grass. Burm. Ceyl. Ind. Pak. 422. 1960. *Brandtia holcoides* Kunth, Revis. Gramin. 2: 511. 1831. *Arundinella agrostoides* Trin., Sp. Gram. 3: t. 265. 1836; Hook. f., Fl. Brit. India 7: 71. 1896.

In dense forests as undergrowth. Bastar.

Fl. & Fr.: Rainy season.

Arundo donax L., Sp. Pl. 81. 1753; Hook. f., Fl. Brit. India 7: 302. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 413. 1960.

In grasslands. Bilaspur.

Fl. & Fr.: Aug.-Nov.

Bambusa teres Buch.-Ham. ex Munro in Trans. Linn. Soc. London 26: 95. 1868; Gamble in Hook. f., Fl. Brit. India 7: 388. 1896.

In dense forests. Bilaspur.

Fl. & Fr.: Rare.

Bothriochloa glabra (Roxb.) A. Camus in Ann. Soc. Linn. Lyon. 1930, n. s. 76: 164. 1931; Bor, Grass. Burm. Ceyl. Ind. Pak. 107. 1960. *Andropogon glaber* Roxb., Fl. Ind. (Carey & Wallich ed.) 1: 271. 1820; Hook. f., Fl. Brit. India 7: 175. 1896.

In grasslands. Korba.

Fl. & Fr.: Aug.-Dec.

B. kuntzeana (Hack.) Henr. in Blumea 3: 456. 1940; Bor, Grass. Burm. Ceyl. Ind. Pak. 108. 1960. *Andropogon kuntzeanus* Hack. in A. DC., Monogr. Phan. 6: 478. 1889; Hook. f., Fl. Brit. India 7: 175. 1896.

In grasslands. Dantewada.

Fl. & Fr.: Sept.-Oct.

Cenchrus setigerus Vahl, Enum. Pl. 2: 395. 1805; Bor, Grass. Burm. Ceyl. Ind. Pak. 290. 1960. *C. biflorus* auct. non Roxb., 1820; Hook. f., Fl. Brit. India 7: 89. 1896.

Along forest roads. Raigarh.

Fl. & Fr.: Aug.-Nov.

Chrysopogon aciculatus (Retz.) Trin., Fund. Agrost. 188. 1820; Bor, Grass. Burm. Ceyl. Ind. Pak. 115. 1960. *Andropogon aciculatus* Retz., Observ. Bot. 5: 22. 1788; Hook. f., Fl. Brit. India 7: 188. 1896.

Among rock boulders. Korba.

Fl. & Fr.: July-Nov.

Coix gigantea Koenig ex Roxb., Fl. Ind. 3: 570. 1832; Bor, Grass. Burm. Ceyl. Ind. Pak. 264. 1960. *C. lacryma-jobi* L. var. *gigantea* (Roxb.) Stapf ex Hook. f., Fl. Brit. India 7: 100. 1896.

In marshy habitats. Dantewada.

Fl. & Fr.: Oct.

Cymbopogon pendulus (Nees ex Steud.) Wats. in Atkins. Gaz. N. W. Prov. Ind. 392. 1882; Bor, Grass. Burm. Ceyl. Ind. Pak. 131. 1960. *Andropogon pendulus* Nees ex Steud., Syn. Pl. Glumac. 1: 388. 1854.

On hill slopes. Bastar.

Fl. & Fr.: Feb.-Apr.

Cyrtococcum oxyphyllum (Steud.) Stapf in Hook., Icon. Pl. sub t. 3096. 1922; Bor, Grass. Burm. Ceyl. Ind. Pak. 291. 1960. *Panicum oxyphyllum* Steud., Syn. Pl. Glumac. 1: 65. 1854. *P. pilipes* Nees & Arnott ex Buese in Miq., Pl. Jungh. 3: 376. 1854; Hook. f., Fl. Brit. India 7: 57. 1896.

In damp shady places. Bastar.

Fl. & Fr.: Nov.-Feb.

Digitaria violascens Link, Hort. Berol. 1: 229. 1827; Henr., Monogr. Gen. Digitaria 790. 1950; Bor, Grass. Burm. Ceyl. Ind. Pak. 307. 1960.

In fields. Bilaspur.

Fl. & Fr.: Aug.-Sept.

Eragrostiella bifaria (Vahl) Bor in Ind. For. 66: 270. 1940 & Grass. Burm. Ceyl. Ind. Pak. 494. 1960. *Poa bifaria* Vahl, Symb. Bot. 2: 19. 1791. *Eragrostis bifaria* (Vahl)

Wight ex Steud., *Syn. Pl. Glumac.* 1: 264. 1854; *Stapf in Hook. f., Fl. Brit. India* 7: 325. 1896. *E. coromandeliana* (*Koen. ex Rottl.*) *Trin. in Mem. Acad. Sci. Petersb.* 6, 1: 415. 1830; *Stapf in Hook. f., Fl. Brit. India* 7: 326. 1896. *Poa coromandeliana* *Koen. ex Rottl. in Ges. Natur. Fr. N. Schr.* 4: 191. 1803.

On rocky slopes. Dhamtari.

Fl. & Fr.: Aug.-Oct.

Eragrostiella leioptera (*Stapf*) *Bor in Ind. For.* 66: 270. 1940 & *Grass. Burm. Ceyl. Ind. Pak.* 495. 1960. *Eragrostis leioptera* *Stapf in Hook. f., Fl. Brit. India* 7: 325. 1896.

On hill slopes. Surguja.

Fl. & Fr.: Sept.-Nov.

Eragrostis riparia (*Willd.*) *Nees, Agrost. Bras.* 512. 1829; *Bor, Grass. Burm. Ceyl. Ind. Pak.* 513. 1960. *Poa riparia* *Willd. in Ges. Natur. Fr. Schr.* 4: 185. 1803. *Eragrostis tenella* (*L.*) *P. Beauv. var. riparia* *Stapf in Hook. f., Fl. Brit. India* 7: 315. 1896. Along the river banks. Raipur.

Fl. & Fr.: Aug.-Nov.

E. viscosa (*Retz.*) *Trin. in Mem. Acad. Sci. Pétersb. ser. 6, 1:* 397. 1830; *Bor, Grass. Burm. Ceyl. Ind. Pak.* 515. 1960. *Poa viscosa* *Retz., Observ. Bot.* 4: 20. 1786. *Eragrostis tenella* var. *viscosa* (*Retz.*) *Stapf in Hook. f., Fl. Brit. India* 7: 315. 1896.

In wastelands. Raipur.

Fl. & Fr.: Sept.-Nov.

E. zeylanica *Nees & Meyen in Nov. Act. Nat. Cur.* 19. *Suppl.* 1: 204. 1843; *Bor, Grass. Burm. Ceyl. Ind. Pak.* 515. 1960. *E. elongata* *auct. non Jacq., 1813: Stapf in Hook. f., Fl. Brit. India* 7: 319. 1896.

In grasslands. Bilaspur.

Fl. & Fr.: Feb.-Apr.

Eulalia hirtifolia (*Hack.*) *A. Camus in Ann. Soc. Linn. Lyon. n. s.* 68: 202. 1922; *Bor, Grass. Burm. Ceyl. Ind. Pak.* 155. 1960. *Pollinia hirtifolia* *Hack. in A. DC., Monogr. Phan.* 6: 165. 1889; *Hook. f., Fl. Brit. India* 7: 111. 1896.

On hill slopes. Raigarh.

Fl. & Fr.: Oct.-Dec.

Gigantochloa hasskarliana (*Kurz*) *Backer ex K. Heyne, Nutt. Pl. Ned.-Ind. ed. 2. 1:* 299. 1927. *Shizostachyum hasskarlianum* *Kurz in Ind. For.* 1: 352. 1876. *Oxytenanthera nigrociliata* *Munro in Trans. Linn. Soc. London* 26: 228. 1868; *Gamble in Hook. f., Fl. Brit. India* 7: 401. 1896.

On hill slopes. Bastar.

Fl. & Fr.: Rare.

Heteropogon triticeus (*R. Br.*) *Stapf ex Craib in Kew Bull.* 1912: 432. 1912; *Bor, Grass. Burm. Ceyl. Ind. Pak.* 165. 1960. *Andropogon triticeus* *R. Br., Prodr.* 201. 1810; *Hook. f., Fl. Brit. India* 7: 200. 1896.

On hill slopes. Bastar.

Fl. & Fr.: Aug.-Dec.

Iseilema anthephoroides Hack. in A. DC., Monogr. Phan. 6: 683. 1889; Hook. f., Fl. Brit. India 7: 219. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 187. 1960.
Along drains. Dantewada.

Fl. & Fr.: Feb.

Jansenella griffithiana (C. Muell.) Bor in Kew Bull. 1955: 98. 1955 & Grass. Burm. Ceyl. Ind. Pak. 426. 1960. *Danthonia griffithiana* C. Muell. in Bot. Zeit. 14: 347. 1856. *Arundinella avenacea* Munro ex Thwaites, Enum. Pl. Zeyl. 362. 1864; Hook. f., Fl. Brit. India 7: 69. 1896.

In moist and swampy places. Bastar.

Fl. & Fr.: Aug.-Nov.

Manisuris clarkei (Hack.) Bor in Santapau, Fl. Khandala 357. 1953; Bor, Grass. Burm. Ceyl. Ind. Pak. 191. 1960. *Rottboellia clarkei* Hack. in Oest. Bot. Zeit. 41. 8. 1891; Hook. f., Fl. Brit. India 7: 156. 1896.

Along forest roads. Raigarh.

Fl. & Fr.: Sept.-Nov.

Microstegium ciliatum (Trin.) A. Camus in Ann. Soc. Linn. Lyon. n. s. 68: 201. 1921; Bor, Grass. Burm. Ceyl. Ind. Pak. 193. 1960. *Pollinia ciliata* Trin. in Mem. Acad. Sci. Pétersb. ser. 6, 2: 306. 1832; Hook. f., Fl. Brit. India 7: 116. 1896.

Along drains. Bilaspur.

Fl. & Fr.: Sept.-Dec.

M. petiolare (Trin.) Bor in Indian For. Rec. (Bot.) 1: 3, 87. 1938; Bor, Grass. Burm. Ceyl. Ind. Pak. 194. 1960. *Spodiopogon petiolaris* Trin. in Mem. Acad. Sci. Petersb. ser. 6, 2: 306. 1832. *Ischaemum petiolare* Hack. in A. DC., Monogr. Phan. 6: 238. 1889; Hook. f., Fl. Brit. India 7: 138. 1896.

Fl. & Fr.: Sept-Dec..

Mnesithea laevis (Retz.) Kunth, Revis. Gramin. 1: 154. 1829; Bor, Grass. Burm. Ceyl. Ind. Pak. 197. 1960. *Rottboellia laevis* Retz., Observ. Bot. 3: 11. 1783. *R. perfoliata* Roxb., Pl. Coromandel 2: 43. t. 182. 1805; Hook. f., Fl. Brit. India 7: 158. 1896.
In moist places. Dantewada.

Fl. & Fr.: Oct.

Oropetium thomaeum (L. f.) Trin., Fund. Agrost. 98. t. 3. 1820; Hook. f., Fl. Brit. India 7: 366. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 474. 1960. *Nardus thomaea* L. f., Suppl. Pl. 105. 1782.

In moist places. Dhamtari.

Fl. & Fr.: July-Sept.

Oryza minuta J. Presl ex K. Presl, Reliq. Haenk. 1: 208. 1830; Bor, Grass. Burm. Ceyl. Ind. Pak. 605. 1960. *O. latifolia* auct. non Desv., 1813; Hook. f., Fl. Brit. India 7: 92. 1896.

In marshy habitats. Surguja.

Fl. & Fr.: Aug.-Oct.

Panicum curviflorum Hornem., Bot. Hafn. Suppl. 116. 1819. *P. trypheron* Schult., Mant. 2: 244. 1824; Hook. f., Fl. Brit. India 7: 47. 1896.

In moist and shady places. Dantewada.

Fl. & Fr.: Oct.

Panicum maximum Jacq., Collectanea 1: 76. 1786; Hook. f., Fl. Brit. India 7: 49. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 327. 1960.

In grasslands. Bilaspur.

Fl. & Fr.: Sept.- Jan.

P. repens L., Sp. Pl. ed. 2. 1: 87. 1762; Hook. f., Fl. Brit. India 7: 49. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 330. 1960

Along the edges of ponds. Bilaspur.

Fl. & Fr.: Aug.-Sept.

Paspalidium geminatum (Forssk.) Stapf in Prain, Fl. Trop. Afr. 9: 583. 1920; Bor, Grass. Burm. Ceyl. Ind. Pak. 333. 1960. *Panicum geminatum* Forssk., Fl. Aegypt.-Arab. 18. 1775. *P. paspaloides* Pers., Syn. Pl. 1: 81. 1805; Hook. f., Fl. Brit. India 7: 30. 1896.

In grasslands. Raipur.

Fl. & Fr.: July-Dec.

Paspalum cartilagineum J. Presl ex K. Presl, Reliq. Haenk. 1: 216. 1830; Bor, Grass. Burm. Ceyl. Ind. Pak. 335. 1960.

In marshy habitats. Bilaspur.

Fl. & Fr.: Mar.-May.

P. compactum Roth, Nov. Pl. Sp. 36. 1821, "Paspalus compactus"; Hook. f., Fl. Brit. India 7: 12. 1896; Bor, Grass. Burm. Ceyl. Ind. Pak. 336. 1960.

In marshy habitats. Surguja.

Fl. & Fr.: Aug.-Dec.

P. vaginatum Sw., Prodr. 21. 1788; Bor, Grass. Burm. Ceyl. Ind. Pak. 341. 1960.

P. distichum L., Syst. Nat. ed. 10. 2: 855. 1759; Hook. f., Fl. Brit. India 7: 12. 1896.

In wet habitats. Bilaspur.

Fl. & Fr.: Aug.-Sept.

Schizachyrium exile (Hochst.) Stapf in Prain, Fl. Trop. Afr. 9: 191. 1917; Bor, Grass.

Burm. Ceyl. Ind. Pak. 216. 1960. *Andropogon exilis* Hochst. in Flora 27: 241. 1844.

In open places. Bilaspur.

Fl. & Fr.: Oct.-Jan.

Setaria plicata (Lam.) T. Cooke, Fl. Bombay 2: 919. 1908; Bor, Grass. Burm. Ceyl.

Ind. Pak. 364. 1960. *Panicum plicatum* Lam., Encyl. 4: 736. 1798; Hook. f., Fl. Brit. India 7: 55. 1896.

In grasslands. Bastar.

Fl. & Fr.: Aug.-Jan.

Sorghum nitidum (Vahl) Pers., Syn. Pl. 1: 101. 1805; Bor, Grass. Burm. Ceyl. Ind. Pak.

245. 1960. *Holcus nitidus* Vahl, Symb. Bot. 2: 102. 1791. *Andropogon serratum* Thunb., Fl. Jap. 41. 1784; Hook. f., Fl. Brit. India 7: 185. 1896.

In shady places of rocky slopes. Bilaspur.

Fl. & Fr.: Oct.-Dec.

Sporobolus capillaris Miq. in Verh. Konink. Nederl. Inst. 3, 4: 37. 1851; Bor, Grass. Burm. Ceyl. Ind. Pak. 627. 1960.
Along forest roads. Raigarh.
Fl. & Fr.: Aug.-Dec.

DISCUSSION

The foregoing account reveals that Chhattisgarh has only four endemic taxa but comparatively a large number of rare taxa (481). This rarity is mainly because of urbanization, non-judicious exploitation and various other developmental activities operating in the newly created state. As a matter of fact the state has 46% of forest cover and is second densely forested state of the country, it requires conservation at various levels. Although Government of India has declared a number of areas as protected ones under the category of national parks, wildlife sanctuaries and a tiger reserve, awareness, especially among the tribal people, is urgently required to check deforestation (usually for fuel purpose) and over-exploitation as well as to encourage them for sustainable utilization. Further, comprehensive environmental impact assessment of each developmental project has to be undertaken before initiation of any new project which may ultimately affect the flora of the state.

ACKNOWLEDGEMENTS

The authors are grateful to the Director, Botanical Survey of India, Kolkata and Additional Director, Botanical Survey of India, Central Circle, Allahabad for providing facilities.

REFERENCES

- ARORA, C.M. The botany of Bailadila, Bastar state, M.P. *Bull. Bot. Surv. India* 10: 61-66. 1968.
- BENTHAM, G. AND J.D. HOOKER. Genera Plantarum Vols. 1-3. London. 1862-1883.
- DIXIT, S.K. AND G.P. ROY. Addition to the flora of Madhya Pradesh. Higher Plants of Indian Subcontinent 2: 23-28. 1991.
- KUMAR A. New distributional records of some Angiosperms from Madhya Pradesh. *J. Econ. Tax. Bot.* 17: 143-145. 1993.
- KUMAR A. Flora of the Indravati Tiger Reserve. Botanical Survey of India, Kolkata (in press).
- MOONEY, H.F. A sketch of the flora of the Bailadila range in the Bastar State. *Indian For. Rec.* 3(7): 197-253. 1942.
- MURTI, S.K. AND G. PANIGRAHI. Flora of Bilaspur district, M.P. Vol. 2. Botanical Survey of India, Calcutta 1999.
- PANIGRAHI, G. AND S.K. MURTI. Flora of Bilaspur district, M.P. Vol. 1. Botanical Survey of India, Calcutta 1989.
- PANIGRAHI, G. AND S.D.N. TIWARI. Rediscovery of Nogra filicaulis after one hundred years. *Kew Bull.* 30: 459-461. 1975.

- ROY, G.P. AND S.K. DIXIT. Addition to the flora of Madhya Pradesh-I. Some rare plants. *J. Econ. Tax. Bot.* 9: 97-100. 1987.
- SAHNI, K.C., VAID, K.M. AND H.B. NAITHANI. Additions to the Cyperaceae of Madhya Pradesh. *Indian For.* 98: 192-194. 1972.
- SAXENA, H.O. Further contribution to the flora of Bailadilla (M.P.). *J. Bombay Nat. Hist. Soc.* 70: 586-590. 1973.
- SAXENA, H.O. AND S.N. KHOTELE. A contribution to the flora of Bastar (M.P.). *J. Bombay Nat. Hist. Soc.* 73: 21-34. 1976.
- SRIVASTAVA, S.K., R.D. DIXIT AND B.K. SHUKLA. A note on endemic, rare and endangered vascular taxa of Madhya Pradesh. *J. Econ. Tax. Bot.* 21(1): 225-232. 1997.
- SUBRAMANYAM, K. AND A.N. HENRY. Vascular plants of Bastar, M.P. *Bull. Bot. Surv. India* 8: 207-215. 1967.
- TIWARI, S.D.N. The Phyto-geography of Legumes of Madhya Pradesh (Central India). Dehra Dun. 1979.
- TIWARI, S.D.N. AND J.K. MAHESHWARI. Orchids of Madhya Pradesh. *Indian For.* 89: 426-444. 1963.
- TIWARI, S.D.N. AND J.K. MAHESHWARI. The Cyperaceae of Madhya Pradesh. *Indian For.* 90: 147-159, 616-629. 1964.
- TIWARI, S.D.N. AND J.K. MAHESHWARI. Commelinaceae of Madhya Pradesh. *Indian For.* 91: 580-590. 1965.
- UNNI, K.S. Studies on the vegetation of ponds, swamps and river-banks in Raipur, M.P. *J. Bombay Nat. Hist. Soc.* 64: 95-102. 1967.
- VERMA, D.M., P.C. PANT AND M.I. HANFI. Flora of Raipur, Durg and Rajnandgaon. Botanical Survey of India, Howrah. 1985.
- WOOD, J.J. Plants of Chhota Nagpur, including Jaspur and Surguja. *Rec. Bot. Surv. India* 2(1): 1-170. 1902.