



Ficus Species of Madhya Pradesh

• A Pictorial Guide



Ficus cupulata Haines

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**Research & Extension
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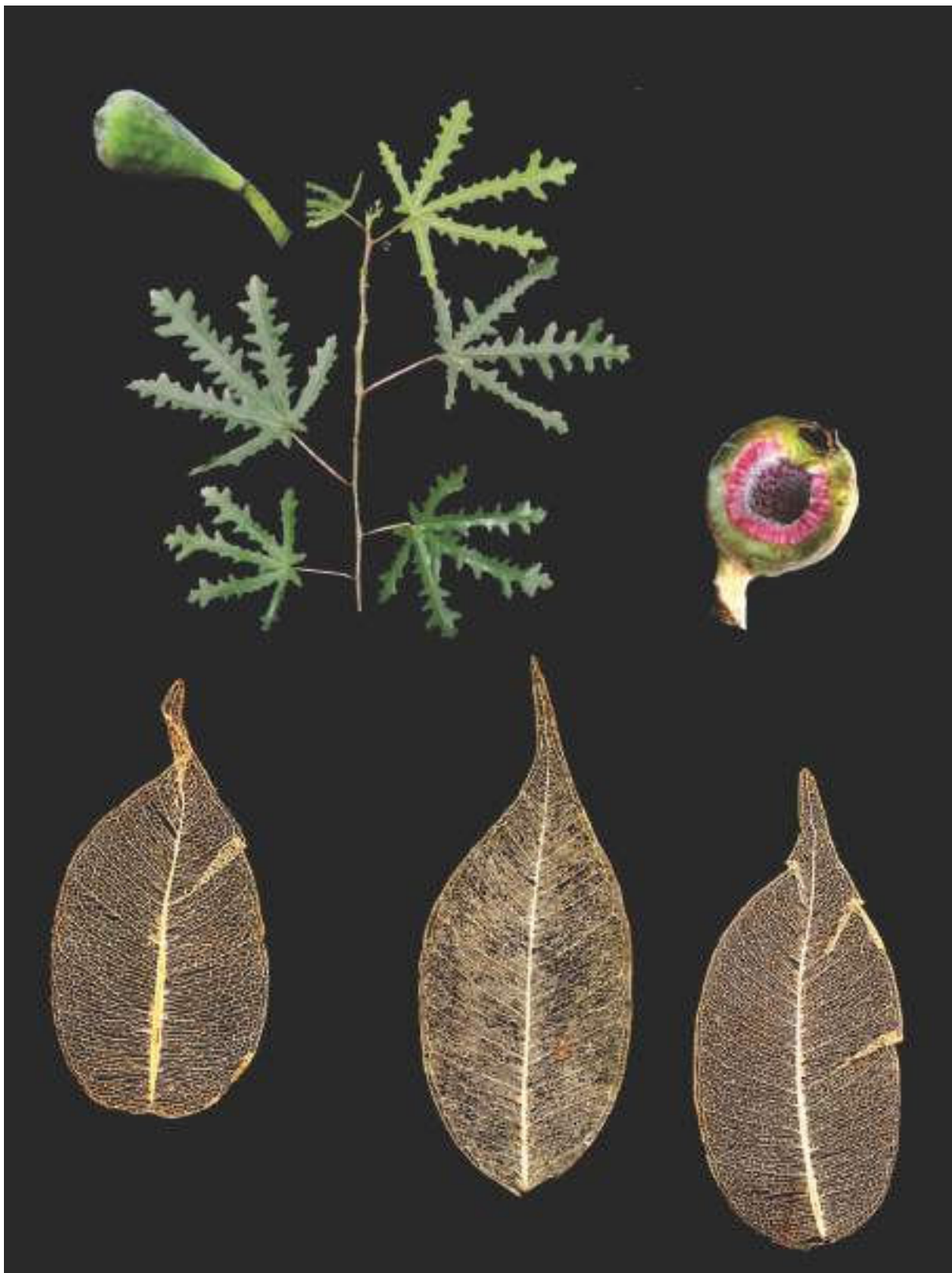
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Ficus (Fig) Species of Madhya Pradesh

- A Pictorial Guide



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Ficus amplissima Sm.

Introduction

Ficus L. (commonly known as Fig) is the largest genus in Moraceae, with about 850 species of trees, shrubs, climbers and creepers occurring in the tropics and subtropics regions of the world, especially in India-Malesia to Australia, Africa and America (Berg. & Corner, 2005). In India, it is represented by 115 taxa, 91 species and 24 infraspecific taxa, of which 10 are endemic (Choudhary et al., 2012 & Sudhakar et al., 2017). The genus *Ficus* is characterized by its arboreal to semi-epiphytic (hemi-epiphytic) habit, milky latex in all parts of the plant, well-developed terminal stipules that protect the growing buds, inflorescence hypanthodium (syconium) and minute unisexual flowers (staminate and pistillate).

Ficus is considered as a keystone species in different ecosystems of the tropical and subtropical forests. Its fruits are eaten by insects, birds, animals throughout the years. Figs are most important for birds such as Asian barbets, pigeons, hornbills, fig-parrots and bulbuls, which may almost entirely subsist on figs when these are in plenty. Some other species of Figs are also edible and having great economic value. Pollination mechanism in the genus is of cross pollination by wasps. They are one to three millimeter long with blackish or yellowish color. *Ficus* trees are known to have medicinal properties. The bark, leaves, fruits and latex is used in skin disease, diabetes, piles, diarrhoea, blood pressure, asthma, and dental problems. *Ficus religiosa*, *Ficus amplissima*, *Ficus benghalensis* are used shade trees in rural areas, roadsides, bangalos, market and communication areas.

The leaves and shoots of *Ficus benghalensis*, *Ficus religiosa*, *Ficus lacor*, *Ficus rumphii*, *Ficus virens* and *Ficus amplissima* form for fodder for cattle specially goats. Many *Ficus* species are ornamental value and *Ficus benjamina*, *Ficus pumila*, *Ficus elastica*, *Ficus krishnae*, *Ficus deltoides*, *Ficus natalensis*, *Ficus lyrata* and *Ficus binnendijkii* used for shade, gardens, parks and roadsides. Figs are also considered cultural importance throughout the tropics, both as objects of worship and for their many practical uses. The wood of *Ficus racemosa* is supposed to be very sacred fires (Hawan). *Ficus religiosa* and *Ficus racemosa* are host for Indian lac insects, the source of shellac in Madhya Pradesh and West Bengal.

Stewart & Brandish (1972) reported 16 species from the forest of North-West and Central India. Mudgal et al (1997) in their book “ Flora of Madhya Pradesh” recorded 23 species from Madhya Pradesh. In the present work 26 species of *Ficus* have been recorded from Madhya Pradesh, of which 15 species wild remaining one (11) are cultivated. In wild species *Ficus arnottiana*, *Ficus benghalensis*, *Ficus heterophylla*, *Ficus hispida*, *Ficus microcarpa*, *Ficus mollis*, *Ficus racemosa*, *Ficus religiosa*, *Ficus semicordata* and *Ficus virens* are common species in the state. *Ficus beddomei*, *Ficus drupacea*, *Ficus exasperata*, *Ficus johannis subsp. afghanistanica*, *Ficus hederacea*, *Ficus lanceolata*, *Ficus talboti*, and *Ficus tsjakala* are rare in occurrence. *Ficus cupulata* is endemic to India (l.c.).

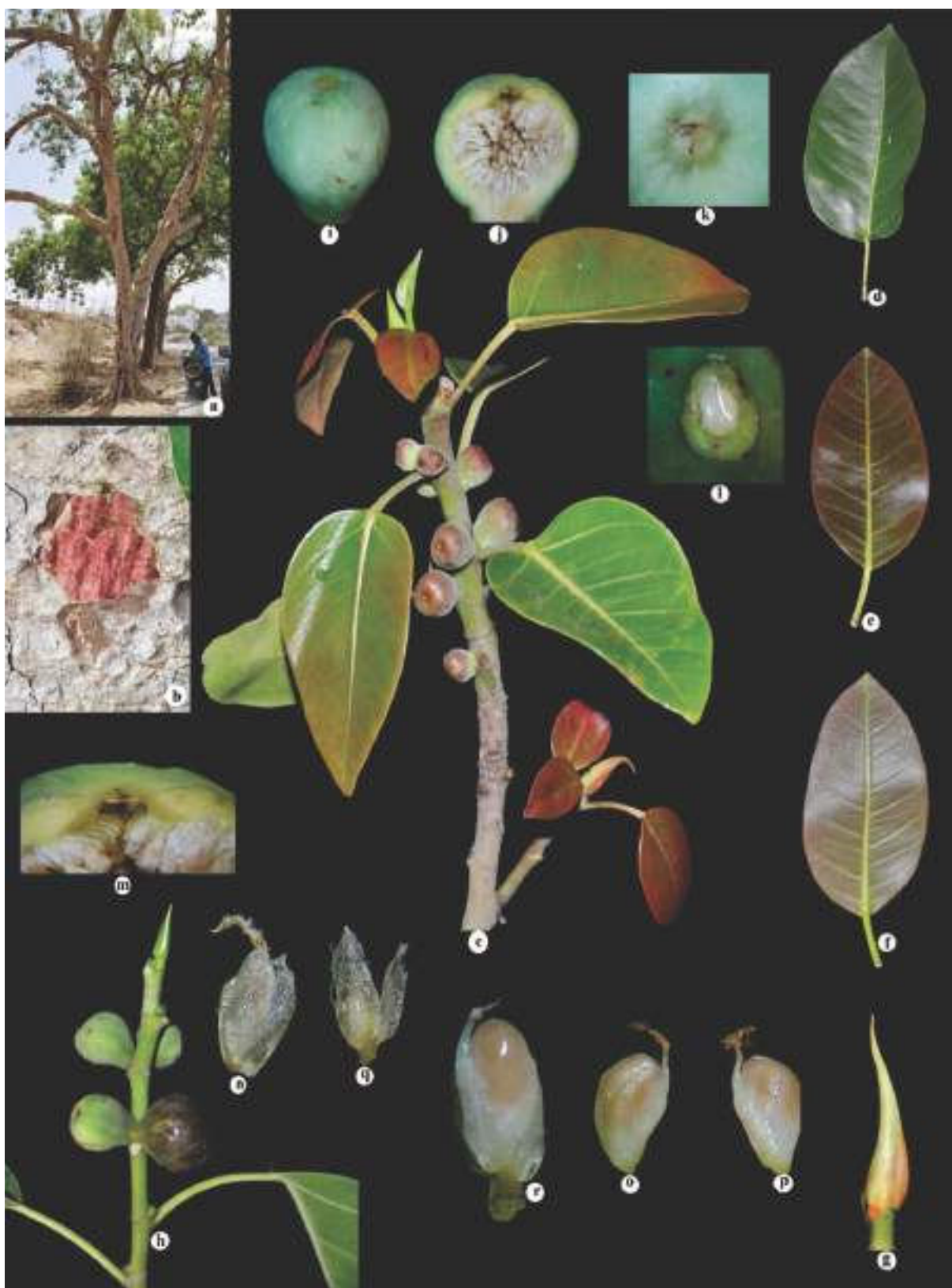
This booklet based on systematic studies of *Ficus* in Madhya Pradesh, which aims to provide the taxonomic details, distribution and live photos of all species of the *Ficus* for easy identification in fields. We hope this booklet will be useful to students, researchers, academicians and forester with amateur interests in *Ficus*.

For preparing this technical report great inputs were given by - J.K. Mohanty PCCF(HOFF), Rajesh Shrivastava PCCF, S.P. Jain ACF, Shri R.S. Rawat CCF, Shri Manoj Argal CCF Indore, Shri Ashok Awasthi ACF, Shri Ramkishan Solanki ACF and Computer work by Gaurav Rajput.

Taxonomic key for Ficus species

1.	a.	Figs cauliflorous.....	2
	b.	Figs not cauliflorous.....	4
2.	a.	Leaves opposite or sub-opposite; clusters of 3-6 on cauliflorous long hanging racemes or stolon trailing on the ground, sometimes geocarpic.....	12. F. hispida
	b.	Leaves alternate; stolon not trailing on ground or geocarpic.....	3
3.	a.	Leaf base semicordate; cauliflorous on leafless branches, hanging from main trunk, stolon up to 2 m long.....	22. F. semicordata
	b.	Leaf base cuneate; cauliflorous on trunk from base to top and on branches in cluster on up to 20 cm long racemes, stolon absent.....	19. F. racemosa
4	a.	Bushy climbing shrubs.....	5
	b.	Trees and standing shrubs.....	7
5.	a.	Leaves heterophyllus on same plant, or one to many pinnately or palmately lobed.....	11. F. heterophylla
	b.	Leaves not as above.....	6
6.	a.	Leaves gibbose, hemi-epiphytes, embracing or basketing the trunk of host Plants.....	24. F. tinctoria subsp. gibbosa
	b.	Leaves not as above, not embracing the trunk of host.....	10. F. hederacea
7.	a.	Leaves apex caudate with 4-10 cm long linear to lanceolate tail.....	20. F. religiosa
	b.	Leaves apex obtuse, rounded or acute to acuminate or acuminate to caudate with 2-3 cm linear tail.....	8
8.	a.	Aerial prop roots numerous.....	9
	b.	Aerial prop roots less or absent.....	10
9.	a.	Prop roots pillar like; lamina 7-30 x 5-16 cm across; figs bright red-orange when ripe	4. F. benghalensis
	b.	Prop roots slender; lamina 3-12 x 2-6 cm across; figs pale green to dark green to purple or black when ripe.....	16. F. microcarpa
10.	a.	Leaves pale to yellow beneath; branchlets and figs tomentose at maturity.....	17. F. mollis
	b.	Leaves not yellow beneath; branchlets and figs not as above.....	11
11.	a.	Figs sub-globose to pyriform	12
	b.	Figs not as above.....	13
12.	a.	Epiphytes on wall; lobes narrow to oblong, 10-15 cm long.....	13. F. johannis Subsp. afghanistanica
	b.	Terrestrial; lobes oblong, 3-5 cm long.....	14
13.	a.	Figs 1.5-3.5 cm across; basal bracts hidden.....	16

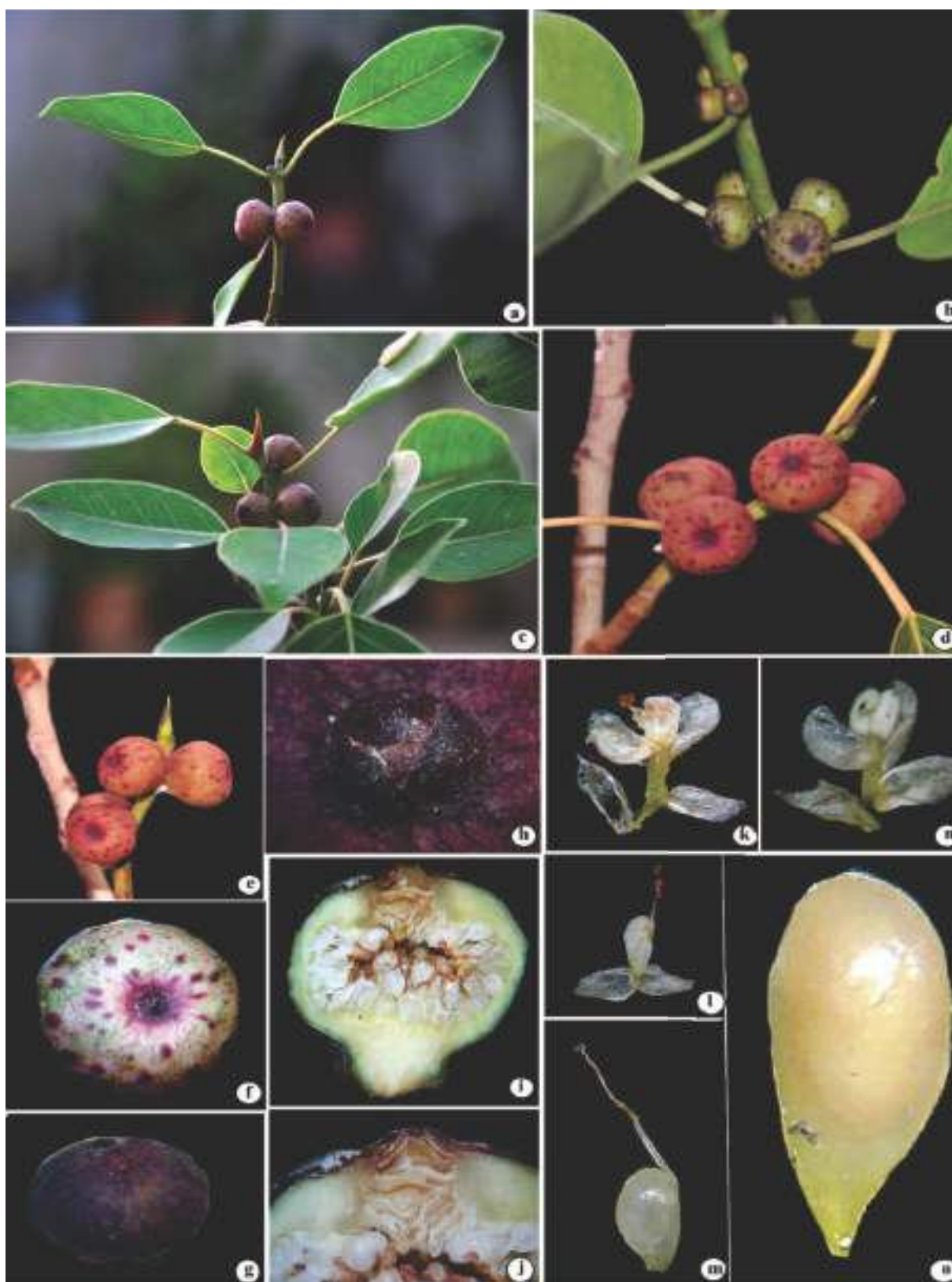
	b.	Figs 0.3-1.5 cm across.....	18
14.	a.	Twigs stouter, glabrous, stipule ovate or oblong; figs 2-6 cm across.....	5. F. carica
	b.	Twigs slender, tomentose or scabrid, stipule ovate-lanceolate; figs 1-2 cm across.....	15
15.	a.	Twigs scabrid, leaves ovate or oblong-elliptic, subcoriaceous, scabrid above.....	9. F. exasperata
	b.	Twigs tomentose, leaves broadly ovate or orbicular, membranous, not scabrid.....	18. F. palmata subsp. virgata
16.	a.	Lamina leathery, tomentose beneath	8. F. drupacea
	b.	Lamina not leathery, glabrous.....	17
17.	a.	Young foliage green, leaves elliptic to ovate, not punctulate beneath, figs 1.5-3.5 cm across.....	3. F. beddomei
	b.	Young foliage red, leaves broadly ovate-elliptic or ovate, punctulate beneath; figs 1.5-2 cm across.....	21. F. rumphii
18.	a.	Figs densely woolly or puberulous.....	14. F. lacor
	b.	Figs not as above.....	19
19.	a.	Leaves apex acuminate or acuminate to caudate.....	20
	b.	Leaves apex acute	22
20.	a.	Leaves lanceolate, apex acuminate.....	15. F. lanceolata
	b.	Leaves oblong, elliptic to ovate or broadly ovate apex acuminate to caudate.....	21
21.	a.	Leaves oblong, elliptic to ovate; figs sessile, yellow when ripe, not dots	23. F. talbotii
	b.	Leaves ovate to broadly ovate; figs pedicellate, light green with white or purple dots.....	2. F. arnottiana
22.	a.	Figs obovoid or obconical.....	1. F. amplissima
	b.	Figs globose or subglobose.....	23
23.	a.	Receptacles in clusters; basal bracts cupular.....	7. F. cupulata
	b.	Receptacles paired; basal bracts not cupular.....	24
24.	a.	Figs sessile, greenish with white dots.....	25. F. tsjakela
	b.	Figs pedicellate, white to pink to purple to blackish or white, green, pale white with pink or red dots.....	25
25.	a.	Figs 0.3-0.6 cm across, white to pink to purple to blackish without dots.....	6. F. caulocarpa
	b.	Figs 0.8-1.2 cm across, white, green, pale white with pink or red dots.....	26. F. virens



Ficus amplissima Sm. a. Habit; b. Bark; c. Twig; d.-e. Leaf upper surface; f. Lower surface; g. Stipule; h. Fruiting twig; i. Single fig; j. L.s. of fig; k. Ostiole; l. Basal bracts; m. L.s. through the ostiole; n. Female flower; o.-p. Gall flower; q. Male flower; r. Achene.



***Ficus amplissima* Sm.** a. Habit; b.-c. Bark; d. Young leaf; e. Fruiting twig; f.-g. Figs.



***Ficus amplissima* Sm.** a. b.-c. Fruiting twig; d.e.f.-g. Figs; h. Ostiole; i. L.S. of fig; j. L.S. through the ostiole; k.-l. Female flower; m. Gall flower; n. Male flower; o. Achene.

1. *Ficus amplissima* Sm.

Diagnostic features : Tree, up to 20 m tall, monoecious, often epiphytes when young, aerial roots few. Bark yellowish-grey, smooth. Stipules ovate-lanceolate, 1-2.5 cm long, glabrous, rarely puberulous. Leaves alternate; petiolate 3-10 cm, long, glabrous, glandular at apex; lamina ovate or ovate to lanceolate, 2.5-18 x 2.5-10 cm, coriaceous, glabrous, sometimes a bunch of leaves or small twigs form as clusters on branches. Figs solitary or paired, axillary or at leaf scars, sessile; receptacle (fig body) obovoid or obconical, 0.4-1.5 cm in diameter, young green, purple when ripe. Achenes ellipsoid or ovoid, 1-1.2 mm in diameter, surface verrucate.

Flowering and fruiting : Almost throughout the year.

Local name: Pipri, Piper, Pakad, Pimpri, Jadi.

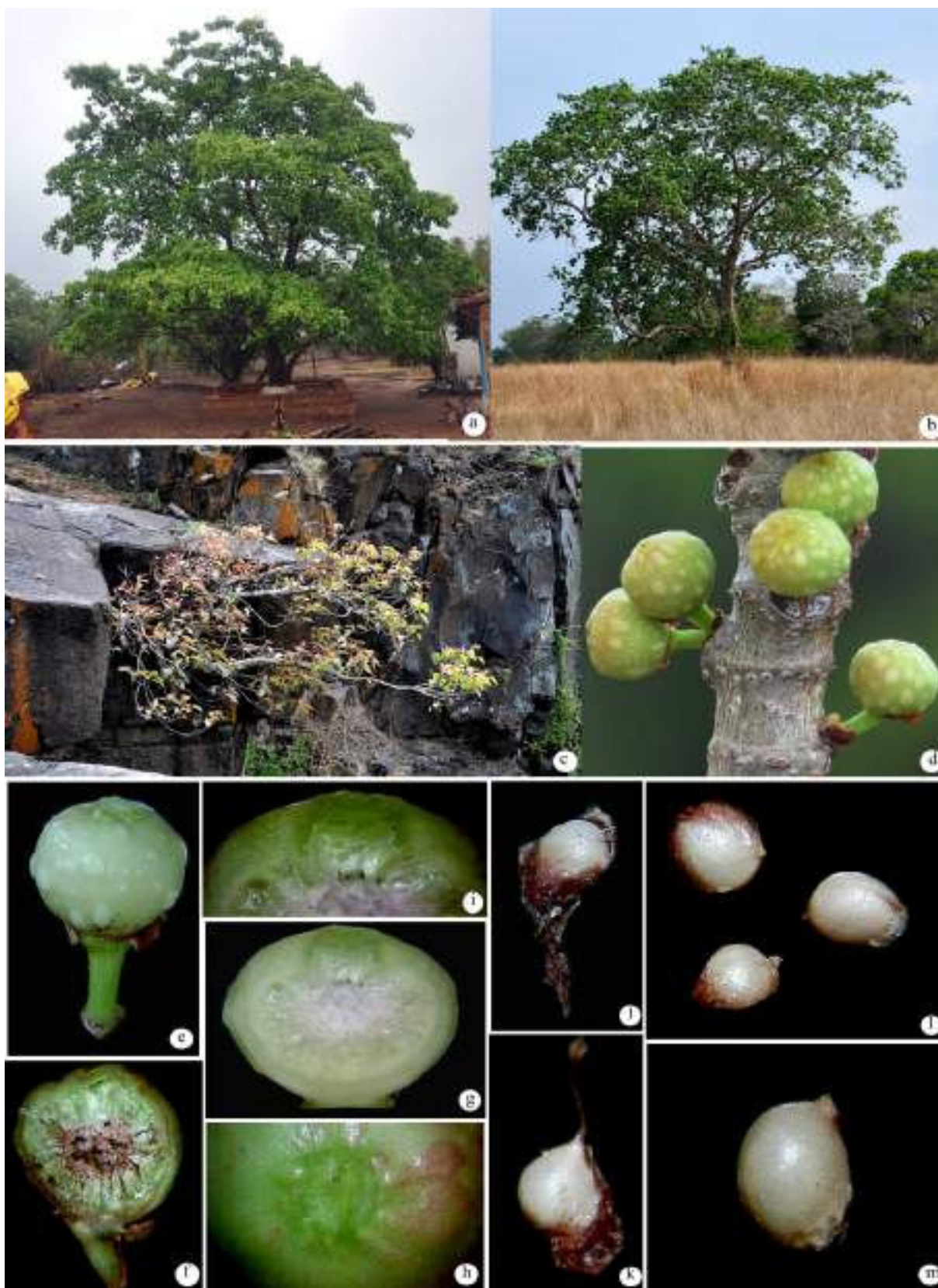
Field notes : It is found along roadsides, old wall, building, rocks and in deciduous forest.

Status : Common.

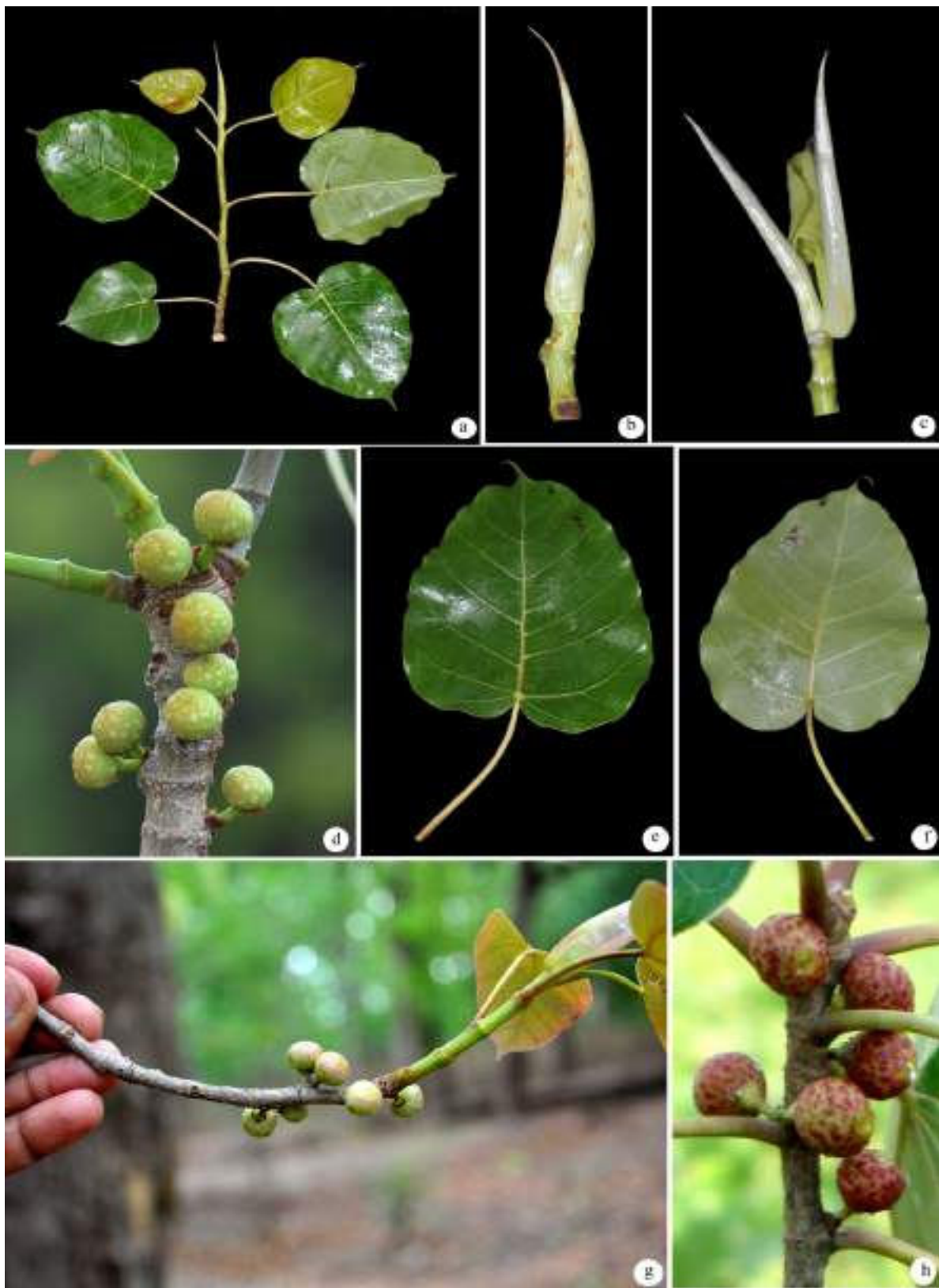
Distribution : **India :** Goa, Gujarat, Jharhand, Maharashtra, Odisa, Rajasthan, Eastern Ghats, **Madhya Pradesh :** Khandwa, Burhanpur, Betul, Hoshangabad, Khargone, Indore, Alirajpur, Jhabua, Dhar, Ratlam and Ujjain.

Uses : It is a good avenue tree, which is planted on the roadsides and in the gardens, besides its fruits are eaten by birds and leaves which are eaten by goats.

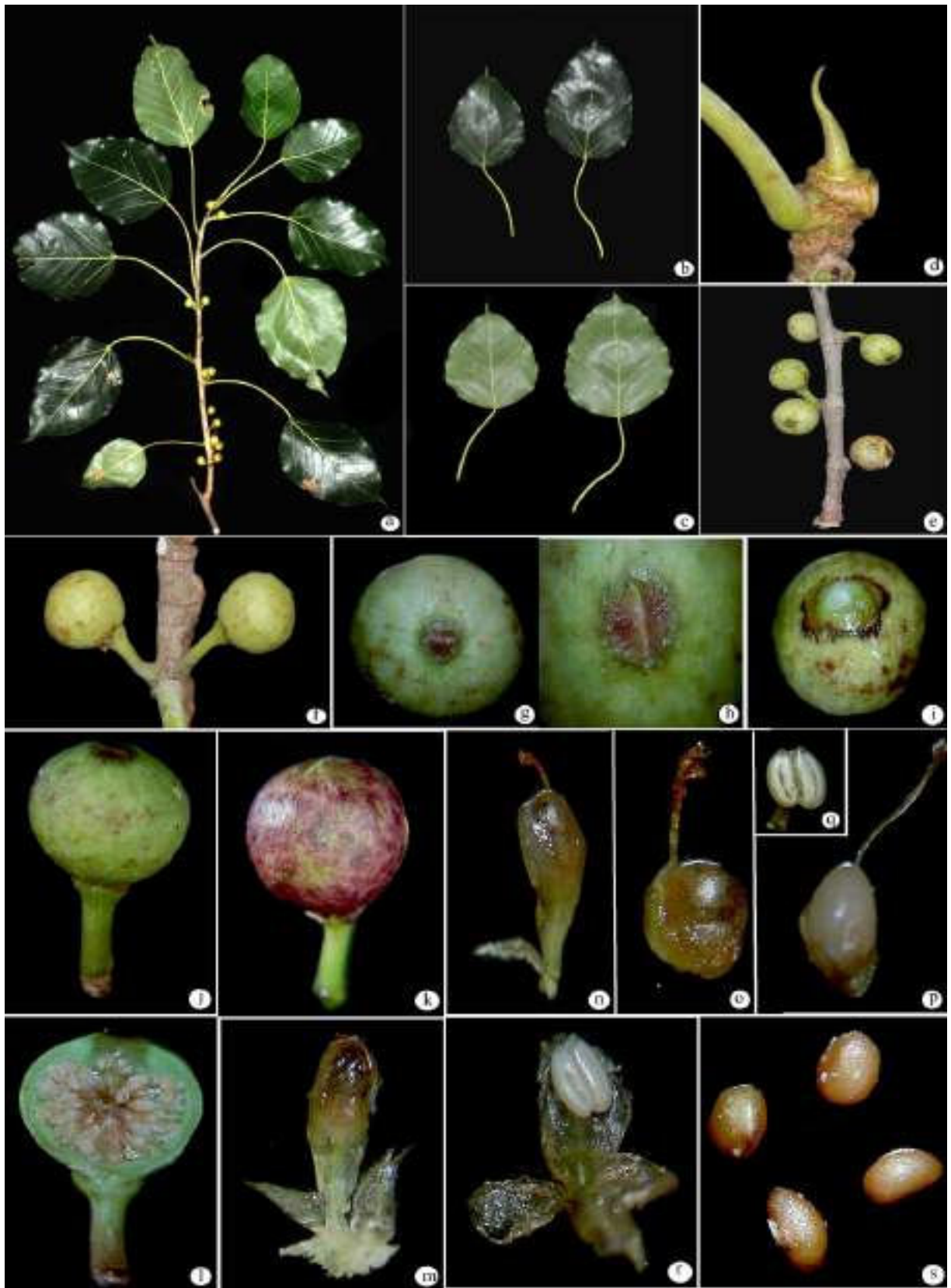




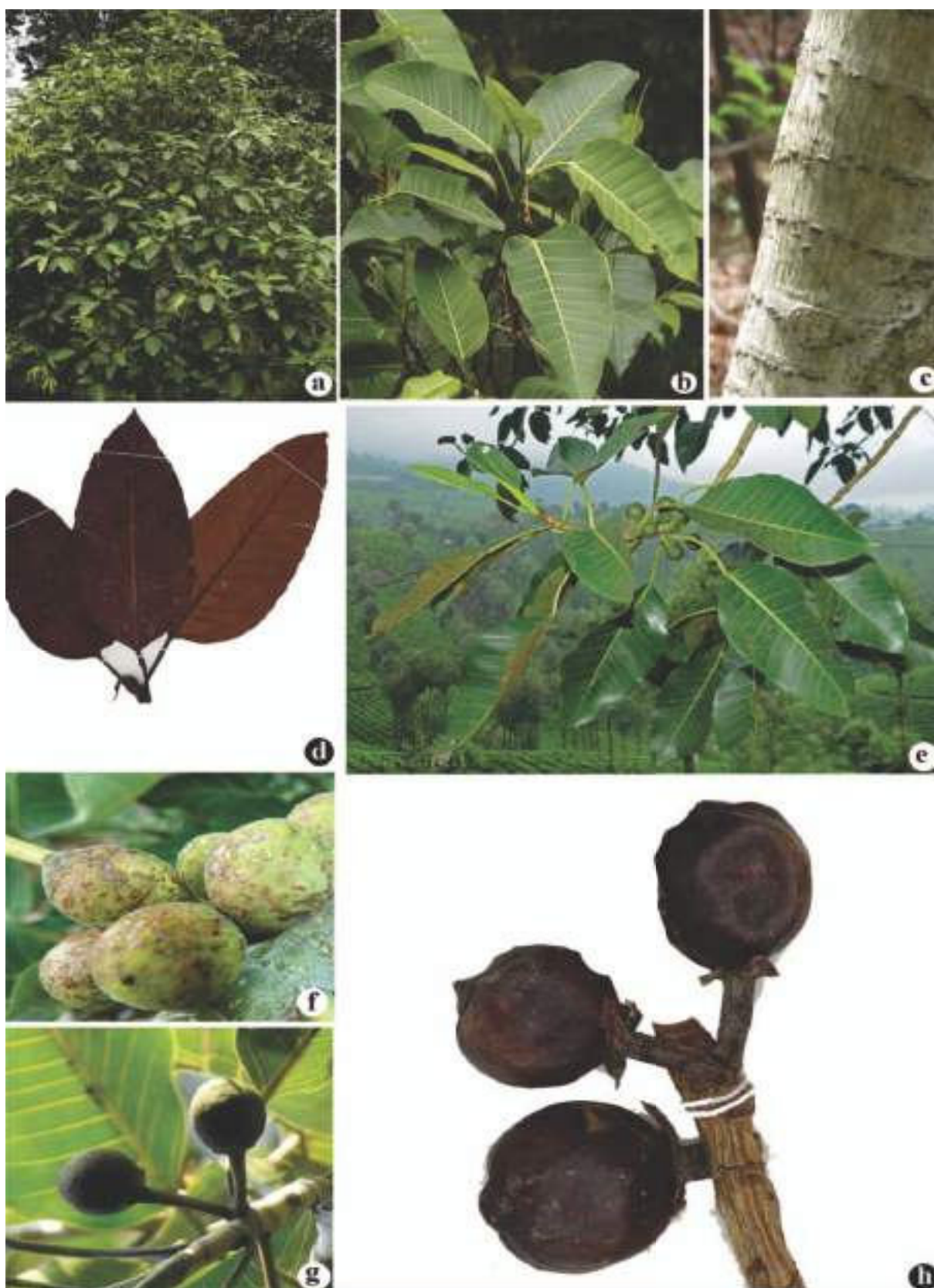
Ficus arnottiana (Miq.) Miq. a. b.-c. Habits; d. Fruiting twig; e. Single Fig; f.-g. L.s. of fig; h. L.s. through ostiole ; j. Female flower; k. Gall flower; l.-m. Achenes.



Ficus arnottiana (Miq.) Miq. a. Leafy branch; b.-c. Stipule; d. Fruiting twig; e. Leaf upper surface; f. Lower surface; g.-h. Figs.



Ficus arnottiana (Miq.) Miq. a. Twig; b.-c. Leaf upper and lower surface; d. Stipule; e.-f. Figs; g.-h. Ostiole; i. Basal bract; j.-k. Single fig; l. L.s. of fig; m.-n. Female flower; o.-p. Gall Flower; q. Stamen; r. Male flower; s. Achenes.



Ficus beddomei King a. Habit; b. Leafy branch; c. Bark; d. leaf upper and lower surface; e. Fruiting branch; f-g. Figs; h. Dry figs. (Source : D.N. Sasidharan)

3. *Ficus beddomei* King

Diagnostic features : Tree, up to 15 m tall, monoecious, beginning as epiphytes later becomes strangler and independent, aerial roots absent. Bark pale brown, yellowish, smooth. Stipules ovate-lanceolate, 5-10 cm long, caducous, glabrous. Leaves alternate; petiolate 5-10 cm long, grooved above, glandular at apex below, glabrous; lamina broadly elliptic to ovate, 15-25 x 8-15 cm, acuminate at apex, truncate to broadly acute at base, entire to sinuate, coriaceous. Figs solitary or paired, axillary pedunculate; receptacle (fig body) globose, 2.5 cm across, bright green, spotted with yellow when ripe. Achenes obovoid, 1-2.5 mm in diameter, surface smooth.

Flowering and fruiting : July - January .

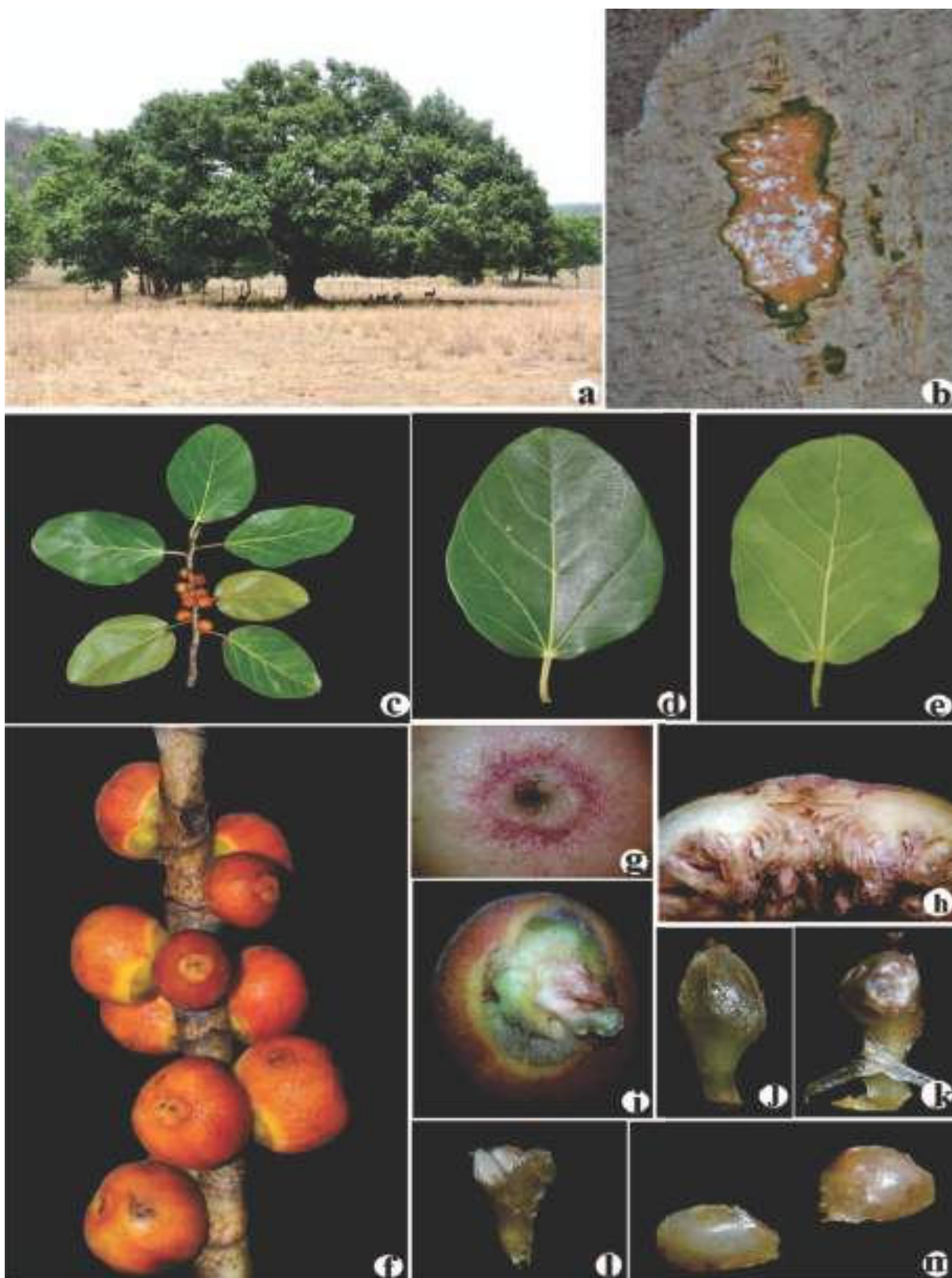
Local name: Pakayan.

Field notes : It is found in moist deciduous forest.

Status : Rare.

Distribution : **India :** Endemic to the Western Ghat, Kerela, Maharashtra, Tamilnadu and Karnataka and **Madhya Pradesh :** Mandla (Kanha National Park).





Ficus benghalensis L. a. Habit; b. Bark; c. Fruiting branch; d.-e. Leaf upper and lower surface; f. Figs; g. Ostiole; h. L.s. of fig; i. Basal bracts; j. Gall flower; k. Female flower; l. Male flower; m. Achene

4. *Ficus benghalensis* L.

Diagnostic features : Tree, up to 40 m tall, monoecious, hemi-epiphytes; aerial prop roots numerous, forming accessory trunks and helping in the lateral spreading of tree indefinitely. Bark greyish-white, smooth. Stipules deltoid or broadly triangular, coriaceous, densely whitish pubescent, caducous. Leaves alternate, often clusters at ends of branches; petiole 1.5-8 cm long, stout, puberulous; lamina ovate, orbicular-ovate to elliptic, 7-18 x 7-12 cm, coriaceous, glabrous above, puberulous or glabrous beneath. Figs paired, axillary, sessile, initially enclosed in calyptrate up to 1 cm long, leathery bud covers; receptacle (fig body) globose to subglobose, 1-2.5 cm in diameter, bright red or orange red when ripe. Achenes ovoid, trigonous or tetragonous, 1 mm in diameter, red-brown, surface reticulate or tuberculate.

Flowering and fruiting : Almost throughout the year .

Local name: Bad, Bar, Bargad, Bat, Bor, Vaddh, Baddh, Ambar.

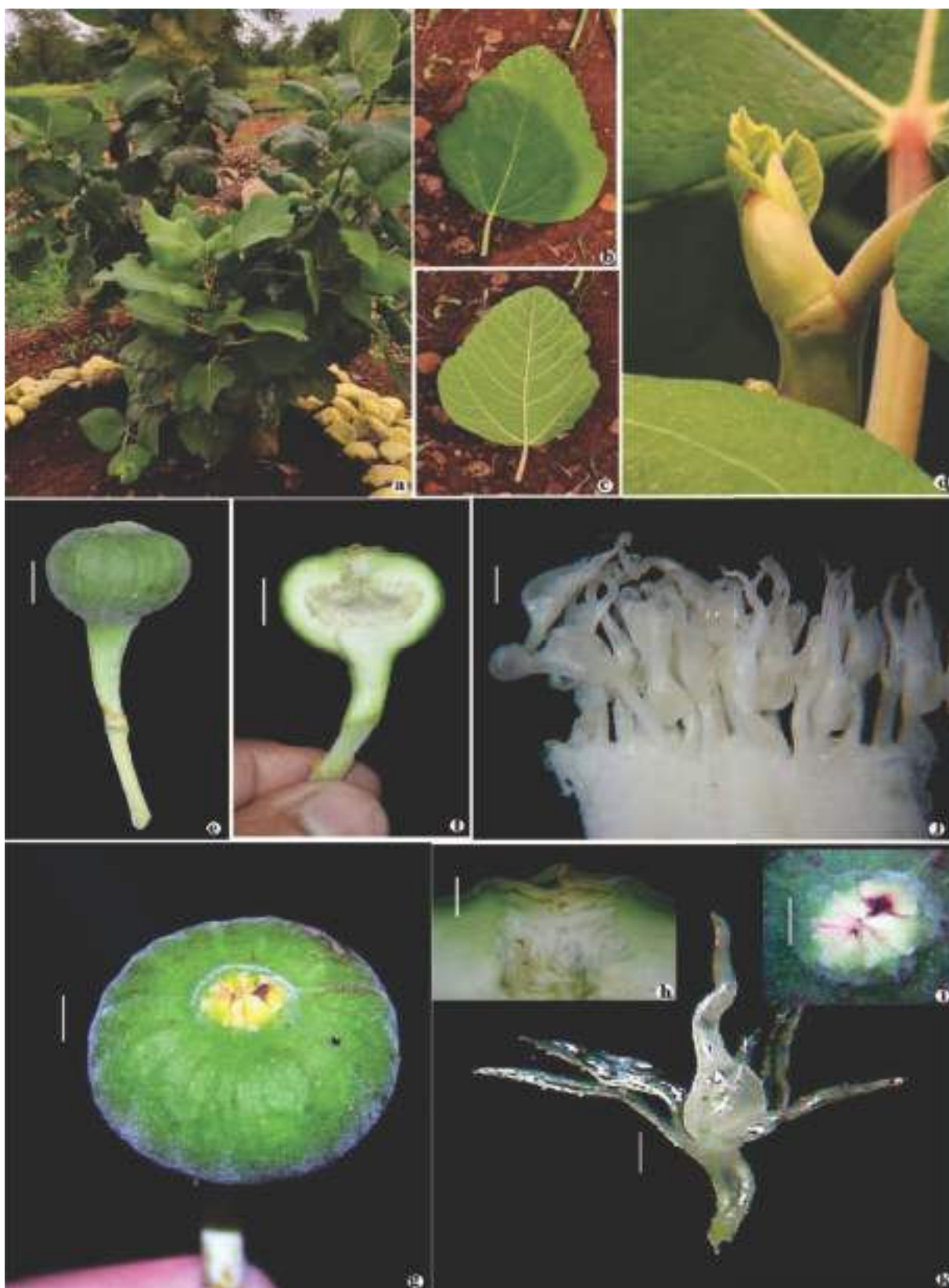
Field notes : Throughout the state on roadsides, in rural areas and secondary forest. It also grows as epiphyte on other *Ficus* species as well as on several other tree species, wall, old building and rocks. It grows wild but frequently planted in gardens, ornamental and avenue tree.

Status : Common.

Distribution : India : Throughout the state and **Madhya Pradesh :** Throughout the districts.

Uses : Bar figs are eaten by birds, bats and monkeys and leaves and twigs are an fodder for cattle. The tree is worshiped by Hindu. Various parts of the tree are reputed to have medicinal uses.





***Ficus carica* L.** a. Habit; b.-c. Leaves upper and lower surface; d. Stipule; e. Figs; f. L.s. of fig; g.-i. Ostiole; j. Flowers; k. Female flowers

5. *Ficus carica* L.

Diagnostic features : Shrubs or small tree, up to 6 m tall, dioecious; not epiphytes; aerial roots absent, milky sap. Bark greyish whitish, smooth or slightly rugose. Leaf twigs solid, cylindrical. Stipule ovate or oblong-lanceolate, 0.5-1.5 cm, glabrous, caducous. Leaves alternate, petiole 3-10 cm long, stout, puberulous; lamina variable, broadly ovate to orbicular, 10-17 x 7-13 cm, cordate, palmately deeply 3-5 lobes. Figs axillary, solitary, pedunculate; receptacle (fig body) pyriform to subglobose or globose, 2-6 cm in diameter, puberulous, yellowish-purple to dark or reddish-purple when ripe. Achene 2 mm, obovoid or ovoid, glabrous.

Flowering and fruiting : Throughout the year.

Local name: Anjir.

Field notes : On roadsides and cultivated in gardens.

Status : Common.

Distribution : **India :** Eastern Ghats and India and **Madhya Pradesh :** Hoshangabad, Indore and Ujjain.

Uses : It is a common edible fig.





***Ficus caulocarpa* (Miq.) Miq.** a. Habit; b. Fruiting branch; c. Figs (Source : Internet)

6. Ficus caulocarpa (Miq.) Miq.

Diagnostic features : Tree, up to 30 m tall, monoecious, aerial roots absent. Bark pale brown, smooth. Stipules lanceolate, 0.3-1.1 cm long, caducous, glabrous. Leaves alternate; petiolate 6-8 cm long, glabrous or minutely puberulous at base; lamina ovate, oblong, elliptic or obovate, 5.5-19 x 7-9 cm, acute or acuminate at apex, cuneate or obtuse at base, entire, coriaceous. Figs solitary or paired, axillary, just below the leaves, or leafy branchlets or on leafless main branches, pedunculate; receptacle (fig body) subglobose, 0.3-0.6 cm across, white to pink to purple to blackish at maturity. Achenes globose, flat, smooth.

Flowering and fruiting: January - October.

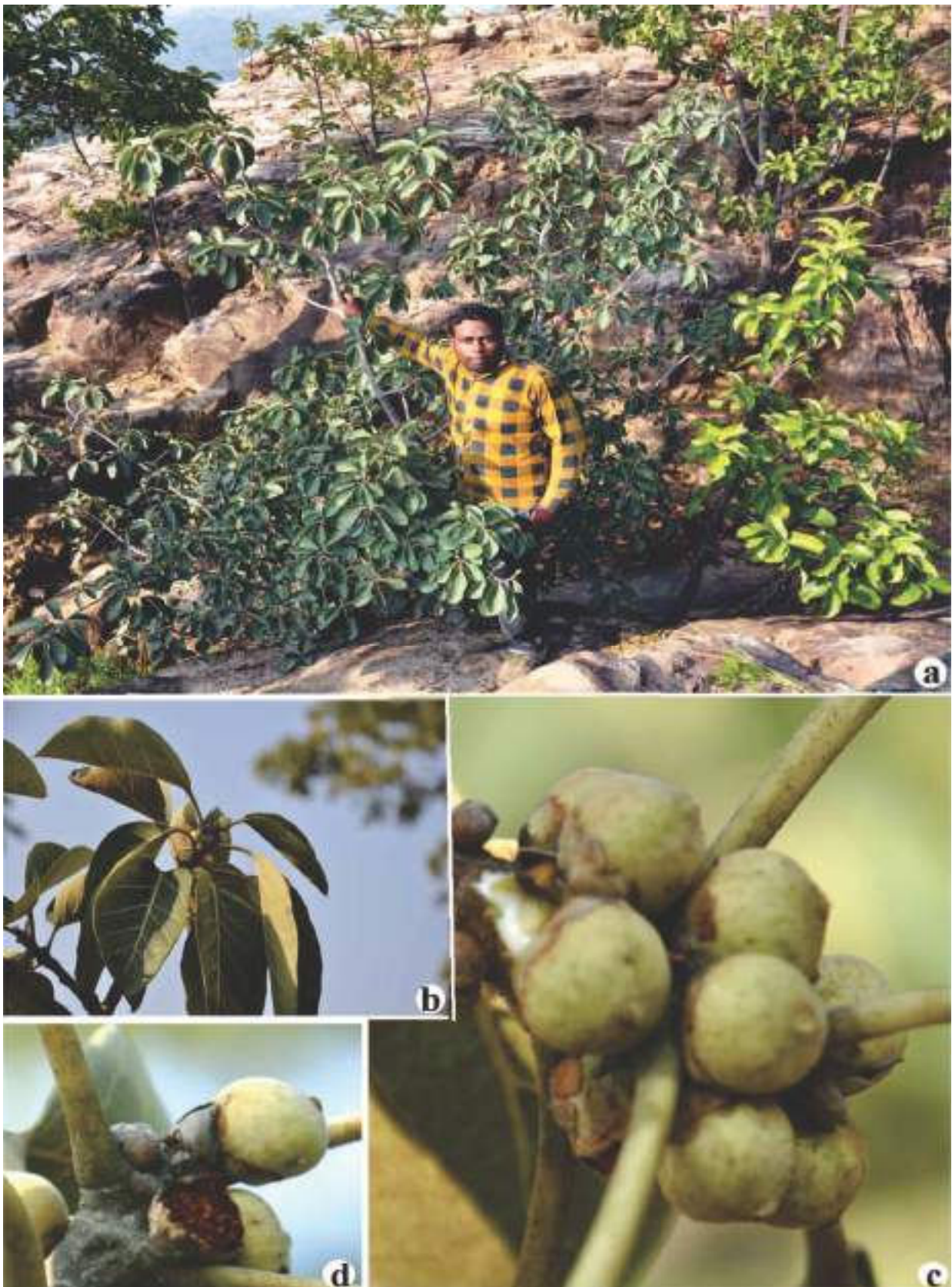
Local name: Pakayan.

Field notes: Along streams.

Status: Rare.

Distribution: India: Karnataka, Kerala and Madhya Pradesh: Jabua.





Ficus cupulata Haines. a. Habit; b. Branch; c. Figs; d. L.S. of fig.

7. *Ficus cupulata* Haines

Diagnostic features : Shrub or small tree, 2-6 m tall, monoecious, epiphytes on rocks; aerial roots absent. Leafy twigs solid, cylindrical. Bark wrinkled. Stipules ovate, 2 cm long, white tomentose or villose. Leaves alternate; petiole 3-4 cm long; lamina broadly ovate, 8.2-12 x 7-9 cm, apex obtuse, base cordate, both surface glabrous. Figs solitary or paired, axillary, sessile, ijust below the leaves or on up to 2-4 mm long spurs on the older wood; receptacle (fig body) subglobose, 0.8 -1.1 cm in diameter, reddish brown or purple when ripe. Achenes tuberculate.

Flowering and fruiting: August - December.

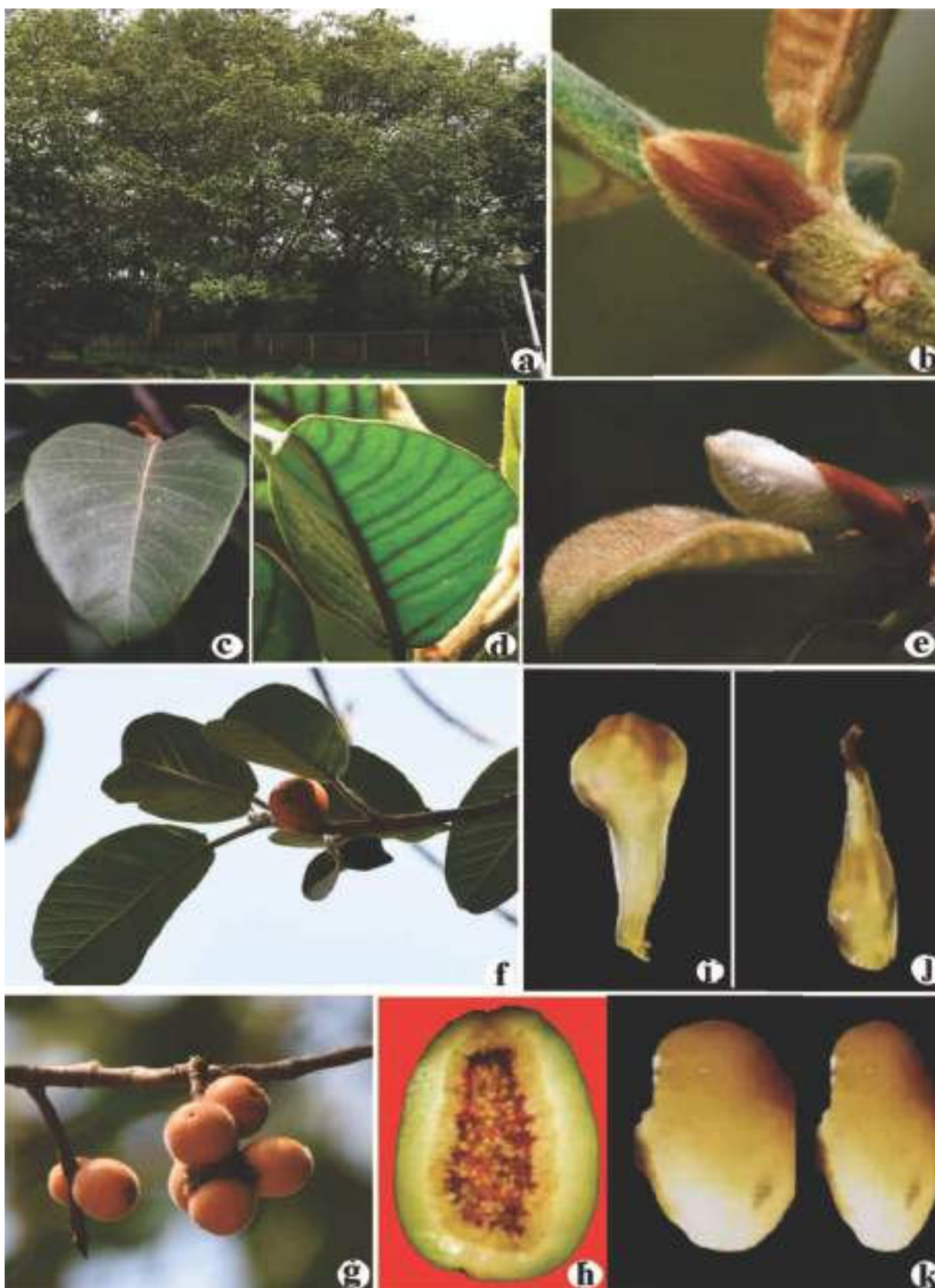
Local name: Pakhri, Akai-bat.

Field notes: Endemic species in Madhya Pradesh, amidst sandstone rocks.

Status: Rare.

Distribution : **India :** Madhya Pradesh and **Madhya Pradesh :** Hoshangabad [Pachmarhi and Chhindwara (Tamia)].





Ficus drupacea Thunb. a. Habit; b. Stipule; c.-d. Leaf upper and lower surface; e. Young Leaf; f. Fruiting branch; g. Figs; h. L.s. of fig; i. Gall flower; j. Female flower; k. Achenes.

8. *Ficus drupacea* Thunb.

Diagnostic features : Large Tree, up to 35 m tall, monoecious, hemi-epiphytes; aerial roots basketing the trunk.. Leafy twigs solid, cylindrical. Bark greyish-white, smooth. Stipules ovate-lanceolate, 0.8-2 cm long, rusty, tomentose above, pubescent beneath. Leaves alternate; petiole 1.5-4 cm long, densely tomentose; lamina ovate, elliptic to oblong, 10-30 x 6-14 cm, coriaceous, minutely dotted above, tomentose beneath. Figs paired, rarely solitary, axillary, sessile, initially enclosed in calyptrate bracts; receptacle (fig body) oblong or subobovate, 1.5-3.5 x 1-2 cm, orange to red when ripe. Achenes ellipsoid or ovoid, 1-1.4 mm in diameter, white, surface smooth or lanceolate.

Flowering and fruiting : Almost throughout the year .

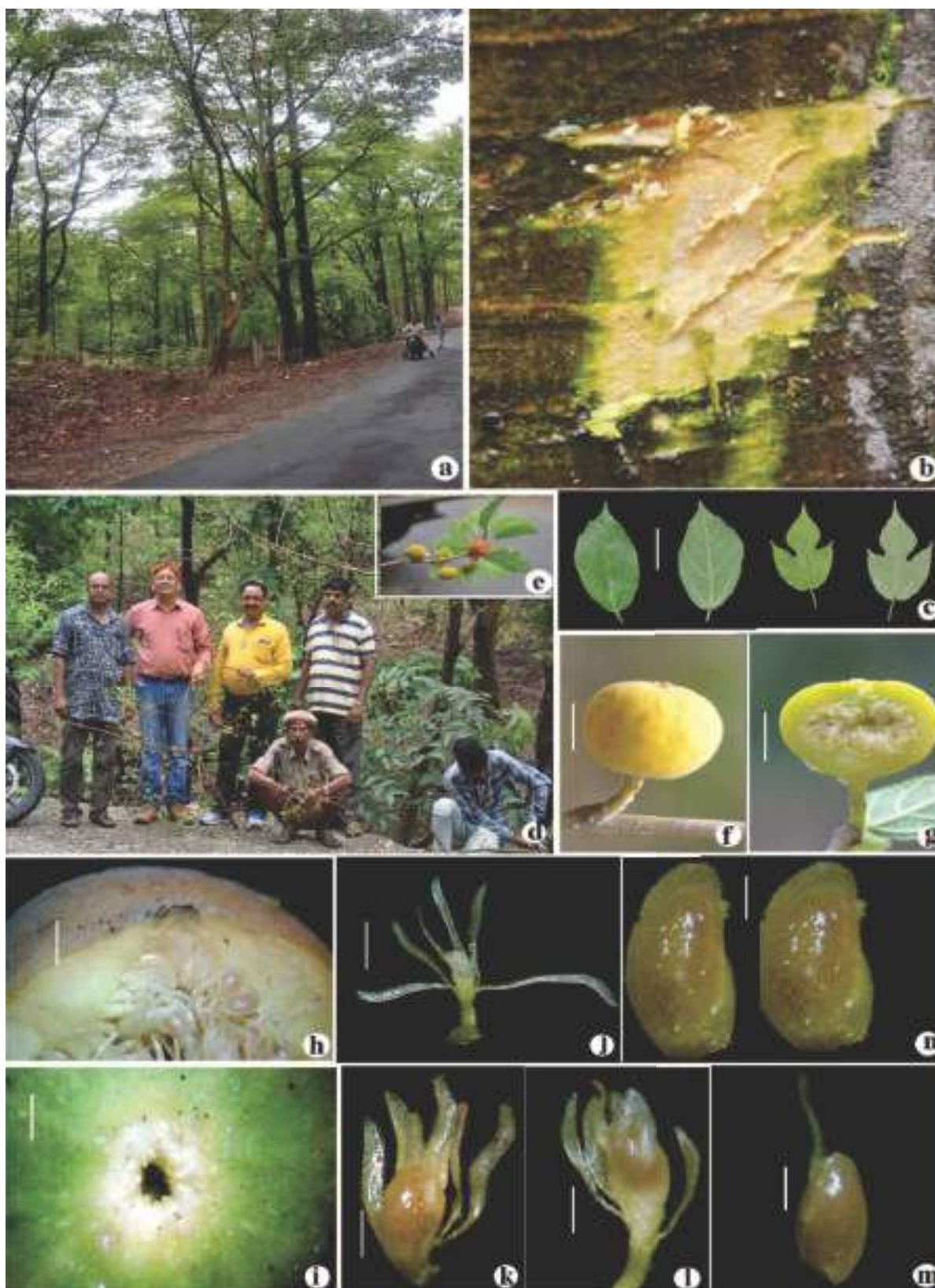
Local name: Pukar, Kappa.

Field notes : Along streams and planted as an gardens.

Status : Rare

Distribution : **India :** Karnataka, Keral, Maharashtra, Sikkim, Tamil Nadu, Uttar pradesh and **Madhya Pradesh :** Sagar and Bhopal.





***Ficus exasperata* Vahl** a. Habit; b. Bark; c. Leaf upper and lower surface; d. Collection teams; e. Fruiting branch; f. Single fig; g. L.s. of fig; h. Ostiole; i. apical bract j. Female flower; k.l. & m. Gall flowers; n. Achenes.

9. *Ficus exasperata* Vahl

Diagnostic features : Medium to large tree, up to 15 m tall, dioecious, not epiphytes; aerial roots absent. Leafy twigs solid, cylindrical. Bark pale, greenish, lenticellate. Stipules minute, ovate-lanceolate, 2-4 mm long, puberulous, caducous. Leaves alternate; petiole 1.4-5 cm long, scabrid; lamina ovate, obovate to ovate to lanceolate, 5-23 x 3-11 cm, scabrous, hispid on both surfaces with stout white, scabrid hairs. Figs paired, axillary, pedunculate; receptacle (fig body) oblong up to 1.4 cm long, yellow or purple when ripe. Achenes oblong or ellipsoid, 1-1.3 mm in diameter, surface reticulate and spotted.

Flowering and fruiting : December - July.

Local name: karvat.

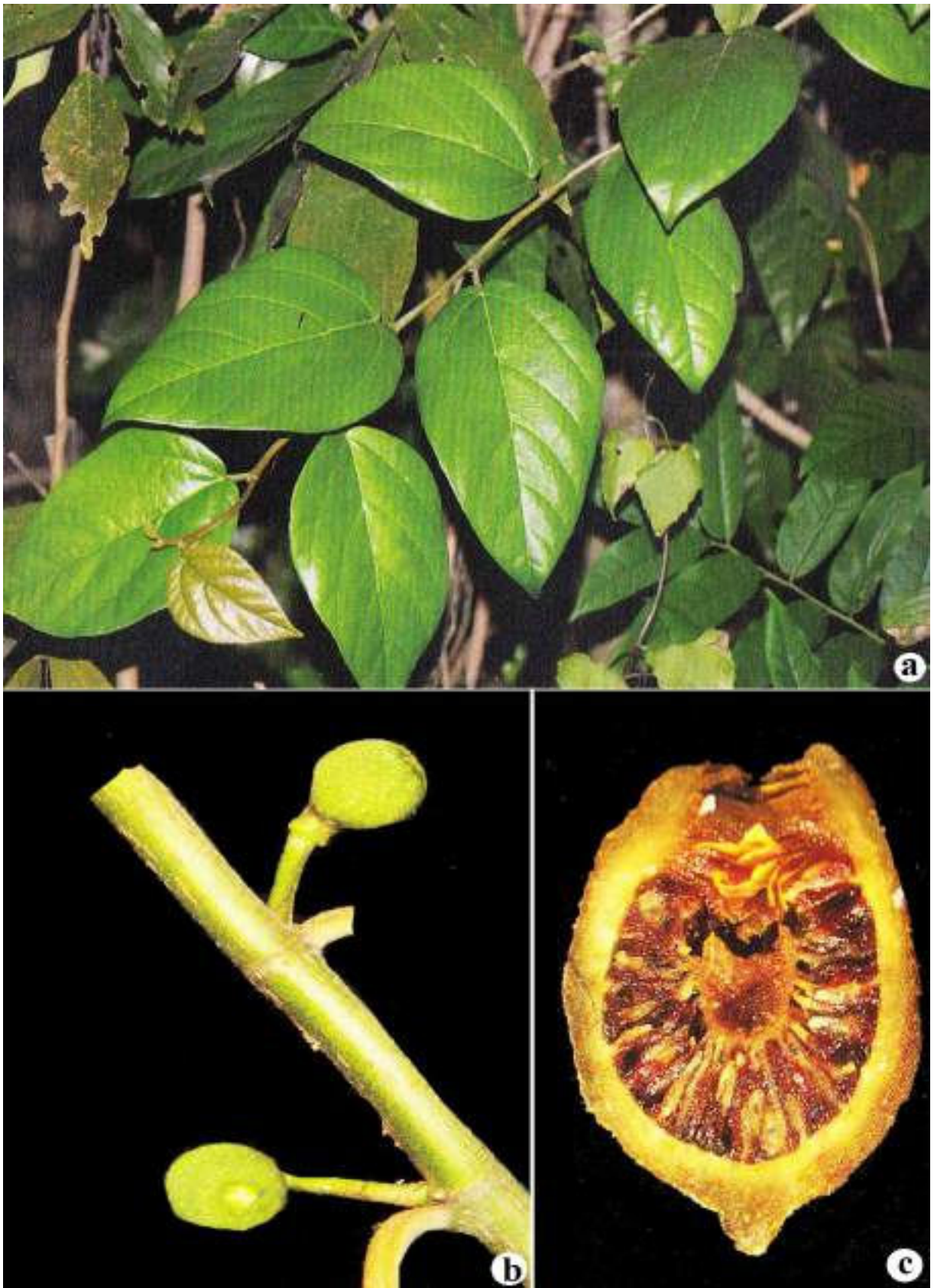
Field notes : Along streams and in moist deciduous forests.

Status : Rare.

Distribution : **India :** Andaman and Nicobar Island, Central and Southern regions and **Madhya Pradesh :** Hoshangabad and Alirajpur.

Uses : Leaves are used as fodder and the rough leaves are widely used as sand paper for polishing.





Ficus hederacea Roxb. a. Habit; b. Figs; c. . L.s. of fig. (Source : J.V. Sudhakar)

10. *Ficus hederacea* Roxb.

Diagnostic features : Climbing, scandent shrubs, up to 7 m tall, dioecious; aerial roots present, support ramifications of branches. Leafy twigs solid, cylindrical. Bark brownish, lenticellate. Stipules ovate or ovate-acuminate, 3-6 mm long, pubescent, caducous. Leaves alternate; petiole 0.6-1.4 cm long; lamina ovate, broadly ovate to elliptic or orbicular, 5.3-10 x 2-5 cm, coriaceous, scabrid above, glabrous or slightly hairy beneath. Figs paired, axillary, pedunculate; receptacle (fig body) globose or rounded, 0.5-1.3 cm in diameter, green when young, turning yellow to orange when mature. Achenes ovoid or ellipsoid, 1.5-2 mm in diameter, with thick margin, beaked, surface smooth.

Flowering and fruiting : January - July.

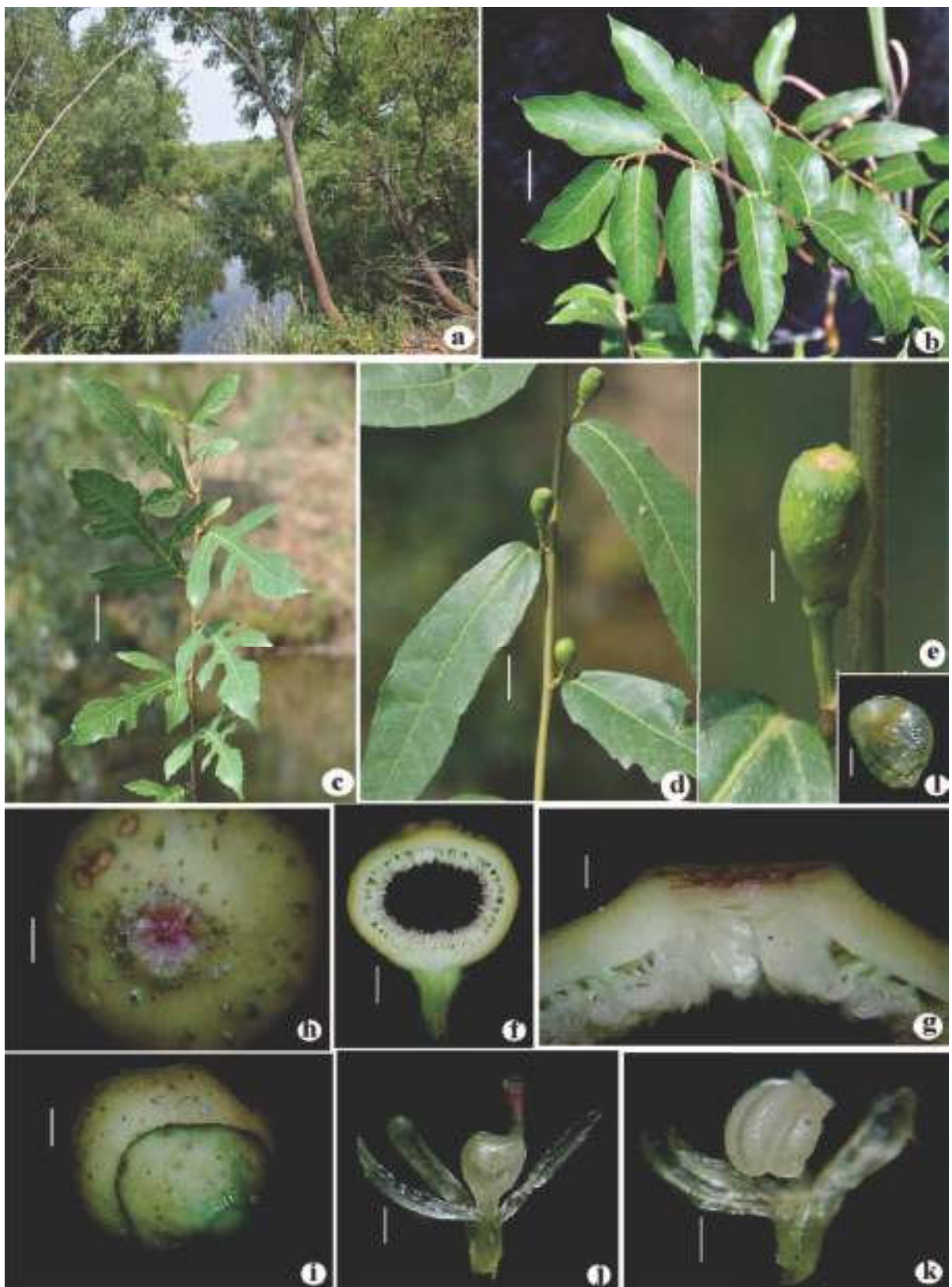
Local name: Nil.

Field notes : Climbing on trees in forest.

Status : Rare.

Distribution : India : Odisha, Andaman and Nicobar Islands, Bihar, Himachal Pradesh, Jharkhand, Uttarakhand and West Bengal and **Madhya Pradesh :** Jabalpur.

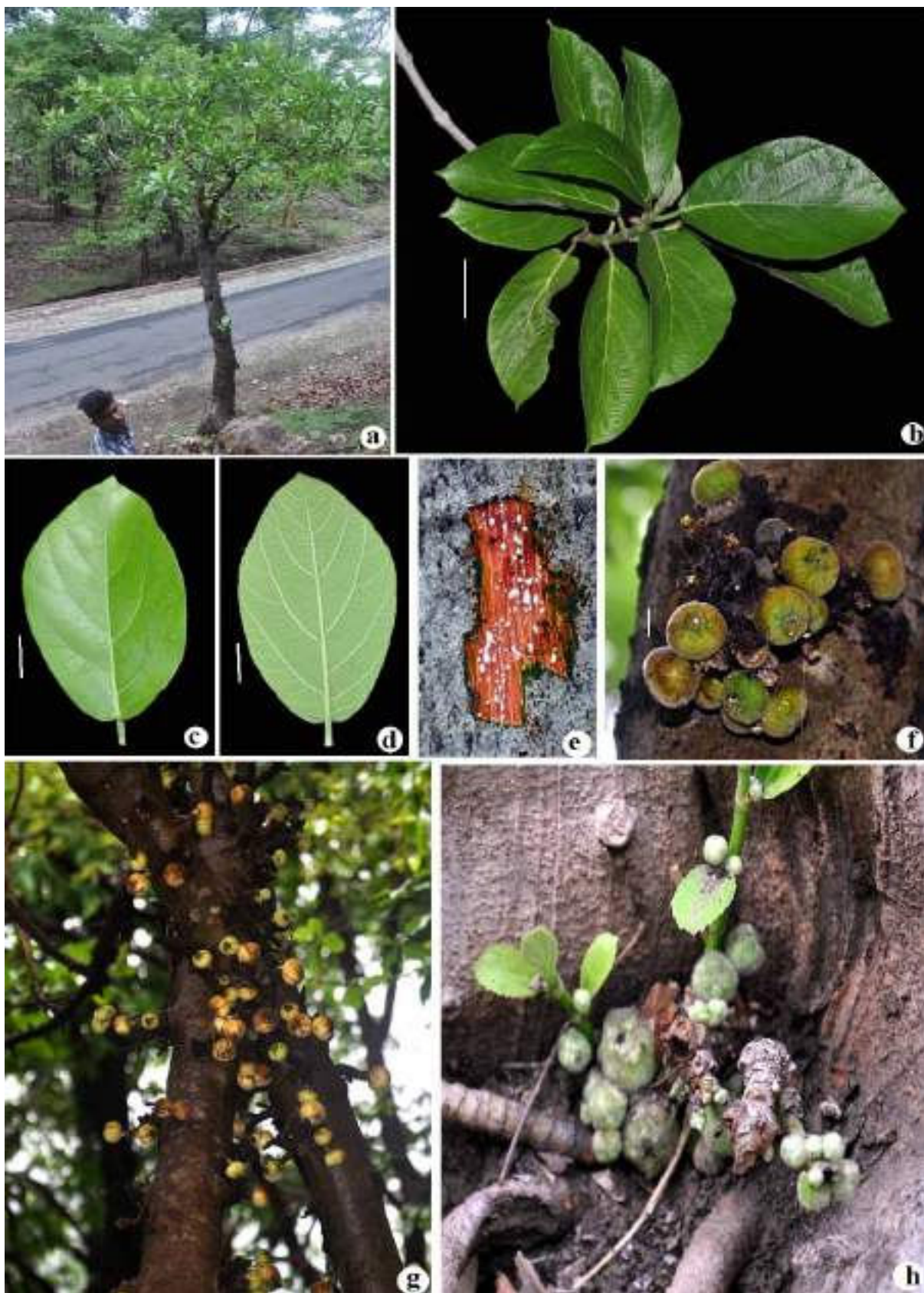




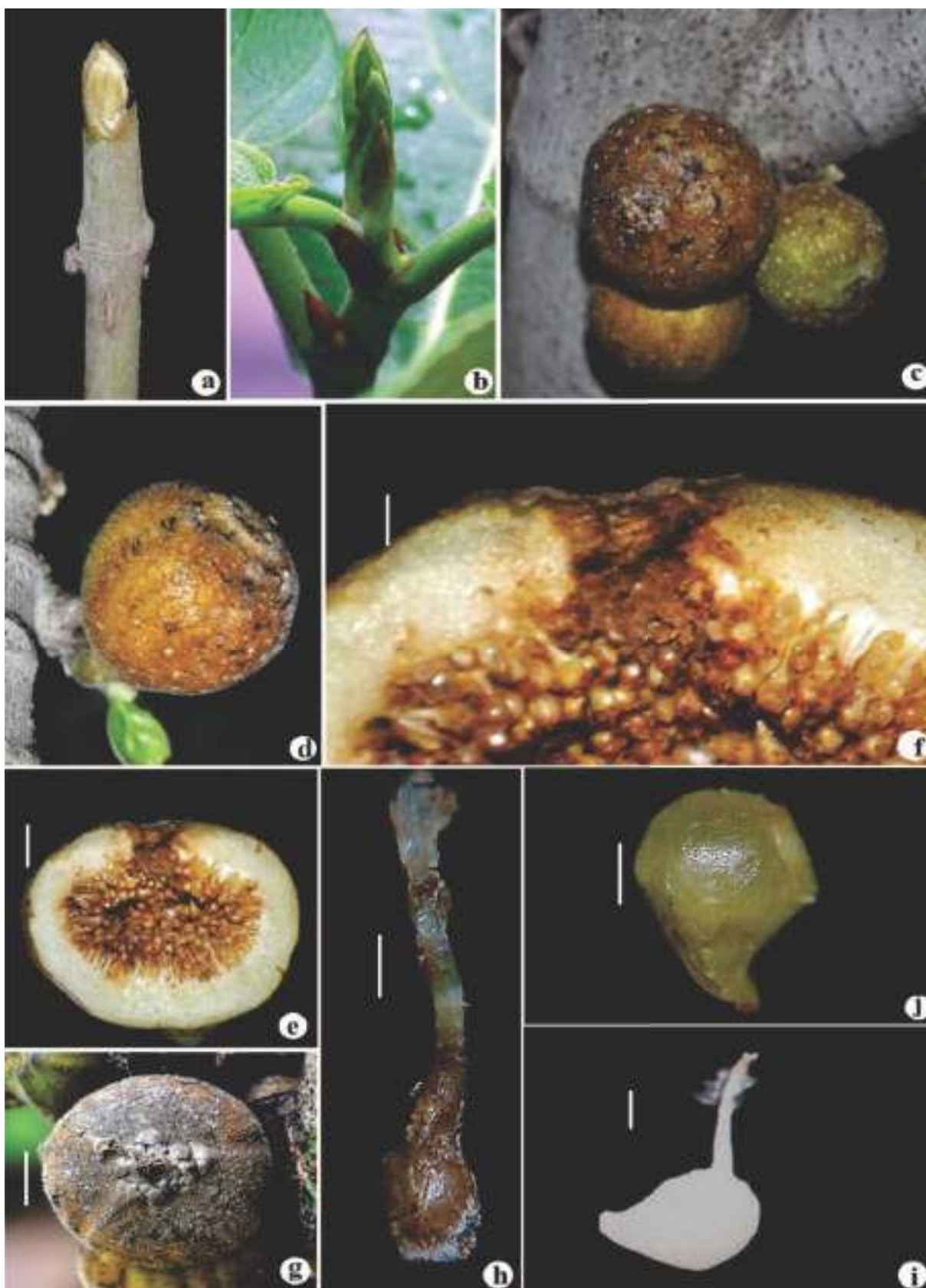
Ficus heterophylla a. Habit; b.-c. Leaf variation; d. Fruiting branch; e. Single Fig; f. L.s. of fig; g. Ostiole; h. apical bract; i. Basal bract; j. Gall flower; k. Male flower; l. Achene.



Ficus hispida L. Different habits



Ficus hispida L. a. Habit; b. Branch; c.-d. Leaf upper and lower surface; e. Bark; f.-g. Figs; h. Figs of geocarpic.



Ficus hispida L. a. Fistular stem; b. stipule; c-d. Figs; e. L.s. of fig; f. Ostiole; h. Female Flower; i. Gall flower; j. Achene.

12. *Ficus hispida* L.

Diagnostic features : Shrubs or medium tree, up to 8 m tall, dioecious; epiphytes in early stage; aerial roots absent, sometimes arising from fig bearing branches. Leafy twigs fistular, cylindrical. Bark greenish -grey, peelling off in irregular flakes. Stipules terminal, axillary and whorls of 3-5 on nodes of fig bearing branchlets, ovate-lanceolate, 1.3-3 cm long, hispid, glabrous beneath. Leaves opposite or subopposite or alternate; petiole 1.4-8 cm long, stout, densely hispid; lamina ovate to elliptic, obovate to oblong, 8-35 x 6-15 cm, coriaceous, scabrous on both surfaces, white beneath, light to dark green above. Figs paired, solitary, axillary or clusters of 3-5 on cauliflorous long hanging racemes or stolons trailing on the ground, sometimes geocarpic, pedunculate; receptacle (fig body) obovate, turbinate or depressed globose, 1-4 cm in diameter. Achenes ovoid or ellipsoid, 1-1.4 mm in diameter, orange or brownish, surface prominently tubercled.

Flowering and fruiting: Throughout the year.

Local name: Bhui gular, Dauduri, Dumri.

Field notes: Along water bodies, roadsides, in fields and sal forest.

Status: Common.

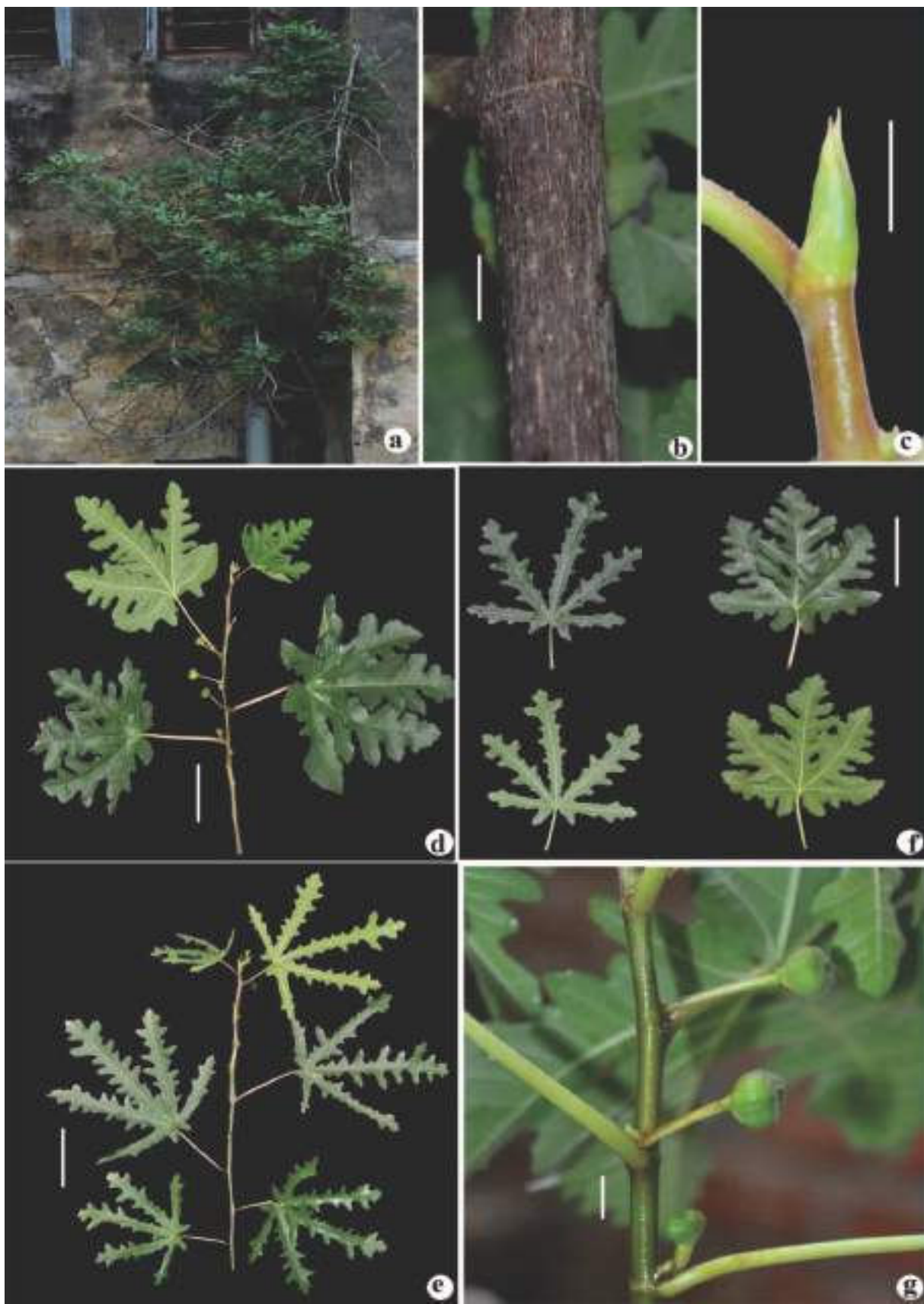
Distribution : **India :** Throughout Eastern Ghat, India and **Madhya Pradesh :** Throughout the state.

Uses : The twigs and leaves form good fodder for cattle. The roots are used in medicines and leaves are uses to polish jewellery.

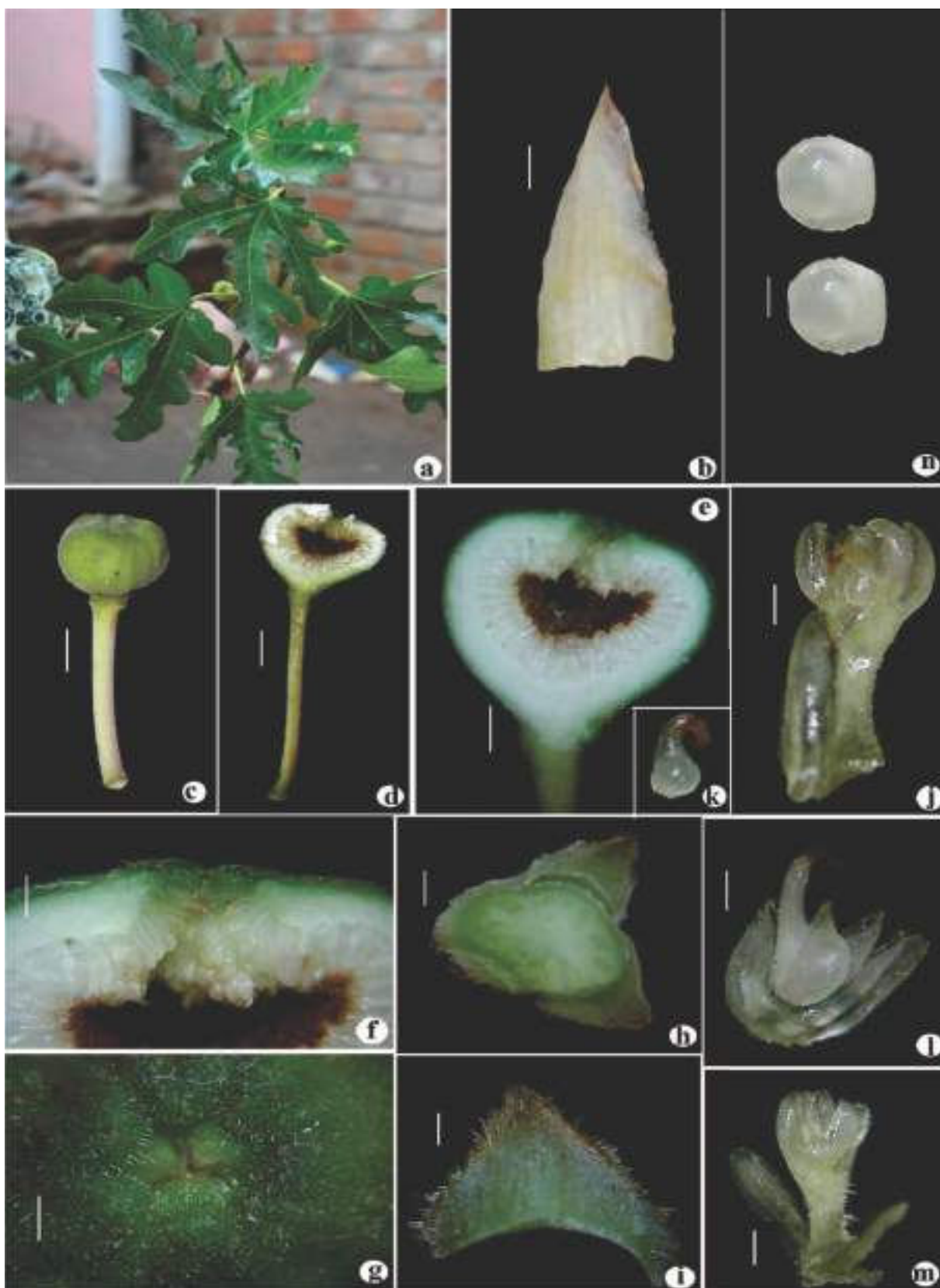




Ficus johannis subsp. *afghanistanica* Boiss. a.b.c. Different habits



Ficus johannis subsp. *afghanistanica* Boiss. a. Habit; b. Bark; c. Stipule; d.-e. Twigs; f. Leaf upper and lower surface with leaf variation; g. Figs.



Ficus johannis Subsp. *afghanistanica* Boiss. a. twig; b. Stipule; c. Single fig; d.-e. L.s. of fig; f. Ostiole; g. Apical bracts; h.-i. Basal bracts; j. Female flower; k. Carpel; l. Gall flower; m. Male flower; n. Achenes

13. *Ficus johannis* subsp. *afghanistanica* (Warb.) Browicz

Diagnostic features : Shrubs or small tree, much branched, up to 2-4 m tall, dioecious; epiphytes; aerial roots absent, milky sap. Bark greyish to brown, young shoot reddish-brown. Leaf twigs solid, cylindrica. Stipule ovate-lanceolate, 0.5-1 x 0.2-0.3 cm, truncate to obtuse at base, puberulous at above, glabrous at beneath, purplish, caducous. Leaves alternate, petiole 3-7 cm long, puberulous; lamina variable, broadly ovate to orbicular, 10-17 x 7-13 cm, palmately deeply 3-5 lobes, with 3-7 basal veins, prominent beneath. Figs axillary, solitary, pedunculate; receptacle (fig body) pyriform to subglobose or globose, 1-2 x 10-12 mm in diameter, puberulous. Achene 1 x1 mm, ovoid to rounded, glabrous.

Flowering and fruiting : September - January.

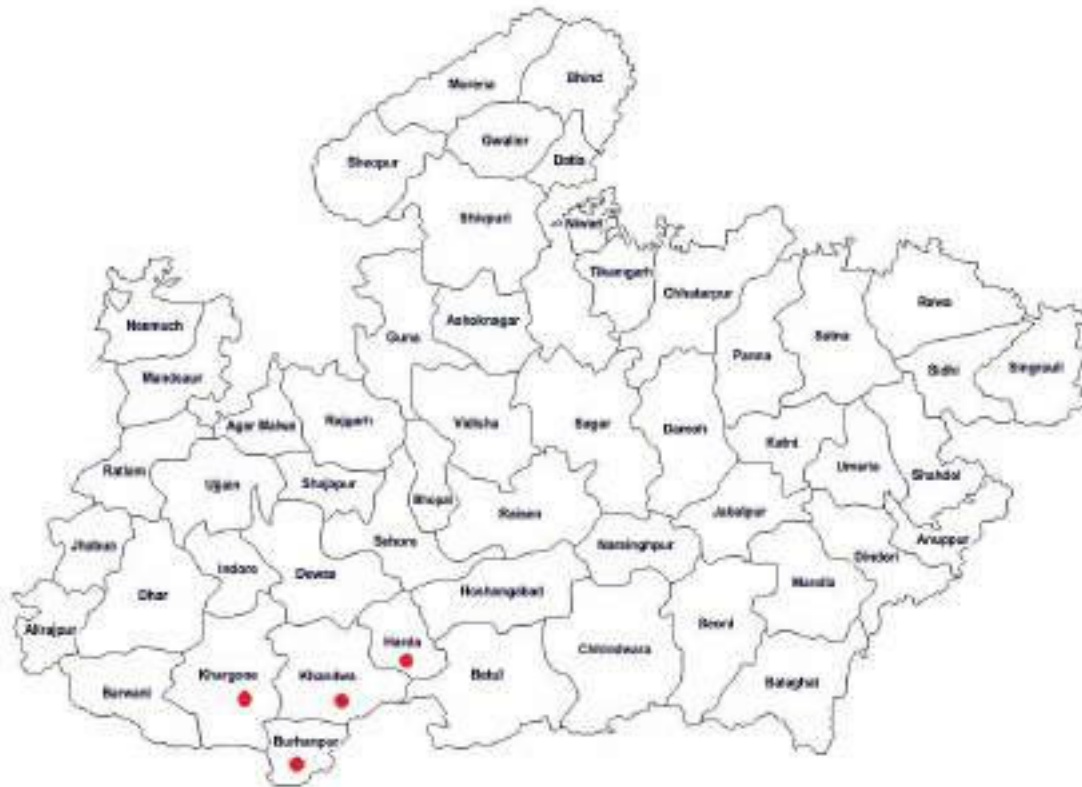
Local name: Anjir or Afghan Anjir.

Field notes : Grown on wall, building and on the walls of old ravines .

Status : Rare.

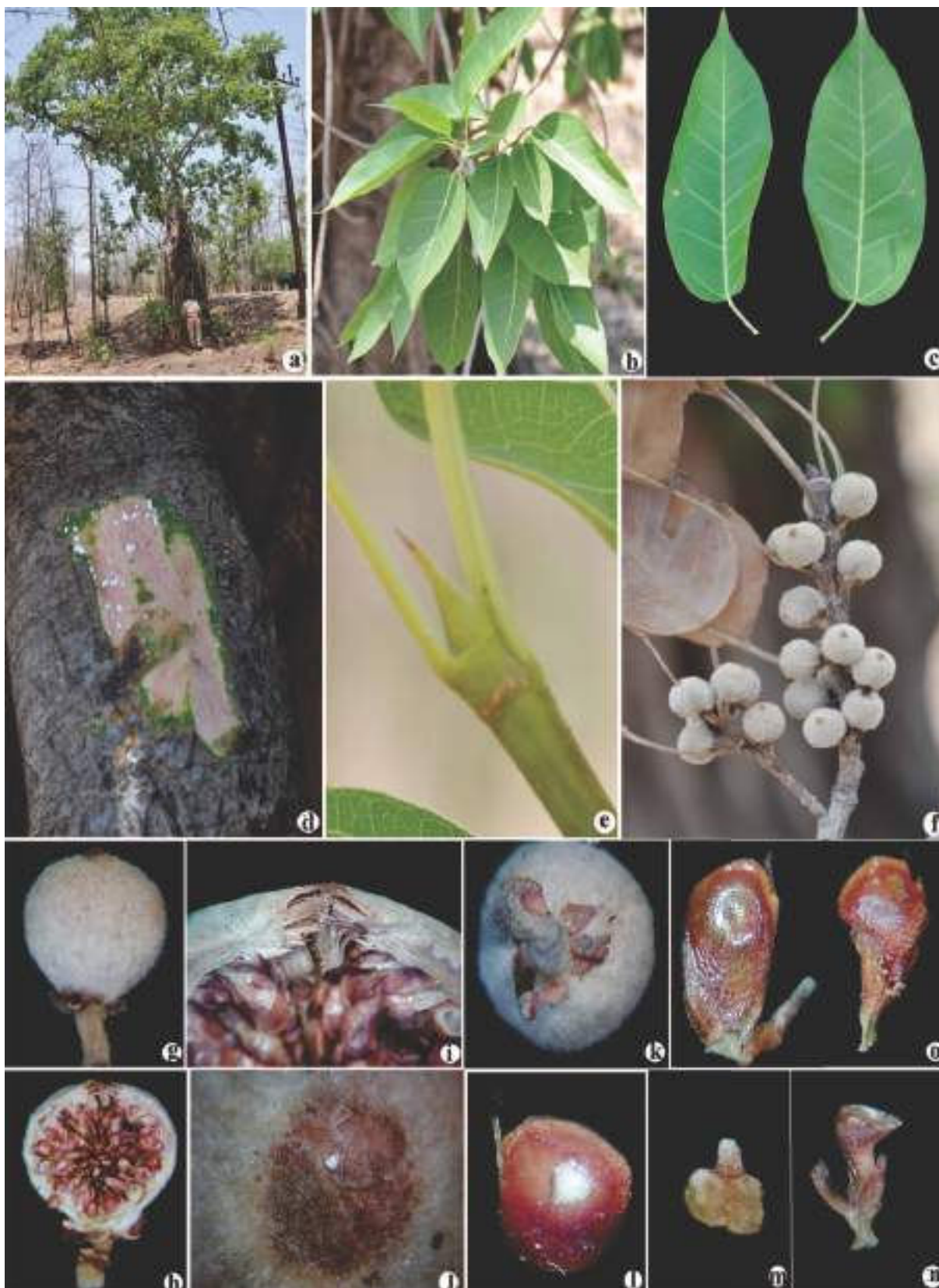
Distribution : **India :** Not reported in India only found in Iran, Pakistan, and Afghanistan and now in India first time and **Madhya Pradesh :** Khandwa, Burhanpur, Khargone and Harda.

Uses : The twigs and leaves form good fodder for cattle. The roots are used in medicines and leaves are uses to polish jewellery.

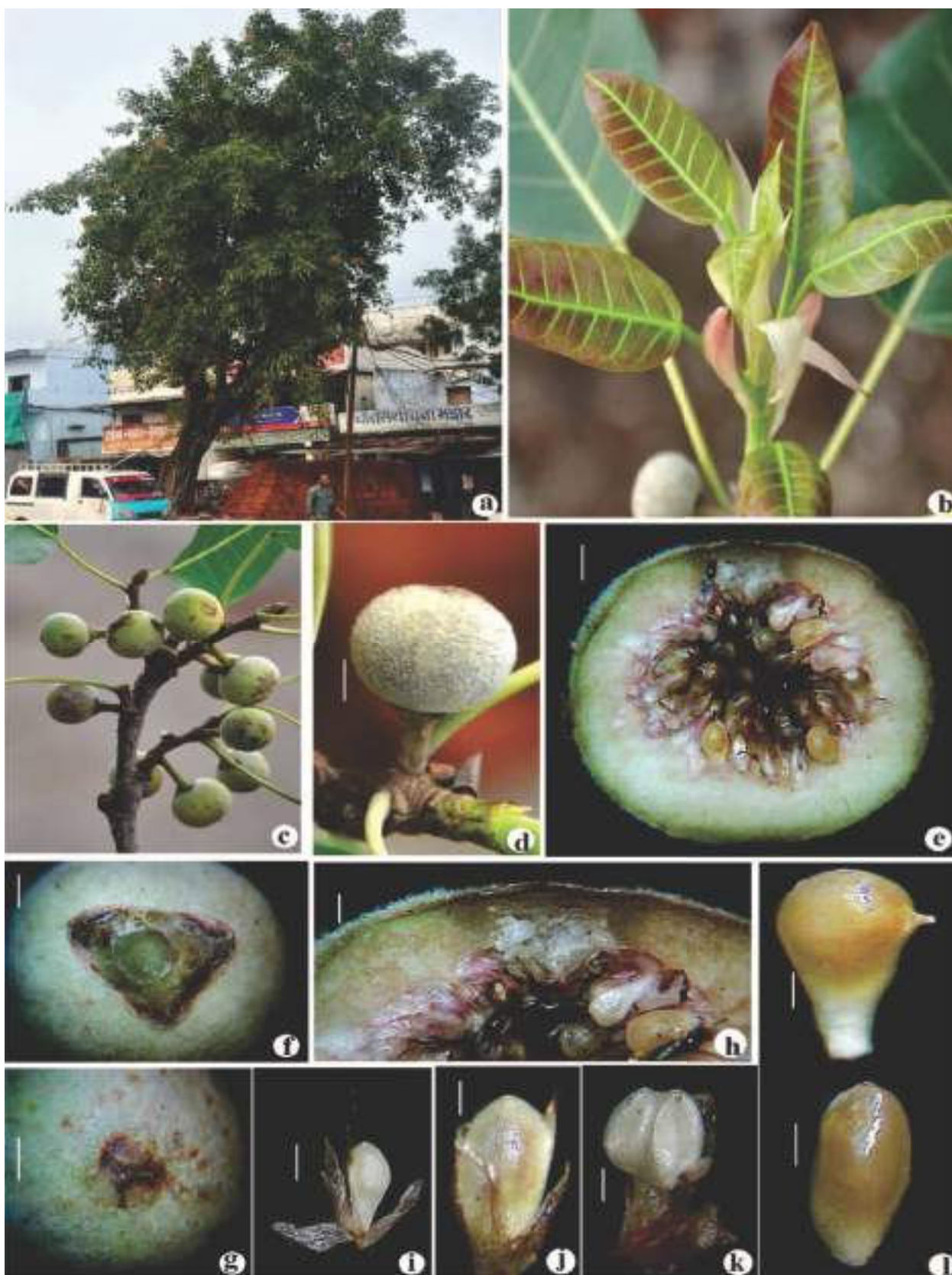




Ficus lacor Buch.- Ham. a. Habit; b. Twig



Ficus lacor Buch.- Ham. a. Habit; b. twig; c. Leaf upper and lower surface; d. Bark; e. Stipule; f. Figs; g. Single fig; h. L.s. of fig; i. Ostiole; j. Upper bracts; k. Basal bracts; l. Gall Flower; m. Stamen; n. Female flower; o. Achenes.



Ficus lacor Buch.-Ham. a. habit; b. twig; c. figs; d. Single fig; e. L.s. of fig; f. Basal bracts; g. Apical bracts; h. Ostiole; i. Gall flower; j. Female flower; k. Male flower; l. Achenes.

14. *Ficus lacor* Buch.-Ham.

Diagnostic features : A large tree, up to 10 m tall, monoecious; not epiphytes; aerial roots absent, milky sap. Leafy twigs solid, whitish puberulous, tomentose, cylindrical, afterward glabrous. Bark whitish, grey. Stipule ovate, 0.5 cm long, truncate at base, tomentose at both side. Leaves alternate, petiole 3-5 cm long, puberulous; lamina elongated-ovate, obtuse at base, acuminate at apex, glabrous both side. Figs crowded at the end of the branches, axillary or just below of the leaves, paired, pedunculate; receptacle (fig body) globular, ca. 1 x 1 cm, woolly, tomentose. Achene 1 x 1 mm, broadly ovate, obovate, glabrous..

Flowering and fruiting : September - December.

Local name: Piprani, Pakhri, Pakhari.

Field notes : Found in deciduous forest, on road sides and near agriculture fields..

Status : Rare.

Distribution : **India :** Bihar, Uttar Pradesh, Jharkhand, Andhra Pradesh and **Madhya Pradesh :** Khandwa, Betul, Seoni, Mandla and Balaghat.

Uses : The leaves of the tree are used as fodder for cattle.

Note : *Ficus lacor* is a very distinct species from *Ficus virens* in having very densely hairy figs and first time reported in Madhya Pradesh.





Ficus lanceolata Buch.-Ham. ex Roxb. a. Habit, b. Bark, c. Stipule, d. Twigs, e.-f.-g. Leaves upper & lower surface; h. Leaf base.

15. *Ficus lanceolata* Buch.-Ham. ex Roxb.

Diagnostic features : Shrub or small tree, monoecius; not epiphytes; aerial roots absent, milky sap. Leafy twigs solid, whitish glabrous, cylindrical. Bark whitish. Stipule lanceolate, 0.5 cm long. Leaves alternate, petiole 0.5-1 cm long, glabrous; lamina lanceolate, or narrow to lanceolate, 4-8 x 0.5 x 1.5 cm, obtuse at base, acuminate at apex, glabrous both side. Figs axillary or leafless or leafy branches in clusters, paired, pedunculate; receptacle (fig body) pyriform, ca. 1-2 cm, purplish when ripe. Achene 1x1 mm, ovoid, tubercled.

Flowering and fruiting : April - June.

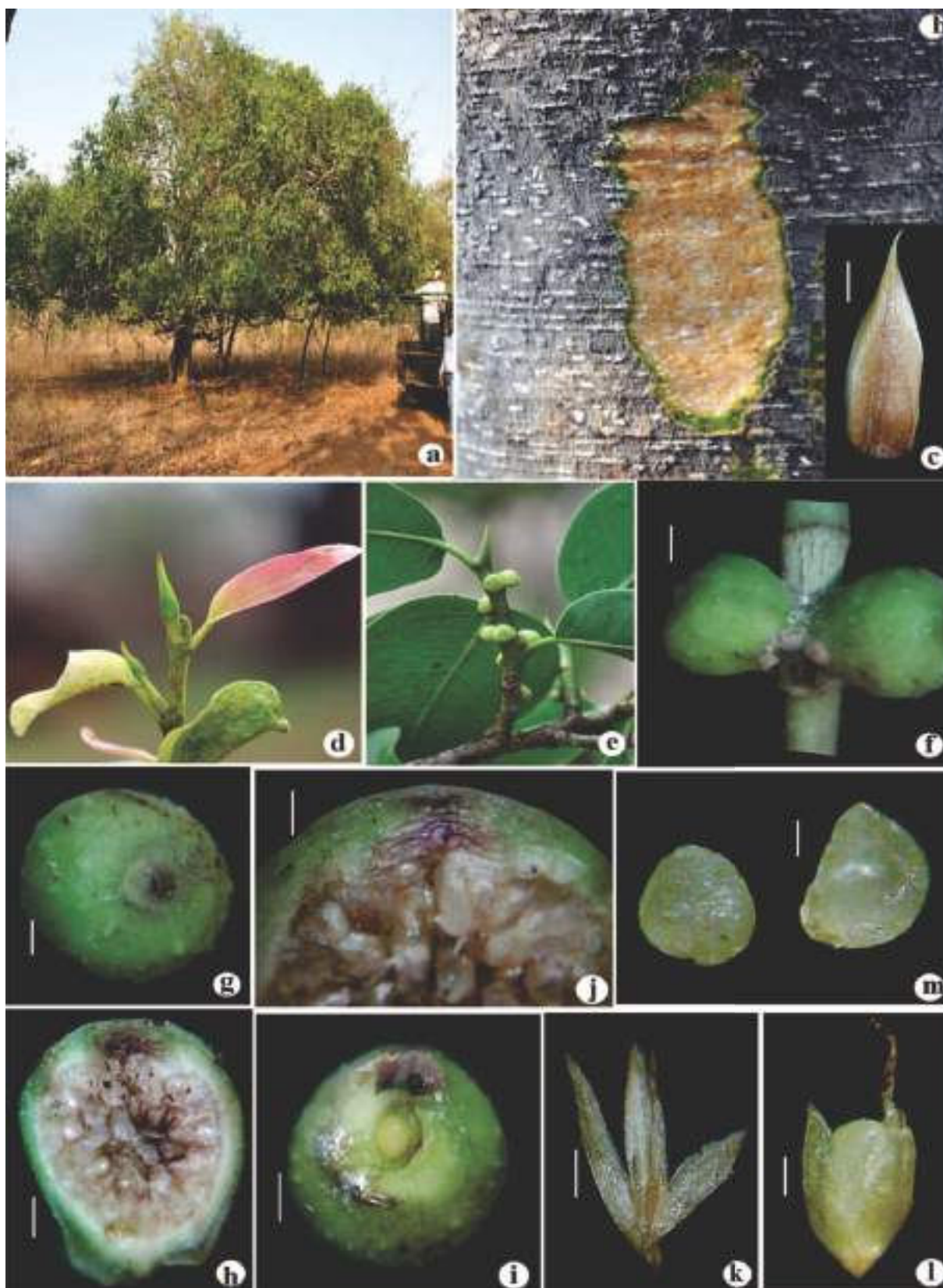
Local name: Nil.

Field notes : On bank of drains.

Status : Rare.

Distribution : **India :** Assam, Bihar, Chhatisagarh, Maharashtra and **Madhya Pradesh :** Sidhi.





***Ficus microcarpa* L.f.** a. Habit; b. Bark; c. Stipule; d. Twig; e. Fruting branch; f.-g. Figs; h. L. s. of fig; i. Basal bract; j. Ostiole; k. Female flower l. Gall. Flower; m. Achenes.

16. *Ficus microcarpa* L.f.

Diagnostic features : Tree, up to 23 m tall, monoecious, spreading with dense crown, shady, epiphytes when young, lithophytic; aerial roots present, milky sap. Bark grey to brown, smooth, lenticellate. Stipule ovate-lanceolate, 0.5-1.3 cm long, puberulous or glabrous, caducous. Leaves alternate, petiole 0.5-2 cm long, slender, brown, glabrous; lamina broadly ovate to subrotund, rhomboid, elliptic, 3-11 x 2-5 cm, dark green, shining above, pale beneath, glabrous on both surface. Figs axillary, paired or solitary, sessile; receptacle (fig body) depressed globose, pyriform to subglobose, 0.5-1 cm in diameter. Achenes ovoid or obovoid, 0.5-1 mm in diameter, white or pale yellow, surface verrucate.

Flowering and fruiting : March - October.

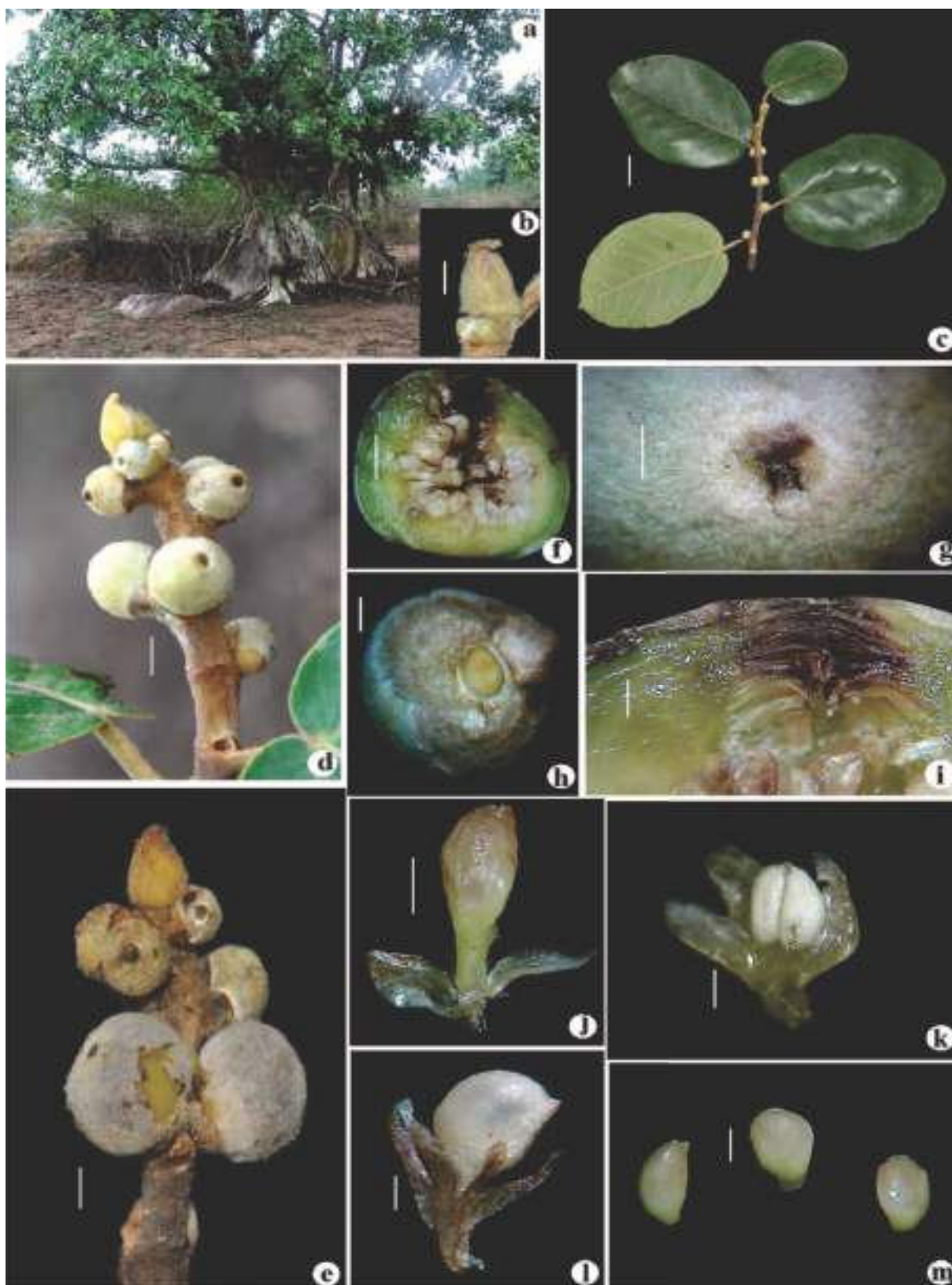
Local name: Fan, Phefar, Paddi baddh, Tilman, Gadasī.

Field notes : In mixed forests, on hill slopes and in rock crevices.

Status : Common.

Distribution : **India :** Throughout Eastern Ghats and India and **Madhya Pradesh :** Chhatarpur, Panna, Hoshangabad, Rewa, Mandla, Sagar, Satna, Seoni, Balaghat and Khandwa.





Ficus mollis Vahl a. Habit; b. Stipule; c.-d.-e. Fruiting branches; f. L.s. of fig; g. Apical bracts; h. Basal bracts; i. Ostiole; j. Female flower; k. Male flower; l. Gall flower; m. Achenes.

17. *Ficus mollis* Vahl

Diagnostic features : Tree, up to 15 m tall, monoecious, epiphytes, lithophytic; aerial roots present, slender or absent. milky sap. Bark white, grey, smooth. Stipule ovate-lanceolate, 0.5-2 cm long, densely appressed woolly tomentose above, glabrous beneath, caducous. Leaves alternate, crowded towards ends of branches; petiole 1.5 -5 cm long, tomentose; lamina variable ovate to elliptic, obovate, 5-18 x 2-12 cm, coriaceous, dark green above, pale to yellow, fluffy beneath, glabrous, minutely dotted above, densely rusty grey tomentose beneath. Figs axillary, paired or solitary, clusters at end of branchlets, sessile; receptacle (fig body) globose, 0.4-1 cm in diameter, greenish when young, grey or brownish when mature, woolly tomentose. Achenes ovoid, oblong, 0.5-1 mm in diameter, yellowish, mucilaginous, surface verrucate or reticulate.

Flowering and fruiting : Throughout the year.

Local name: Son pakhad, Katbar, Katbaddh, Chitakar.

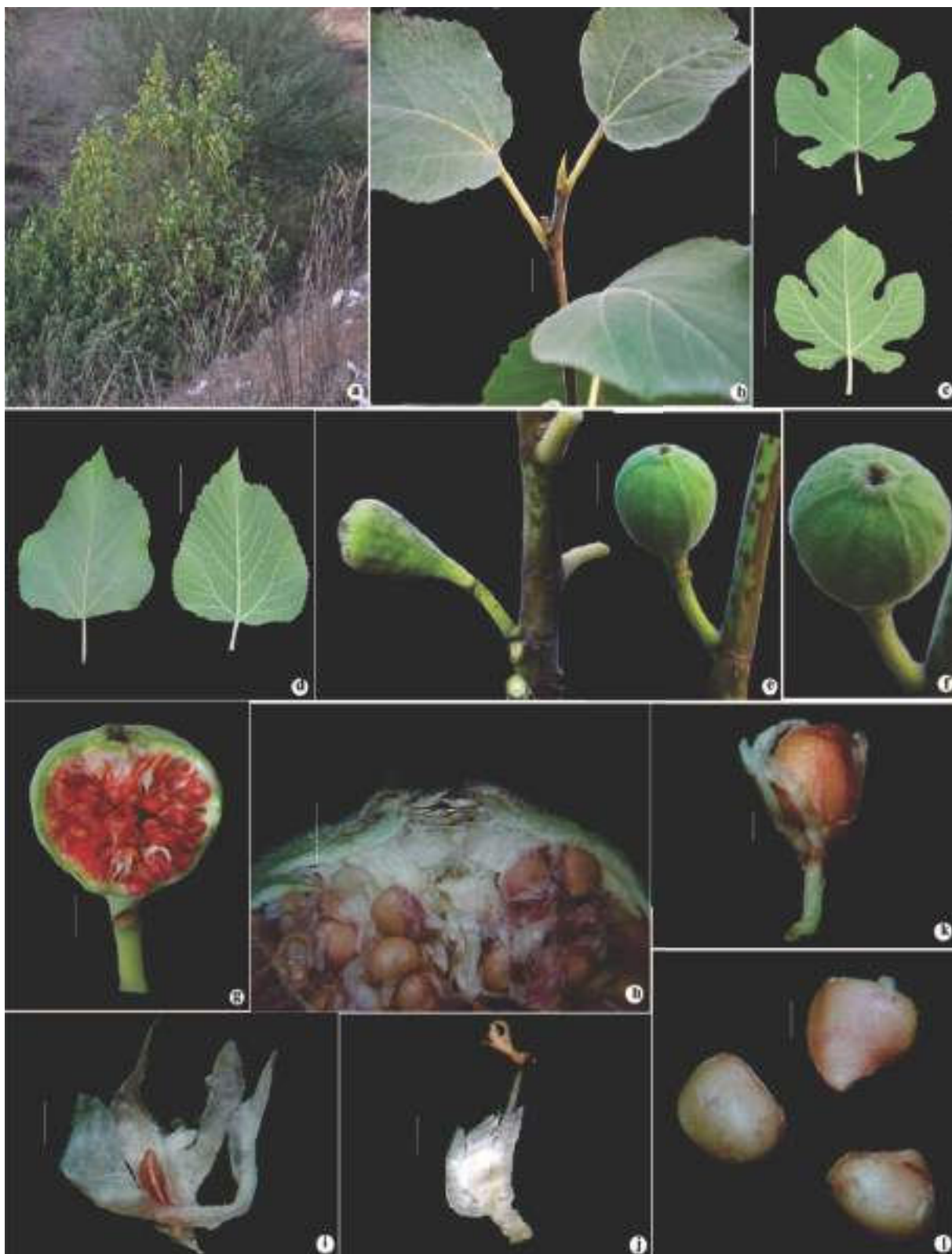
Field notes : In rock crevices, roadsides on hill slopes.

Status : Common.

Distribution : **India :** Throughout Eastern Ghats, Peninsular India, Bihar, Jharkhand, Rajasthan and Uttar Pradesh and **Madhya Pradesh :** Balaghat, Chhatarpur, Damoh, Gwalior, Hoshangabad, Mandla, Panna, Rewa, Satna, Shahdol, Shivpuri and Sidhi.

Uses : Fruits are edible and the leaves and young branches are used as fodder.





***Ficus palmata* Forssk. subsp. *virgata* (Roxb.) Browicz** a. Habit; b. Twig; c.-d. Leaf upper and lower surface; e.-f. Figs; g. L.s. of fig; h. Ostile; i. Male flower; j. Female flower; k. Gall Flower; l. Achenes.

18. *Ficus palmata* Forssk. subsp. *virgata* (Roxb.) Browicz

Diagnostic features : A bushy shrub or small tree, up to 5 m tall, dioecious, not epiphytes; aerial root absent. Bark brownish, smooth, Stipule ovate-lanceolate, 0.5-1 cm long, dpubescent, caducous. Leaves alternate; petiole 2-7 cm long, tomentose; lamina variable orbicular to ovate, sometimes 3-5-lobed, 5-17 x 4-12 cm, subscabrid above, softy tomentose beneath. Figs solitary, axillary, pedunculate; receptacle (fig body) subglobose to pyriform, 1-1.5 cm in diameter, yellowish or purple when ripe. Achenes ovoid, or trigonous, 1-1.5 mm in diameter, yellowish brown, surface minutely tuberculate.

Flowering and fruiting : March - November.

Local name: Anjir, Jangli anjir.

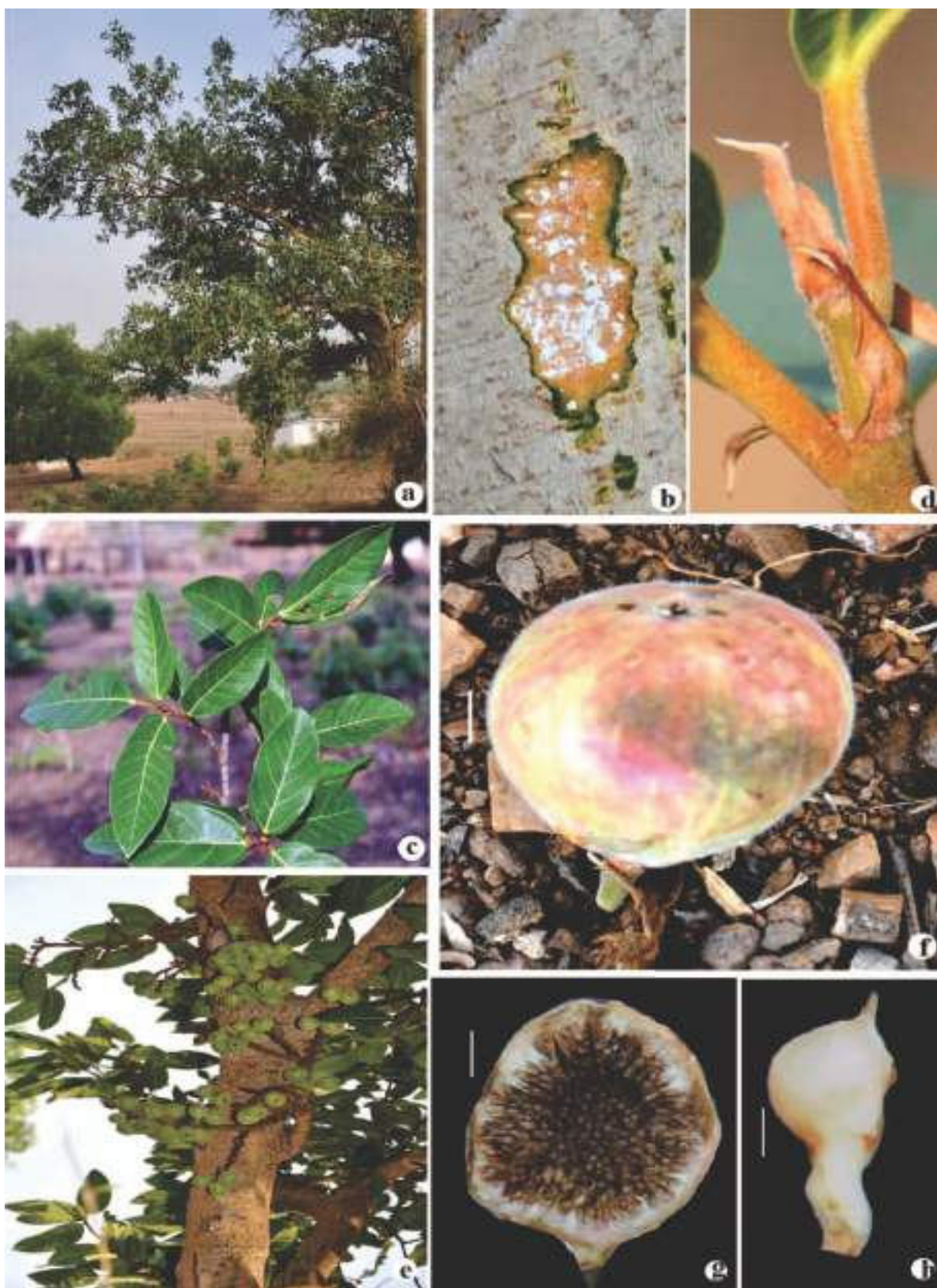
Field notes : Usaully found in waste lands and boundaries of the fields.

Status : Common.

Distribution : **India :** Andhra Pradesh, Odisha, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Rajasthan, Uttarakhand, Uttar Pradesh and **Madhya Pradesh :** Chhatarpur, Damoh, Dhar, Seoni, Balaghat and Mandla

Uses : The figs are edible.





Ficus racemosa L. a. Habit; b. Bark; c. Twig; d. Stipules; e.-f. Figs; g. L.s. of fig; h. Female flower.

19. Ficus racemosa L.

Diagnostic features : Tree, up to 32 m tall, monoecious, not epiphytes; aerial root absent or few. Leafy twigs solid, grey, hairy, cylindrical. Bark grey to reddish-brwon, scaly. Stipule ovate-lanceolate or linear-lanceolate, 0.4-2 cm long, puberulous, glabrous beneath, caducous. Leaves alternate; petiole 1-7 cm long, puberulous or glabrous; lamina ovate to elliptic, oblong to lanceolate, 5-18 x 1-8 cm, subcoriaceous, light to dark green, shining above, pale dotted beneath, puberulous, scaberulous above. Figs culiflorous, on trunk from base to top and on branches, in clusters on up to 20 cm long racemes, racemes branched or unbranched, rarely axillary, pedunculate; receptacle (fig body) subglobose to subpyriform, 1-5 cm in diameter, turning light green to pink, red, orange when ripe. Achenes ellipsoid, ovoid, 0.5-1.5 mm in diameter, surface polygonal structure..

Flowering and fruiting: Throughout the year.

Local name: Gular, Umar, Doomar, Umbar, Toya, Tuey.

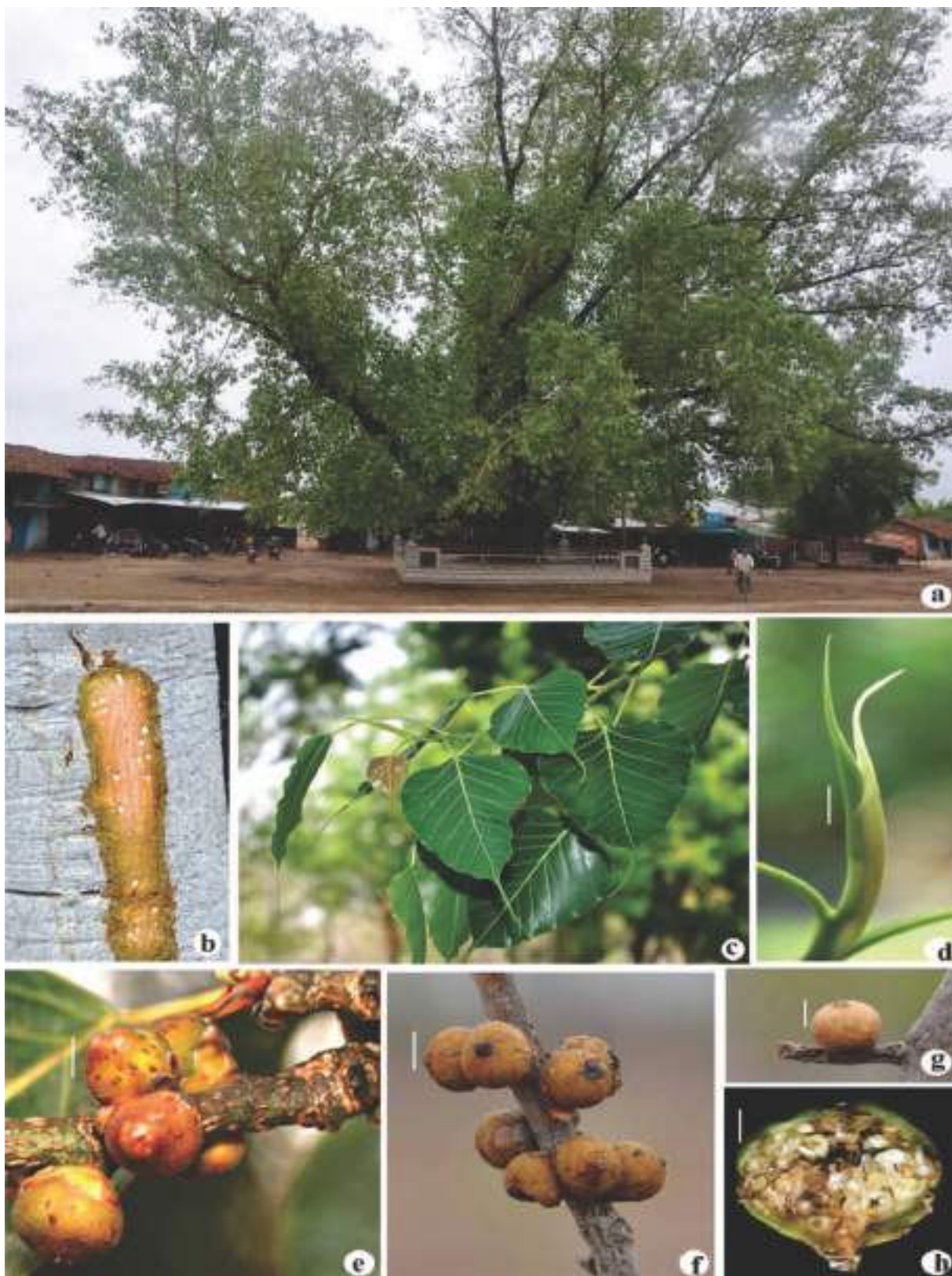
Field notes: In waste lands and mixed forests, on the bank of drains and rivers.

Status: Common.

Distribution : **India :** Throughout Eastern Ghats and India and **Madhya Pradesh :** Throughout the state.

Uses : It is a sacred plants , commonly grown in temple, figs are edible and the leaves are used as fodder.





***Ficus religiosa* L.** a. Habit; b. Bark; c. Twig; d. Stipule; e.-f. Figs; g. Single fig; h. L.s. of fig. .

20. *Ficus religiosa* L.

Diagnostic features : Tree, up to 28 m tall, monoecious, epiphytes; aerial root absent or few. Bark grey or ash color. Stipule ovate-lanceolate or subulate, 0.5-2.3 cm long, puberulous, caducous. Leaves alternate; petiole 7-12 cm long, glabrous; lamina broadly ovate to suborbicular to cordiform, 6-30 x 4-18 cm, apex caudate with 4-10 cm long, linear to lanceolate tail, dark green above, pale beneath, glabrous on both surface. Figs paired or clustered at end of branchlets, rarely solitary, axillary, sessile; receptacle (fig body) globose to suglobose, 0.6-1.4 cm in diameter, turning from green to purple to black when ripe. Achenes ovoid, ellipsoid or obovoid, 0.5-1 mm in diameter, with persistent style, surface smooth or striate.

Flowering and fruiting : March-October.

Local name: Peepal, Pipar, Ali, Pipal, Peepri.

Field notes : On roadsides in fields, villages and sometimes in forests.

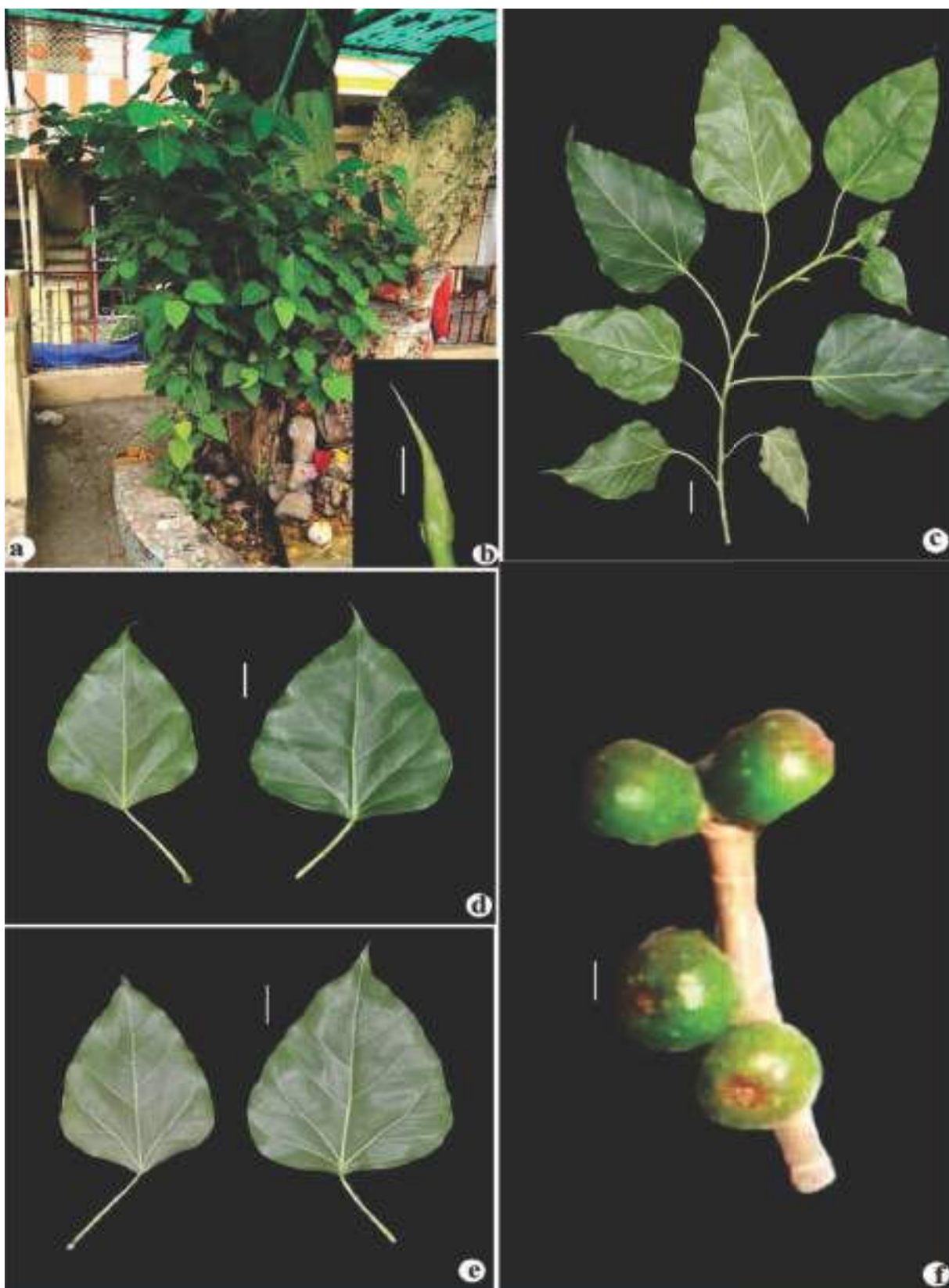
Status : Common.

Distribution : **India :** Throughout Eastern Ghats and India and **Madhya Pradesh :** Throughout the state.

Uses : It is a sacred, religious plant, commonly seen in temple, and the leaves are used as fodder.

Notes : There is never uprooted or damaged even when it grows on the walls of houses.





Ficus rumphii Blume a. Habit; b. Stipule; c. Twig; d-e. Leaf upper & lower surface; f. Figs. (f. Image, Source : J.V. Sudakar)

21. *Ficus rumphii* Blume

Diagnostic features : A medium sized and large tree up to 24 m tall, monoecious, epiphytes or terrestrial, embracing other trees trunks; aerial root absent. Bark yellowish to dark brown. Stipule elongated to ovate, 2-3 cm long, glabrous, caducous. Leaves alternate; petiole 4-10 cm long, slender, glabrous, grooved; lamina ovate, broadly ovate to elliptic, 7-16 x 5-10 cm, apex acuminate, dark green, shining above, young foliage red, glabrous both surface. Figs paired, axillary or below the leaves on leaf scars, sessile; receptacle (fig body) globose to subglobose, 1-2 cm in diameter, whitish or pale green with white spots when young, turning yellow to purple to black when marure. Achenes ovoid or ellipsoid, 0.5-1 mm in diameter, mucilaginous, surface reticulate, tuberculate.

Flowering and fruiting : September - June.

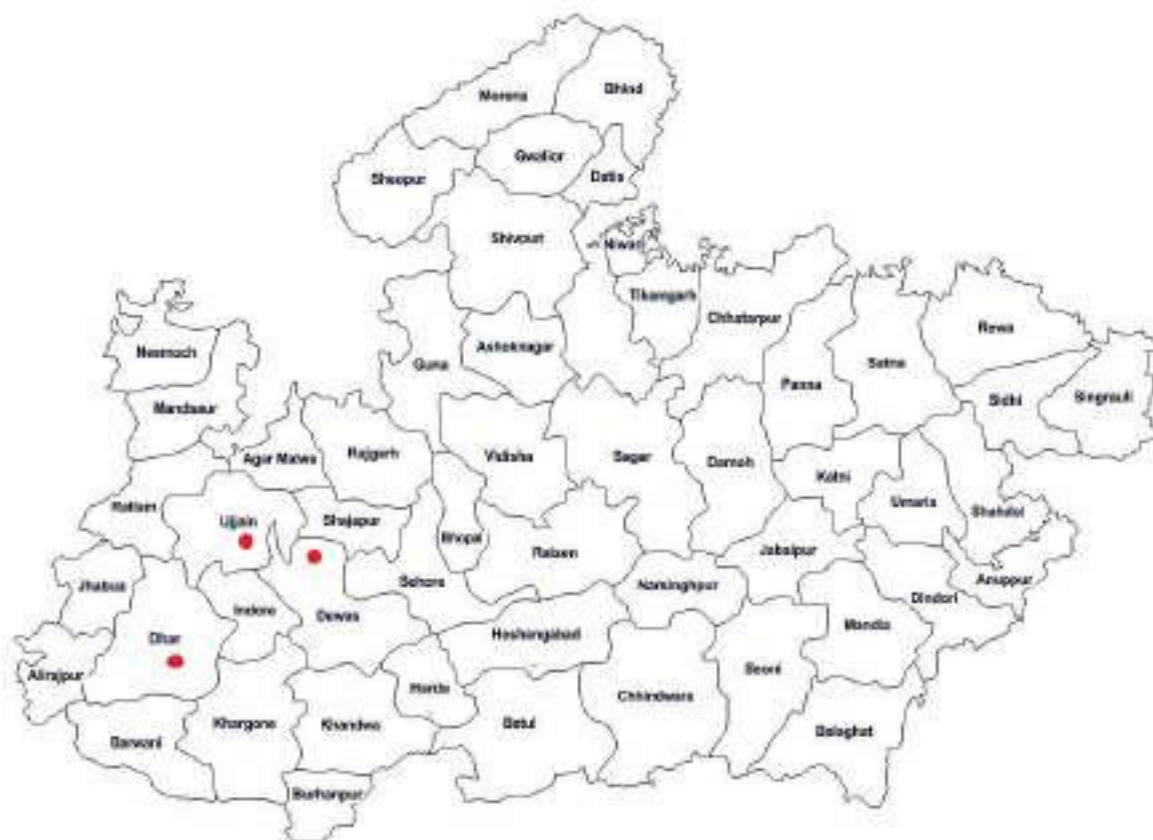
Local name: Pilkhan, Palakh.

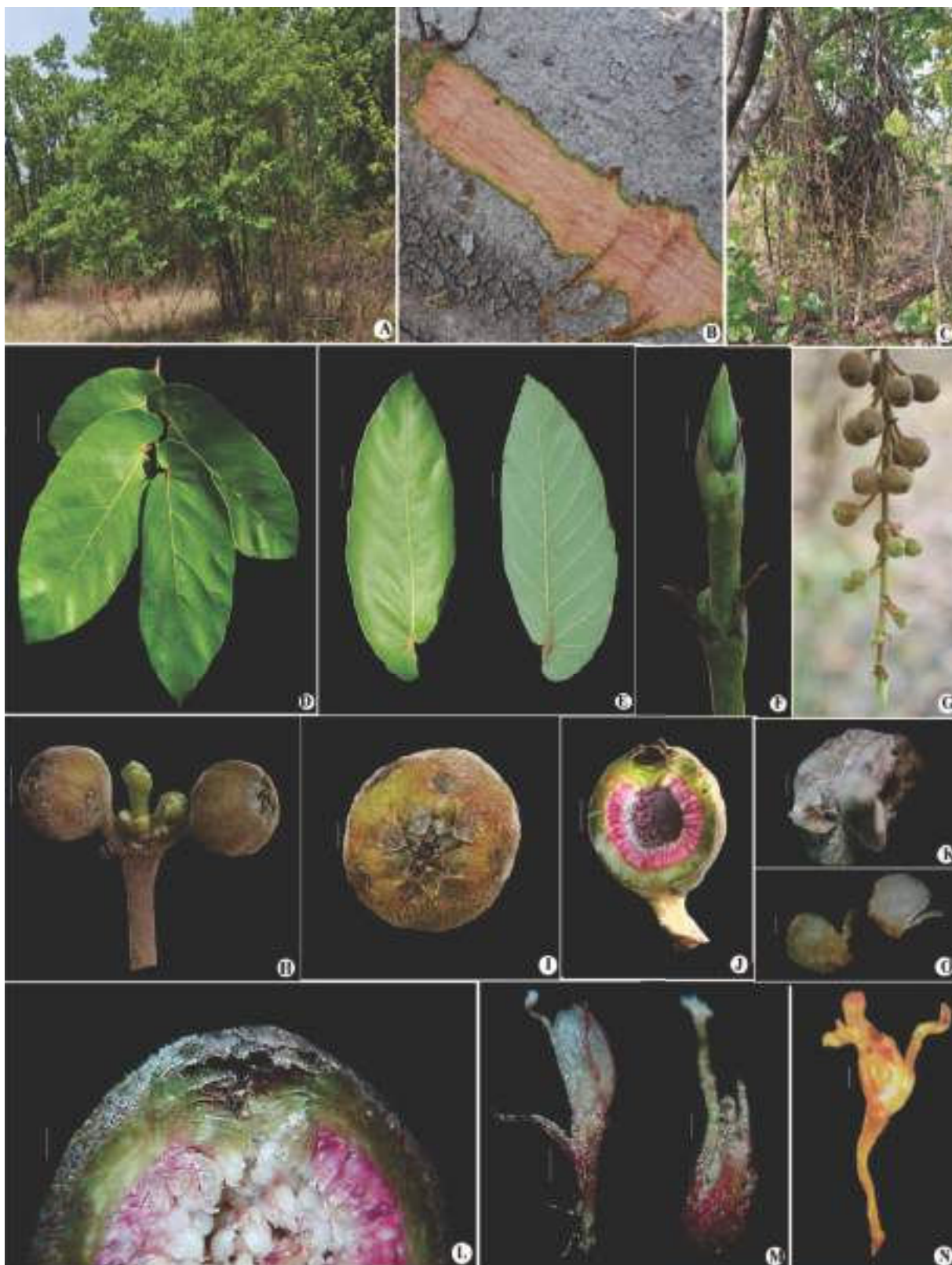
Field notes : On roadsides.

Status : Rare.

Distribution : India : Andhra Pradesh, Odisha, Andaman & Nicobar Islands, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Rajashthan, Uttar Pradesh and West Bengal and **Madhya Pradesh :** Ujjain, Dhar and Dewas.

Uses : The leaves are used as fodder for cattle.





Ficus semicordata Buch.-Ham. ex Sm. a. Habit; b. Bark; c. Flagilliflorous branches; d. Twig; e. Leaf upper & lower surface; f. Stipule;g. Hanging fig; h. Figs; i. Apical bract; j. L.s. of Fig; k. Basal bract; l. Ostiole; m. Female flower; n. Male flower; o. Achene.

22. *Ficus semicordata* Buch.- Ham. ex Sm.

Diagnostic features : Small or medium sized tree, up to 15 m tall, dioecious, ; aerial root absent. Leafy twigs 0.5- 0.7 mm in diameter, white, brown to whitish, puberulous. Bark brown, darkish grey or reddish, rough. Stipule linear-lanceolate, 1-2 cm long, puberulous, brown, caducous. Leaves alternate; petiole 0.5-2 cm long, pubescent or hispid, brown; lamina variable, oblong, lanceolate to elliptic, 8-33 x 3-11 cm, base semi-cordate or semi-sagittate, with subrotund lobe, scabrous, hispidulous above, pubescent beneath, dark green above, pale beneath. Figs axillary, mostly caulliflorous on leafless branches hanging from the main branches or flagelliflorous, on up to 2 m long stolon, pedicellate; receptacle (fig body) globose, 1.5-2 cm in diameter, whitish to pale green with white dots or reddish to red brown. Achenes ovoid or ellipsoid, 1-1.5 mm in diameter, viscid, surface verrucate.

Flowering and fruiting: Throughout the year.

Local name: Ghei, Ghawi, Korelawa, Bhuin doomar, Dumba, Bhuin gular.

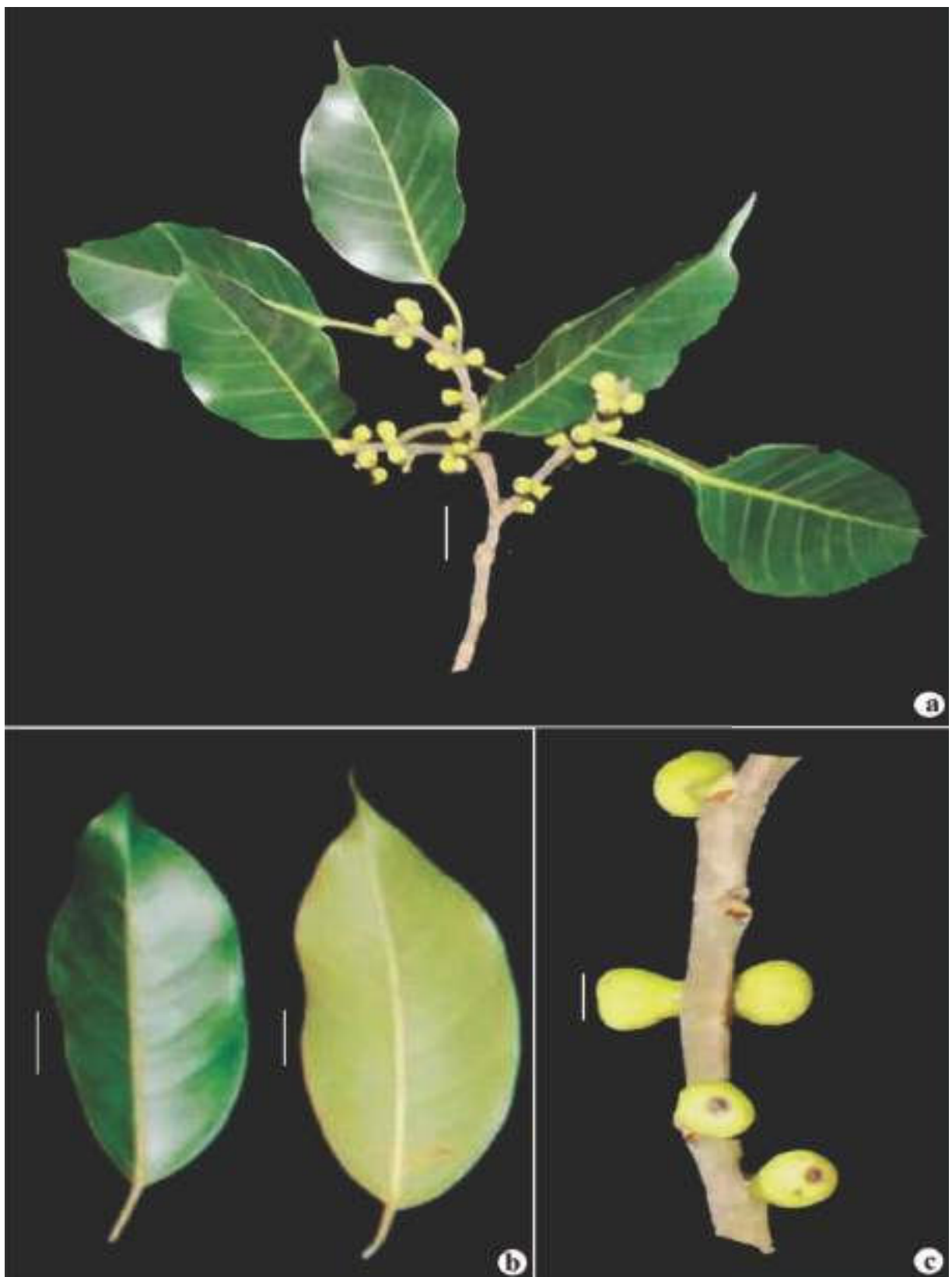
Field notes : In mixed forests, on hill slopes and along drains.

Status: Rare.

Distribution : **India :** Andhra Pradesh, Odisha, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Maharashtra, Uttar Pradesh and West Bengal and **Madhya Pradesh :** Mandla, Alirajpur, Shahdol and Sidhi.

Uses: The figs are edible.





Ficus talboti King a. Fruiting twig; b. Leaf upper & lower surface; c. Figs.
(Source : J.V. Sudakar)

23. *Ficus talboti* King

Diagnostic features : Tree, up to 20 m tall, monoecious, aerial root present. Leafy twigs 0.5- 0.7 mm in diameter, white to yellow, angular, glabrous. Bark pale whitish or yellowish, smooth. Stipule ovate-lanceolate, 2-5 mm long, persistent. Leaves alternate; petiole 2-3 cm long, glabrous, greenish to brown; lamina elliptic to ovate or oblong, 5-12 x 3-6 cm, apex caudate acuminate, acumen 1-2 cm long, dark green above, pale beneath, glabrous both surfaces. Figs in pairs or 3 or 4, rarely solitary, axillary, clustered below the leaves, sessile; receptacle (fig body) obovoid, obconical or subglobose, 4-8 mm in diameter, greenish yellow or with brown dots on mature. Achenes ovoid or obovoid, 0.5-1 mm in diameter, white or brown, surface tuberculate.

Flowering and fruiting: September - March.

Local name: Nil.

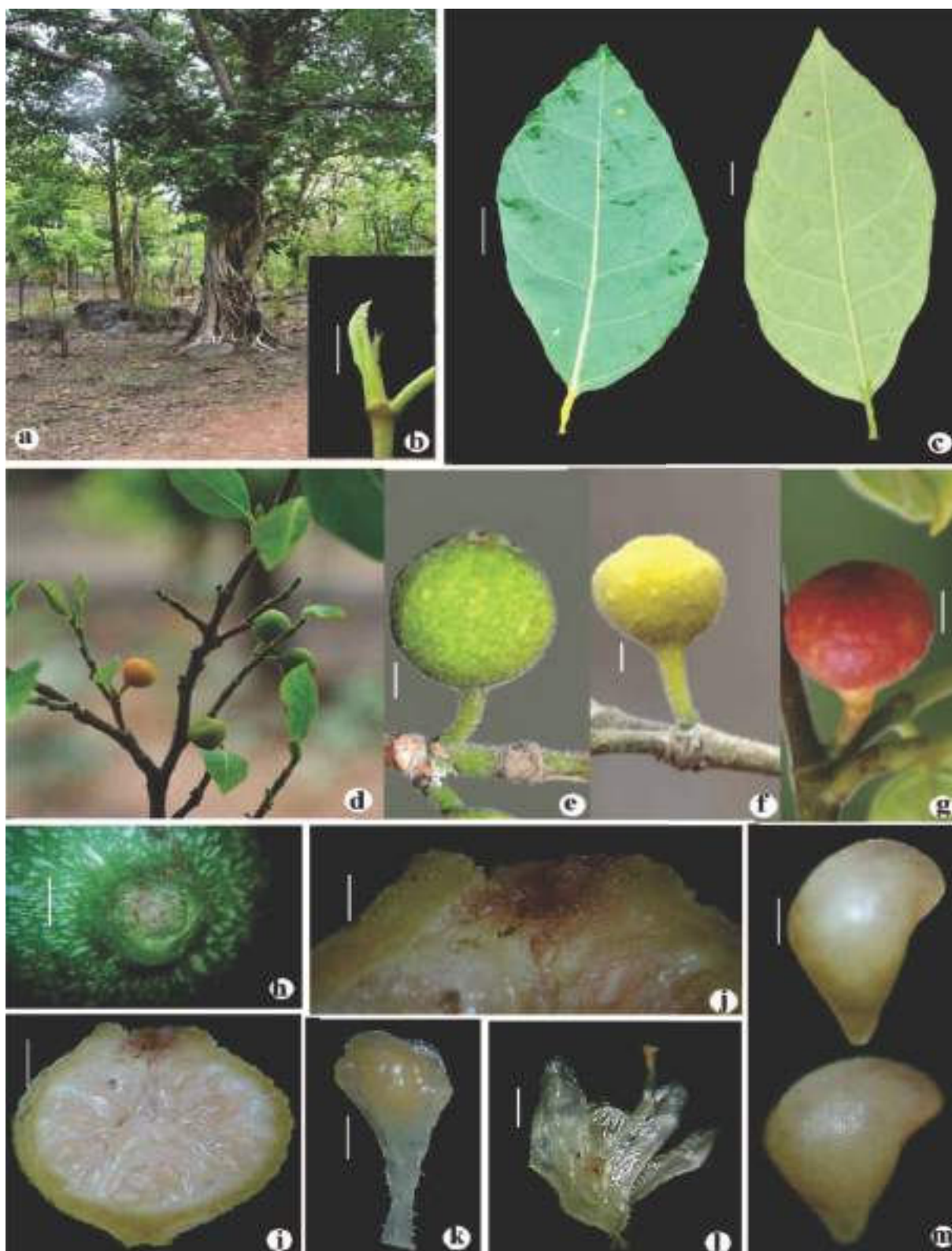
Field notes: Along drains and on rocks.

Status: Rare.

Distribution : **India :** Andhra Pradesh, Tamil Nadu, Goa, Karnataka, Kerala, Maharashtra and West Bengal and **Madhya Pradesh:** Jabua.

Uses: Leaves are used as cattle fodder.





Ficus tinctoria G. Forster subsp. ***gibbosa*** (Blume) Comer, a. Habit; b. stipule; c. Leaf upper & lower surface; d.-e.-f.-g. Figs; h. Apical bract; i. L.s. of fig; j. Ostiole; k. Gall flower; l. Female flower; m. Achene.

24. *Ficus tinctoria* G. Forster subsp. *gibbosa* (Blume) Corner

Diagnostic features : Climbing bushy shrubs or small tree, up to 8 m tall, hemi-epiphytic, embracing the trunks of host plants forming network of branches (basketing) or creeping on rocks; dioecious; aerial roots absent. Leafy twigs, brownish, cylindrical, glabrous. Bark greenish-yellow, brownish-grey. Stipule terminal or axillary, lanceolate or ovate-lanceolate, 0.3-1 cm long, glabrous or puberulous, caducous. Leaves alternate; petiole 1-3 cm long, slender, glabrous; lamina variable rhomboid to subrhomboid, ovate to elliptic, 3-15 x 2-10 cm, coriaceous, gibbose, scabrous, glabrous both surface. Figs in pairs, solitary or umbellate fascicles, axillary or just below the leaves, pedicellate; receptacle (fig body) globose to subglobose, pyriform, 0.3-1 cm in diameter, light to dark green, turning yellow to orange to red when ripe. Achenes ovoid or ellipsoid, 0.8-1 mm in diameter, surface minutely reticulate or papillose.

Flowering and fruiting : June - December.

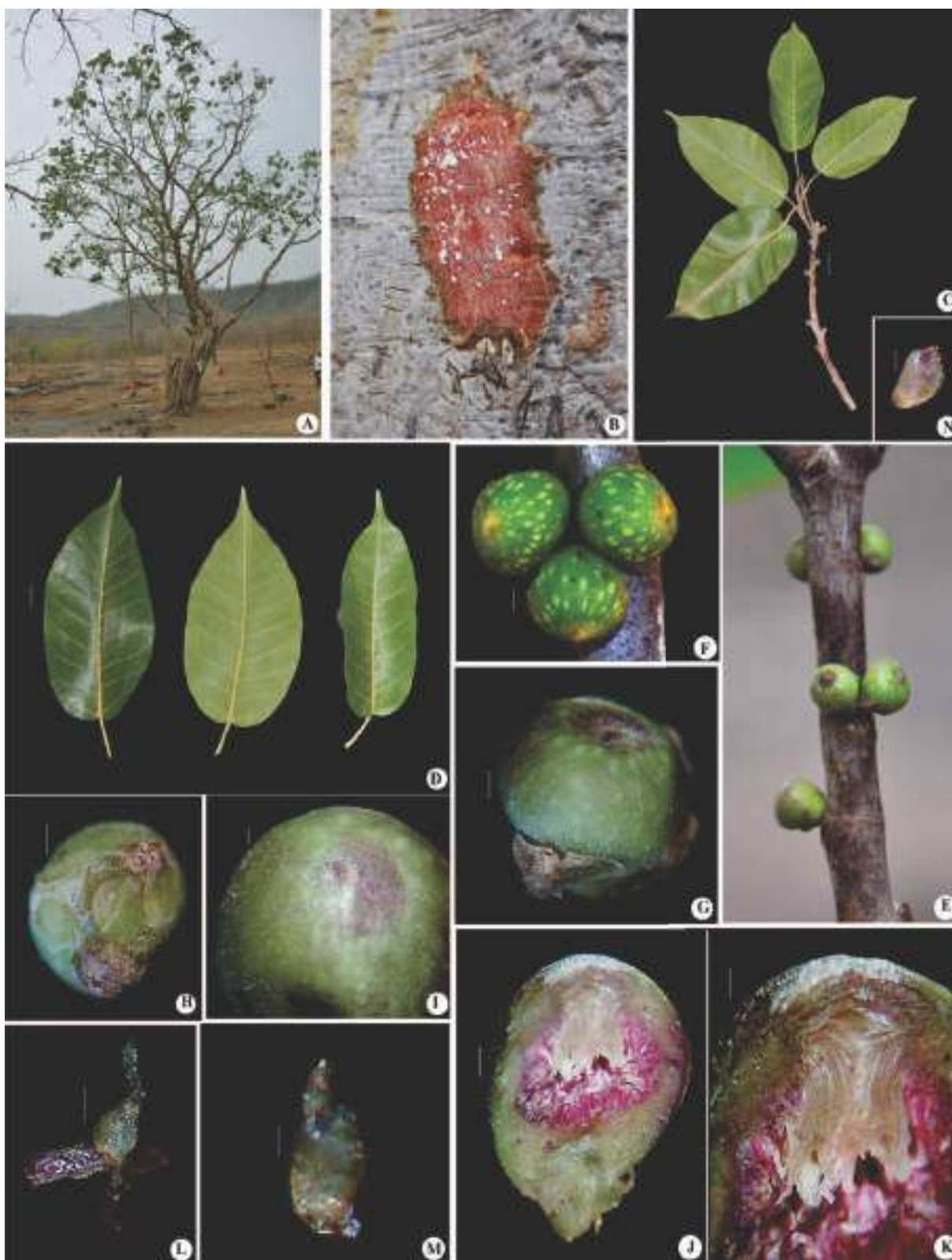
Local name: Gacchi, Gasti, Majni, Kama.

Field notes : In mixed and sal forests, on trees and rocks.

Status : Rare.

Distribution : India : Throughout Eastern Ghats and India and **Madhya Pradesh :** Hoshangabad, Rewa, Sidhi, Balaghat, Seoni, Betul, Chhindwara and Narsingpur.





Ficus tsjakela Burm. a. Habit; b. Bark; c. Twig; d. Leaf upper & lower surface; e.-f. Figs; g. Single fig; h. Basal bracts; i. Apical bract; j. L. s. of fig; k. Ostiole; l. Female flower; m. Gall Flower; n. Achene.

25. Ficus tsjakela Burm

Diagnostic features: Tree, up to 30 m tall, monoecious, early epiphytic, aerial root absent. Leafy twigs 0.5- 0.7 mm in diameter, brownish, angular, glabrous. Bark dark brown, inner bark red, rough. Stipule terminal, in pairs, smaller on resting buds, ovate-lanceolate, 0.5-1.2 mm long, brown to black, caducous. Leaves alternate; petiole 4-10 cm long, glabrous, glandular at apex beneath; lamina oblong to elliptic, sometimes ovate to lanceolate, 11-23 x 4-11 cm; coriaceous, dark green above, pal or olive green beneath. Figs in pairs or 4-6 clusters on tuberculate leafless branchlets, rarely solitary, axillary, sessile; receptacle (fig body) depressed globose or globose, 2-7 mm in diameter, greenish with white dots or white to yellowish with pale spots. Achenes ovoid, ellipsoid, 0.5-1 mm in diameter, white with red spot, surface smooth or minutely reticulate.

Flowering and fruiting: Almost throughout the year.

Local name: Pipri.

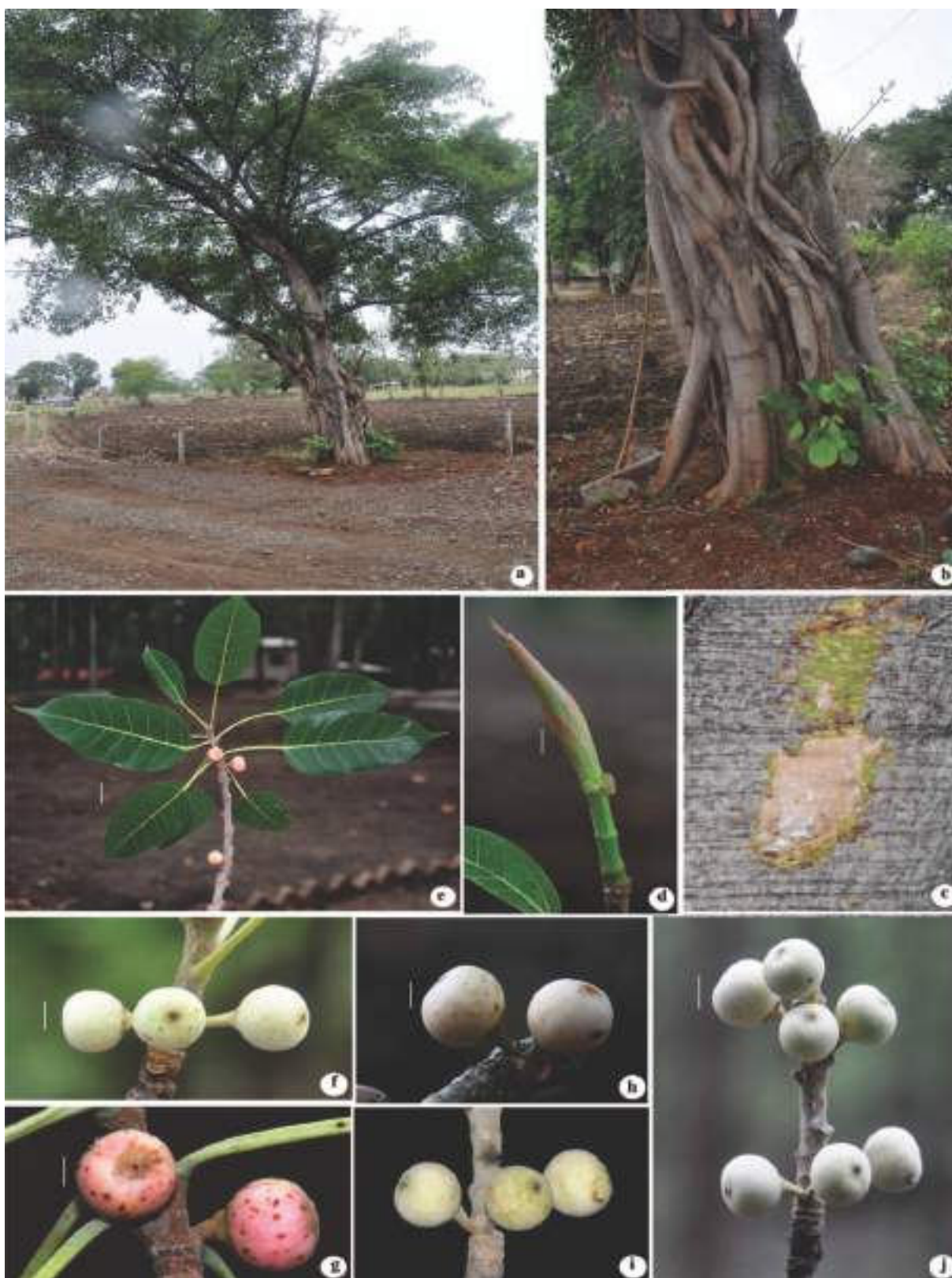
Field notes: In moist deciduous forest, hilly area and amidst rocks.

Status: Rare.

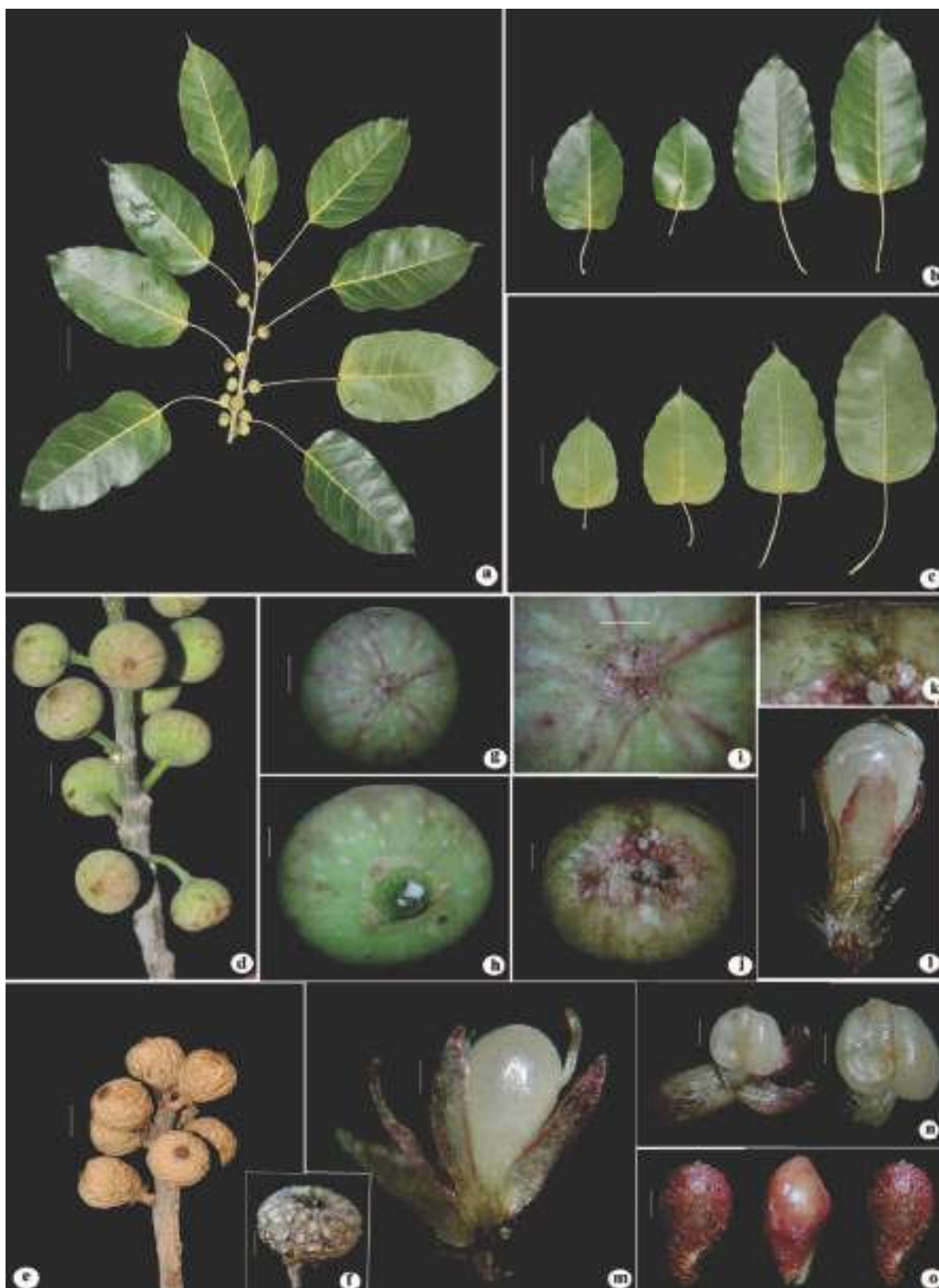
Distribution : **India :** Andhra Pradesh, Tamil Nadu and peninsular India and **Madhya Pradesh :** Sidhi and Khandwa.

Note: First time reported in Madhya Pradesh

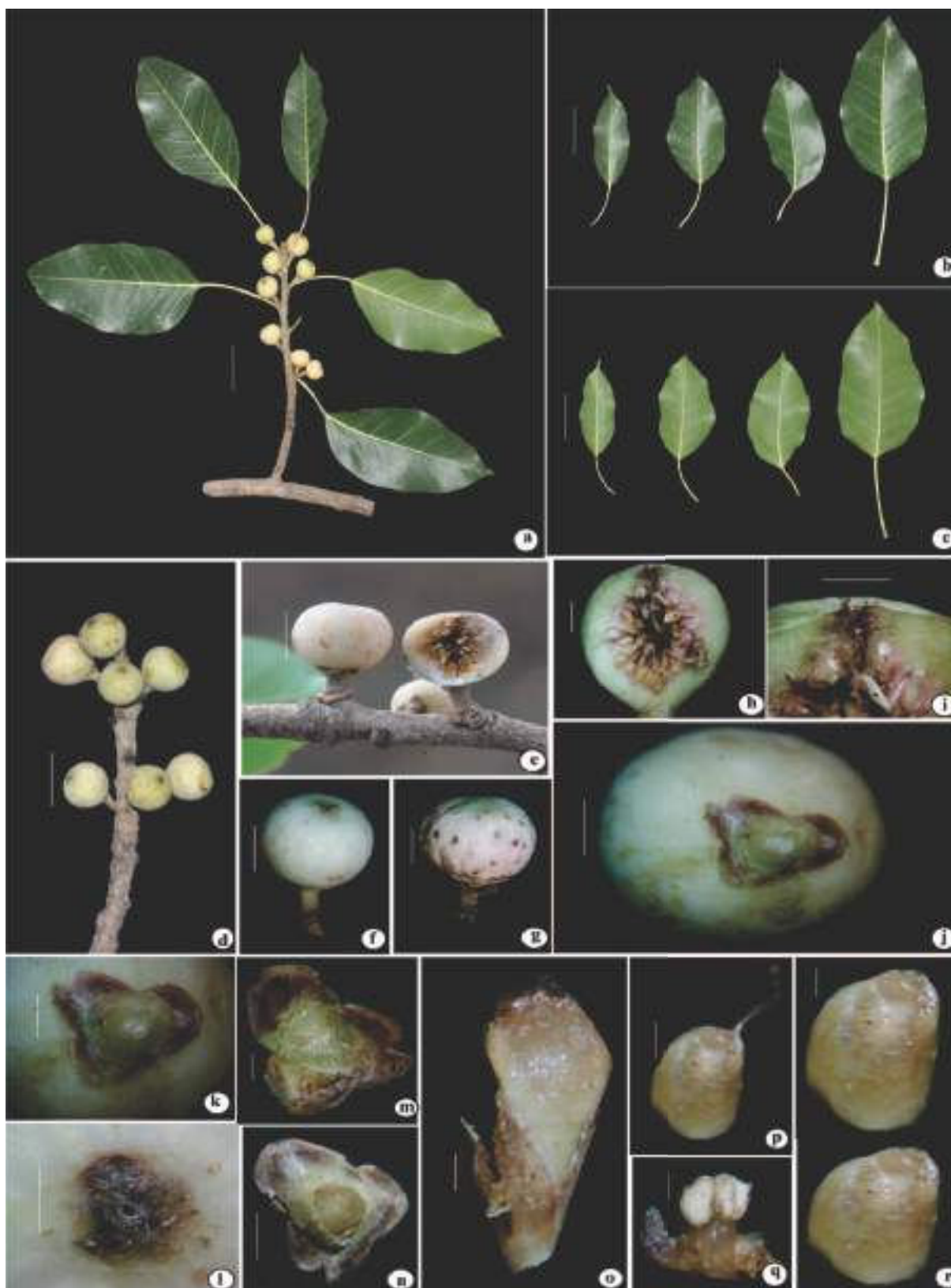




***Ficus virens* Aiton** a.-b. Habit; c. bark; d. Stipule; e. fructing twig; f.-g.-h.-i.-j. Figs color variation.



***Ficus virens* Aiton** a. Fruiting twig; b.-c. Leaf upper & lower surface; d. Figs; e.-f. Dry figs; g.-i. Apical bracts; h. Basal bracts; j. L.s. of fig; k. Ostiole; l. Female flower; m. Gall flower; n. Male flower; o. Achenes.



Ficus virens Aiton a. Fruiting twig; b.-c. Leaf upper & lower surface; d.-e. Figs; f.-g. Single fig; h. L.s. of fig; i. Ostiole; j.-k.-m.-n. Basal bracts; l. Apical bracts; o. Female flower; p. Gall Flower; q. Male flower; r. Achenes.

26. *Ficus virens* Aiton

Diagnostic features : Large tree, up to 40 m tall, monoecious, early epiphytic, widely spreading and fast growing, aerial root absent or few. Leafy twigs brownish, cylindrical, glabrous. Bark grey or brownish, smooth. Stipule broadly ovate, 0.3-1 cm long (3-7 cm in opening shoot), pubescent to glabrous, caducous. Leaves alternate; petiole 2-10 cm long, striate when dry; lamina variable broadly ovate, ovate to oblong, elliptic to lanceolate, 5-15 x 3-9 cm, coriaceous, light green above, pale beneath, glabrous on both surface, younger leaves red to pink. Figs in pairs or solitary, axillary or just below the leaves, on spurs of old wood, pedunculate; receptacle (fig body) depressed on apex, globose to subglobose. 0.8-1 cm in diameter, white, green, pale white, pink or red or red dots, some times are turning from greenish to pink to purple to red and even black and maculate, wrinkled when dry. Achenes Ovoid, oblong, ellipsoid, 0.5-1 mm in diameter, whitish, reddish or brownish, surface smooth, reticulate..

Flowering and fruiting : November - June.

Local name: Pakhad, Pakhri, Peepri, Piprani.

Field notes : Along roadsides, river, streams bank and between rock boulders.

Status : Common.

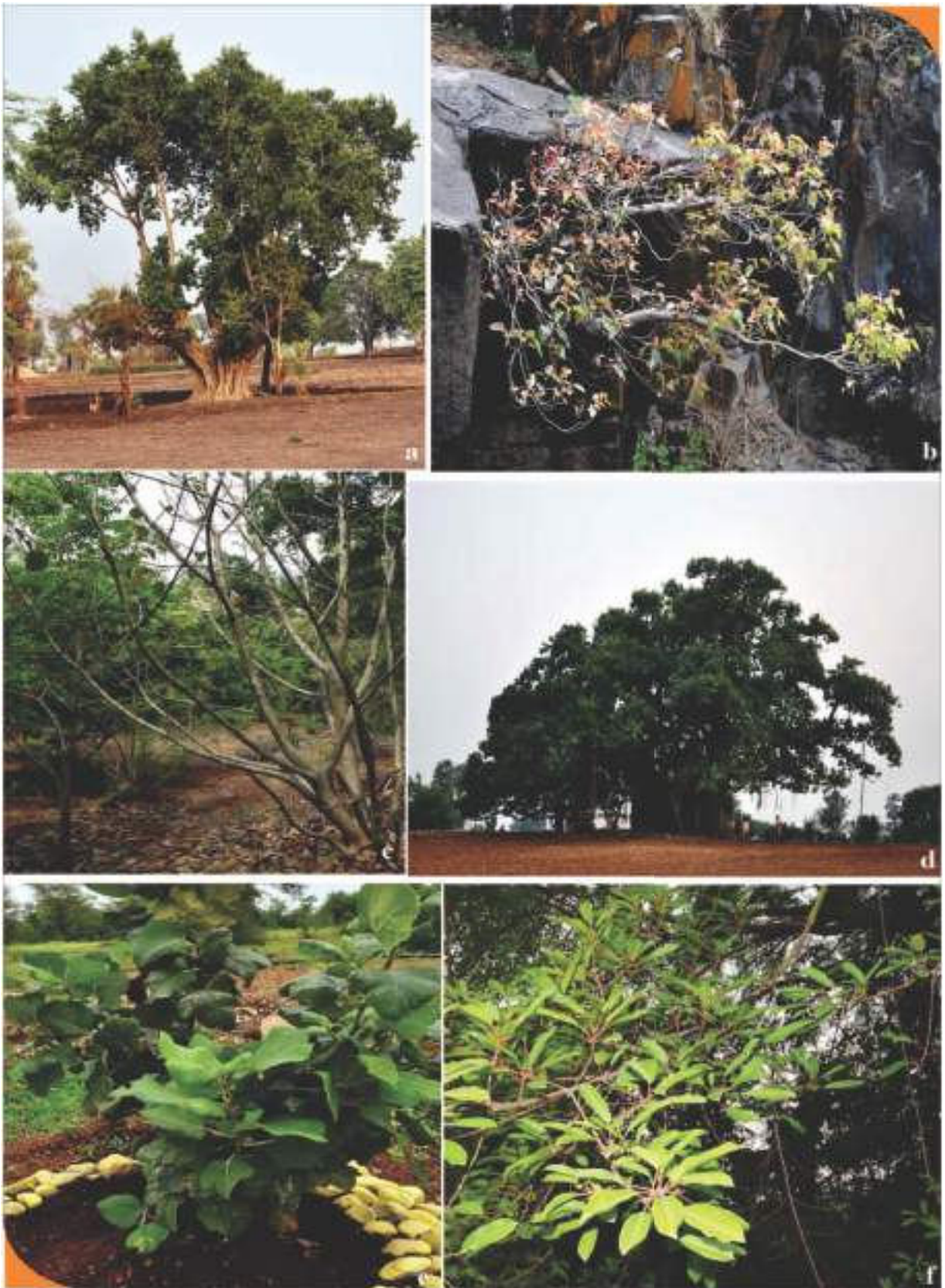
Distribution : **India :** Almost throughout Eastern Ghats and India and **Madhya Pradesh :** Balaghat, Chhatarpur, Damoh, Dhar, Hoshangabad, Indore, Jabalpur, Mandla, Panna, Satna, Seoni, Shivpuri, Narsingpur, Chhindwara and West Nimar.

Uses : Leaves and shoots are good fodder for cattle and ripe figs are edible.

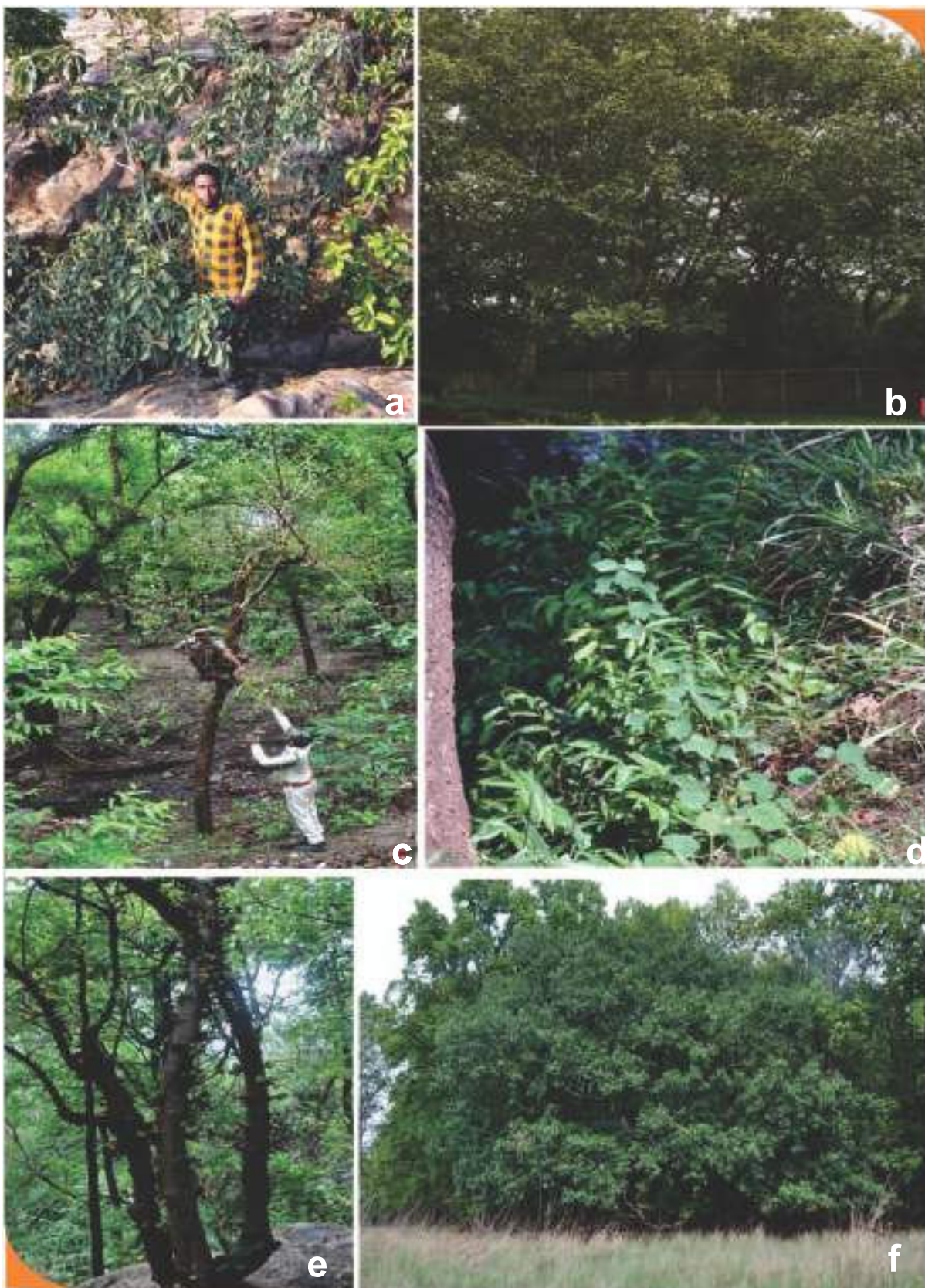
Notes : It is highly variable species, *Ficus virens* Aiton var. *glabella* (Blume) Corner and *Ficus virens* Aiton var. *virens* corner species are merged in *Ficus virens*.

Note : It is highly variable species.

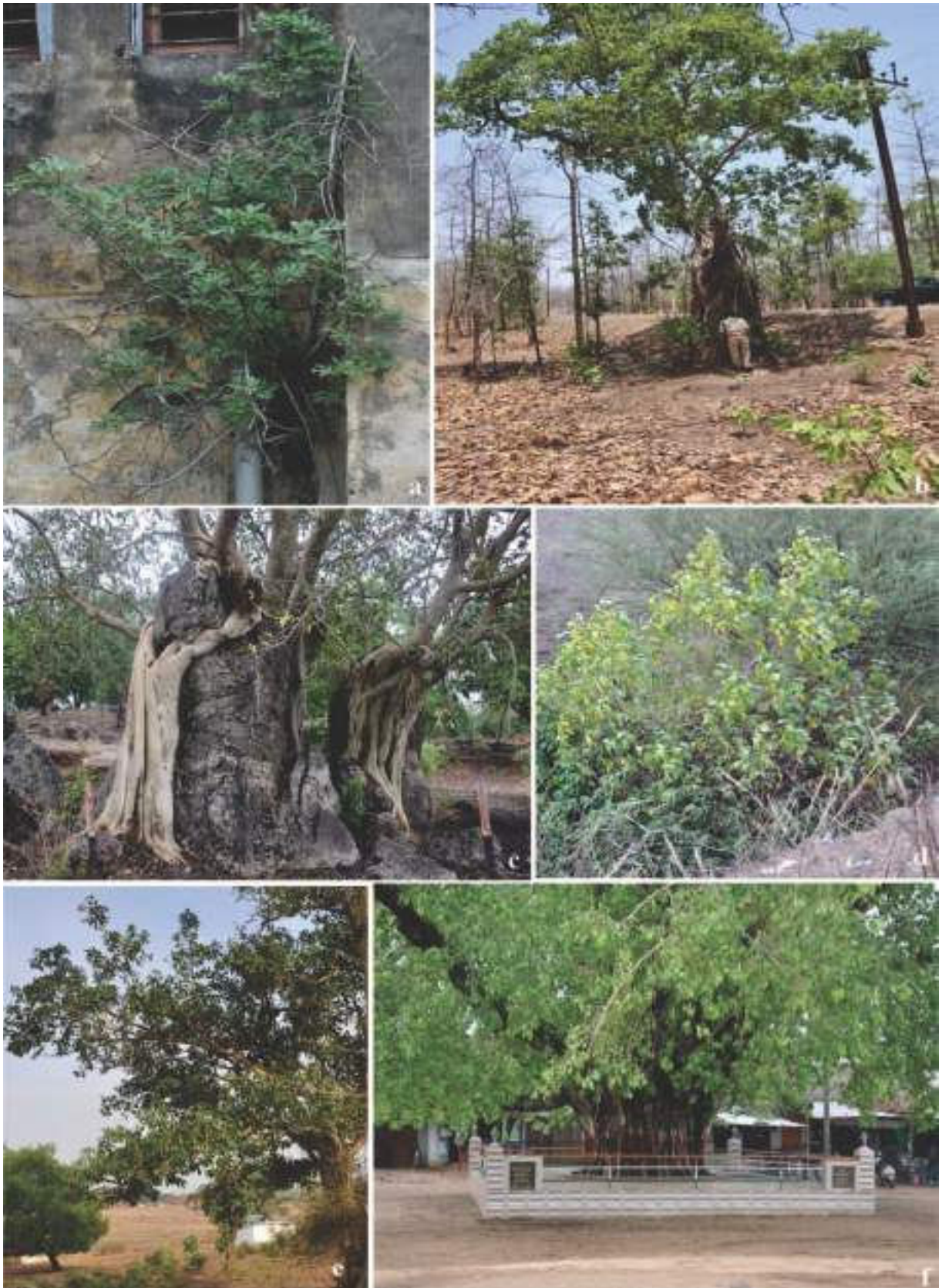




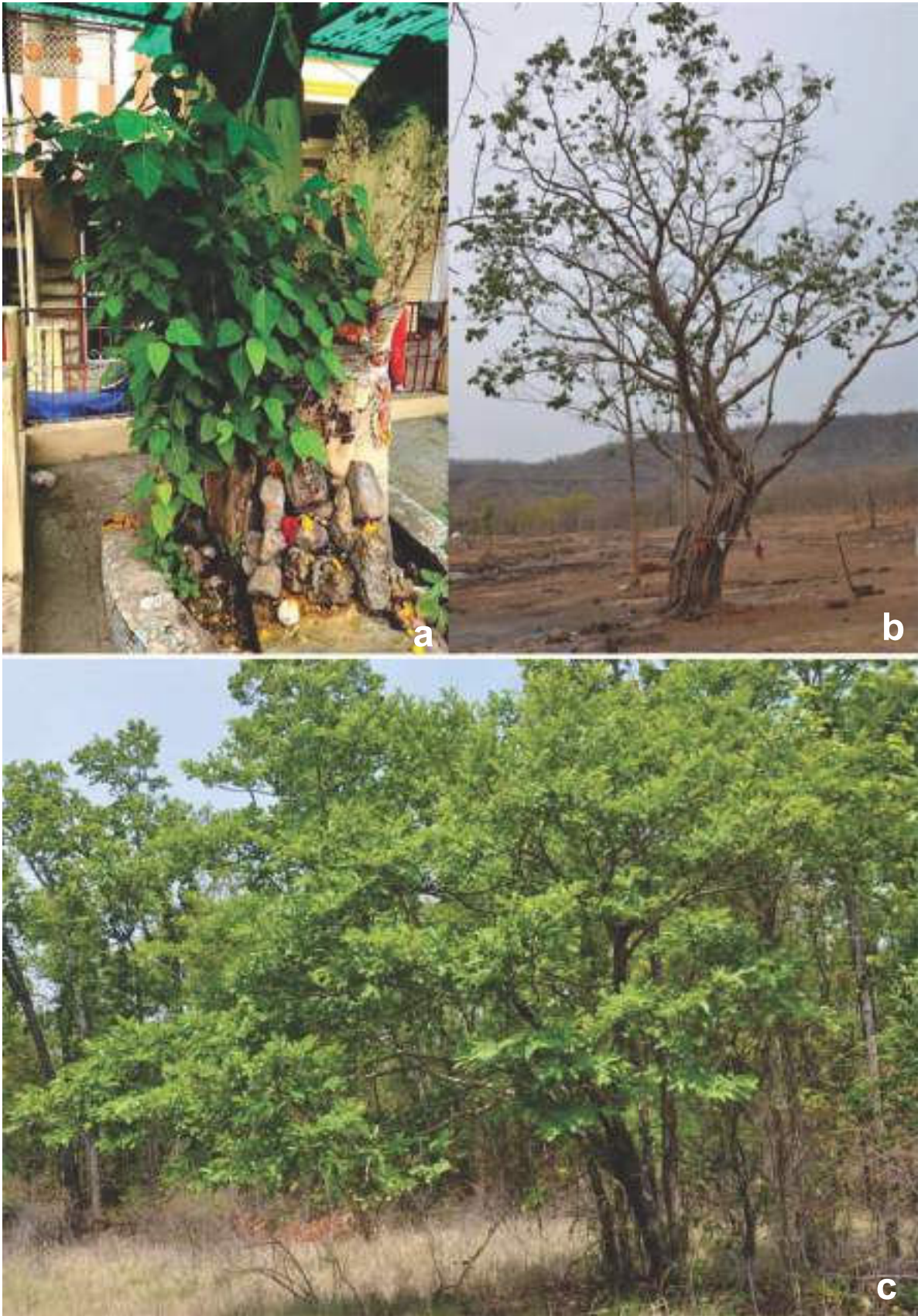
Habits : a. *Ficus amplissima*; b. *F. arnottiana*; c. *F. beddomei*; d. *F. benghalensis*;
E. *F. carica*; f. *F. caulocarpa*.



Habits : a. *Ficus cupulata*; b. *F. drupacea*; c. *F. exasperata*; d. *F. heterophylla*;
e. *F. hispida*; f. *F. microcarpa*.



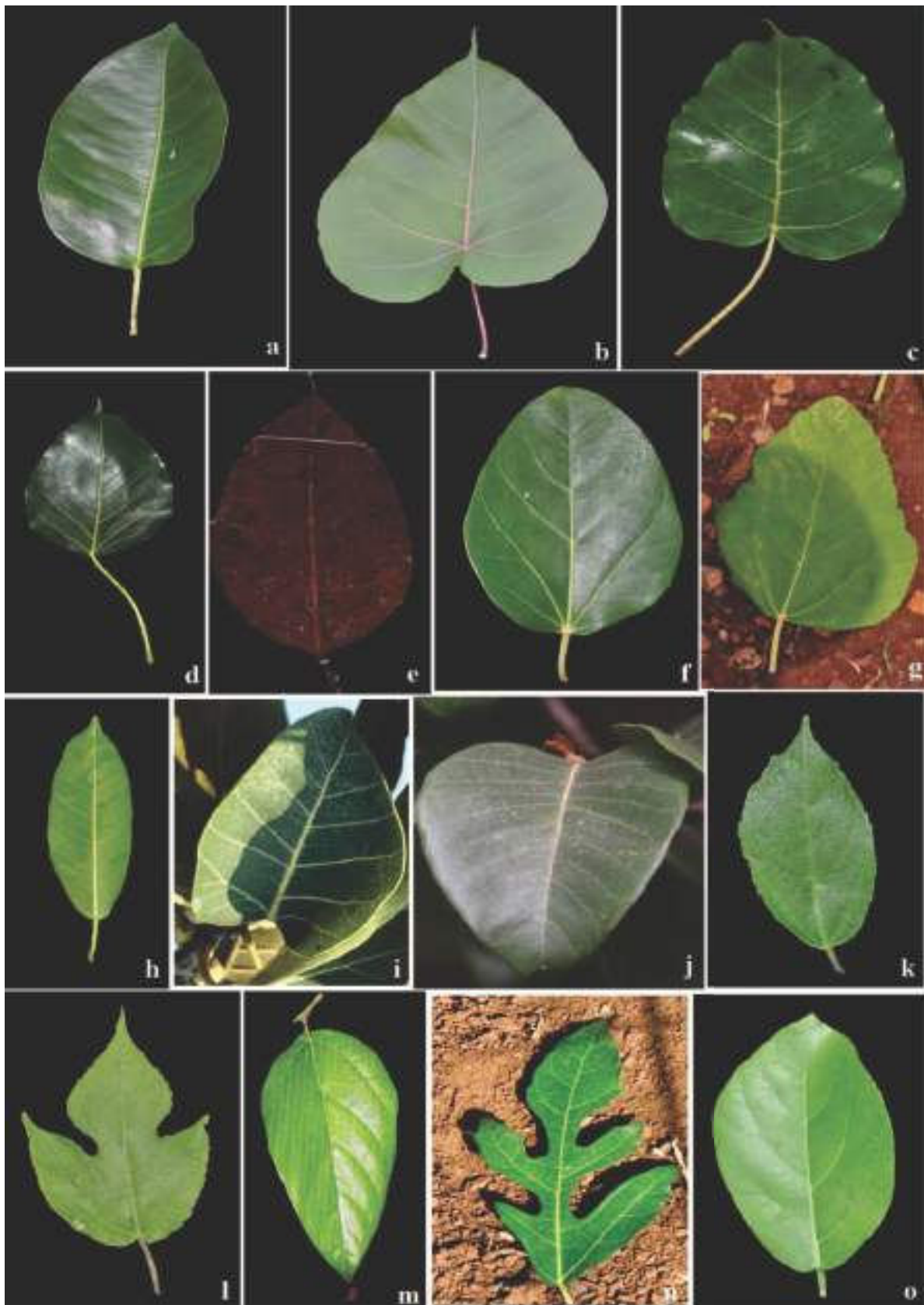
Habits : a. *Ficus johannis subsp. afghanistanica*; b. *F. lacor*; c. *F. mollis*;
d. *F. palmata subsp. virgata*; e. *F. racemosa*; f. *F. religiosa*.



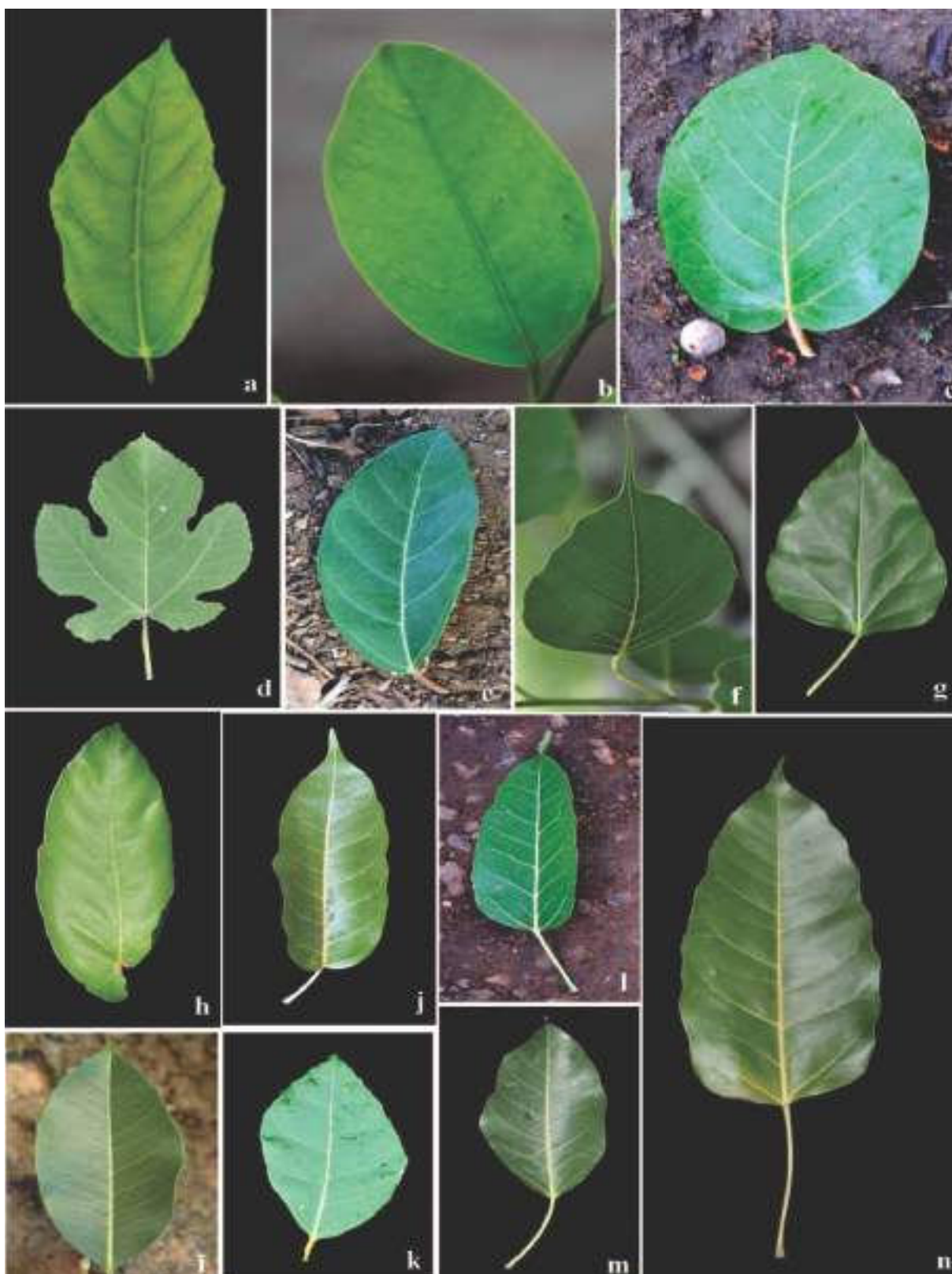
Habits : a. *Ficus rumphii*; b. *F. tsjakela*; c. *F. semicordata*.



Habits : a.-b. *Ficus tinctoria* subsp. *gibbosa*; c. *F. virens*.



Leaves : a. *Ficus amplissima*; b.-c.-d. *F. arnottiana*; e. *F. beddomei*; f. *F. benghalensis*; g. *F. carica*; h. *F. caulocarpa*; i. *F. cupulata*; j. *F. drupacea*; k.-l. *F. exasperata*; m. *F. hederacea*; n. *F. heterophylla*; o. *F. hispida*.



Leaves : a. *Ficus lanceolata*; b. *F. microcarpa*; c. *F. mollis*; d. *F. palmata*; e. *F. racemosa* subsp. *virgata*; f. *F. religiosa*; g. *F. rumphii*; h. *F. semicordata*; i. *F. talboti*; j. *F. tsjakela*; k. *F. tinctoria* subsp. *gibbosa*; l.-m.-n. *F. virens*.



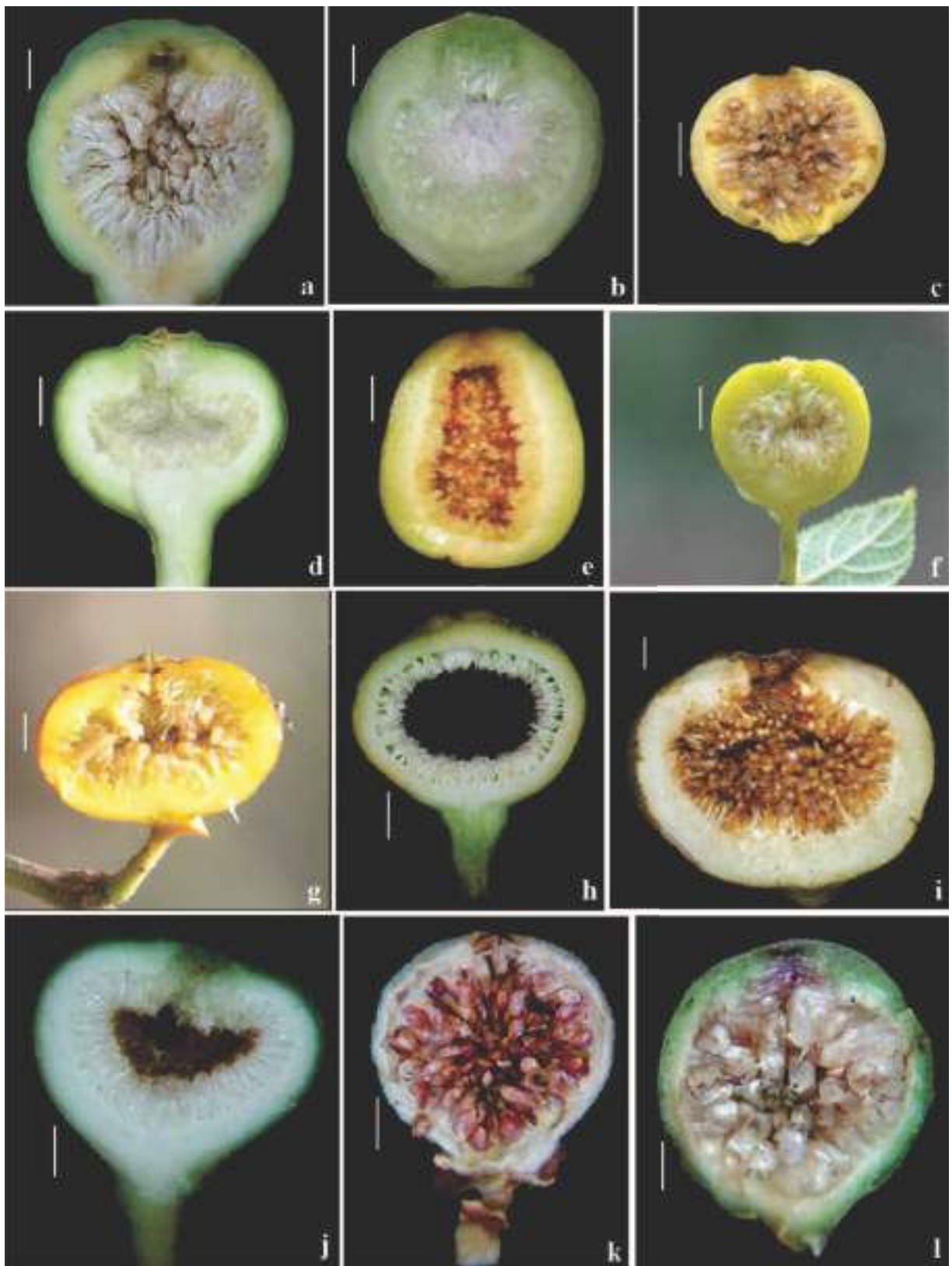
Stipules : a. *Ficus amplissima*; b. *F. arnottiana*; c. *F. benghalensis*; d. *F. carica*; e. *F. drupacea*; f. *F. exasperata*; g. *F. heterophylla*; h. *F. hispida*; i. *F. Johannis* subsp. *afghanistanica*; j. *F. lacor*; k. *F. microcarpa*; l. *F. mollis*; m. *F. palmata* subsp. *virgata*; n. *F. racemosa*; o. *F. religiosa*; p. *F. rumphii*; q. *F. semicordata*; r. *F. tsjakela*; s. *F. tinctoria* subsp. *gibbosa*; t. *F. virens*.



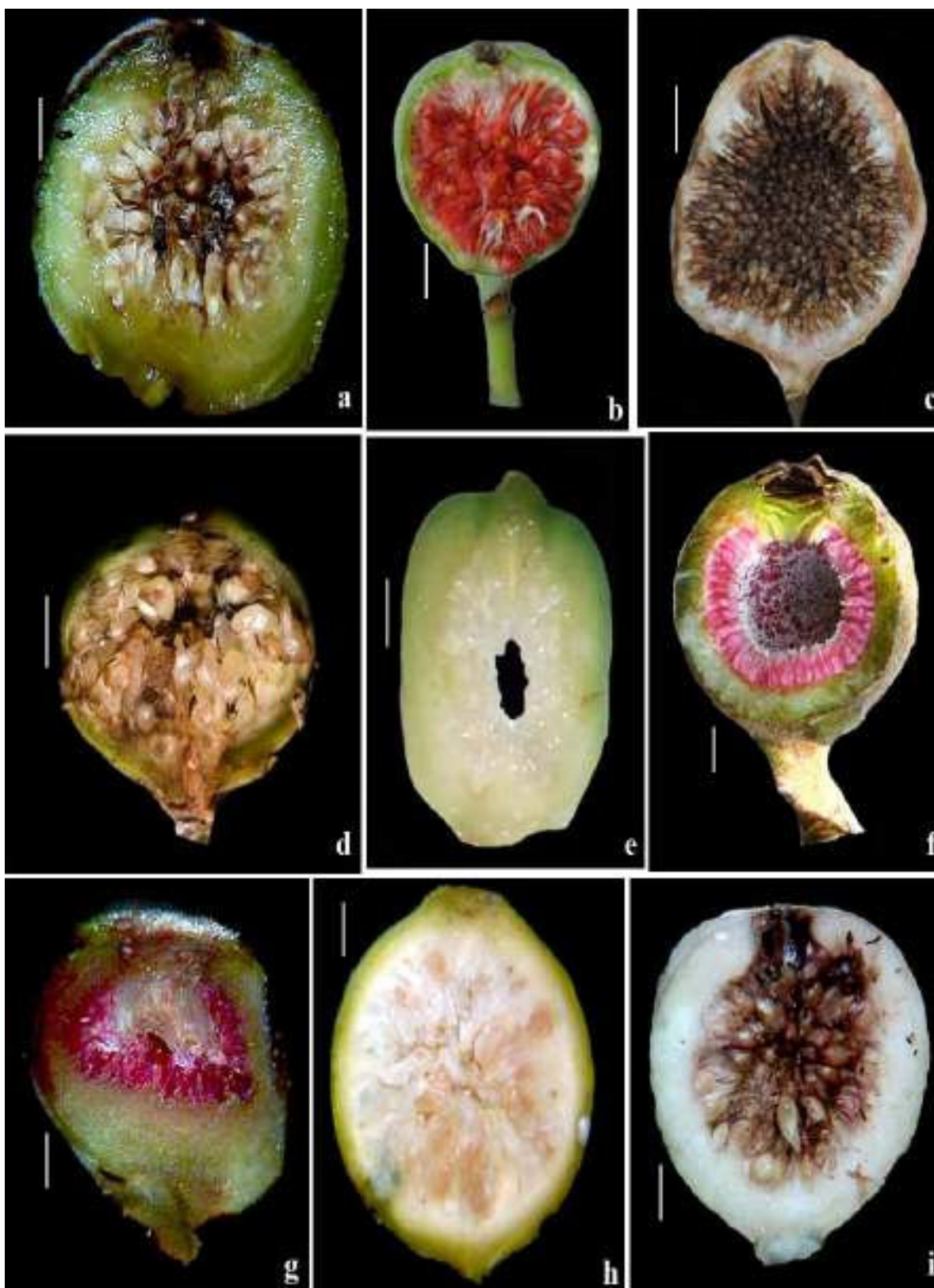
Figs : a. *Ficus amplissima*; b. *F. arnottiana*; c. *F. beddomei*; d. *F. drupacea*; e. *F. carica*; f. *F. caulocarpa*; g. *F. cupulata*; h. *F. drupacea*; i-j. *F. exasperata*; k. *F. heterophylla*; l. *F. hispida*.



Figs : a. *Ficus microcarpa*; b. *F. mollis*; c. *F. palmata* subsp. *virgata*; d. *F. racemosa*; e. *F. religiosa*; f. *F. rumphii*; g. *F. semicordata*; h. *F. talboti*; i. *F. tsjakela*; j. *F. tinctoria* subsp. *gibbosa*; k. *F. virens*.



L.S. of figs : a. *Ficus amplissima*; b. *F. arnottiana*; c. *F. benghalensis*; d. *F. carica*; e. *F. drupacea*; f. -g. *F. exasperata*; h. *F. heterophylla*; i. *F. hispida*; j. *F. johannis* subsp. *afghanistanica*; k. *F. lacor*; l. *F. microcarpa*.



L.s. of figs : a. *Ficus mollis*; b. *F. palmata* subsp. *virgata*; c. *F. racemosa*; d. *F. religiosa*; e. *F. rumphii*; f. *F. semicordata*; g. *F. tsjakela*; h. *F. tinctoria* subsp. *gibbosa*; i. *F. virens*.

List (Fig) Species of Madhya Pradesh

S. No.	Botanical Name / Local Name	Habit	Habitat	Flowering & Fruiting	Status	Uses					
						Ecological	Medicinal	Edible	Religious	Ornamental	Fodder
1	<i>Ficus amplissima</i> Sm./Pakad, Pipri, Piper, Pimpri, Jadi	Tree	Amidst rock boulders	Almost throughout the year	Common	+	+	-	-	+	+
2	<i>Ficus arnottiana</i> (Miq.) Miq./ Paras pipal, Gailani Kath peepal, Peepli	Tree	Amidst rock boulders and along the drains	Almost throughout the year	Occasional	+	-	-	-	+	+
3	<i>Ficus beddomei</i> King/Pakayan	Tree	In moist deciduous forest	July - January.	Rare	+	-	-	-	-	-
4	<i>Ficus benghalensis</i> L/Bad, Bar, Bargad, Bat, Bor, Vaddh, Baddh, Ambar.	Tree	Planted along roadsides and avenues	Throughout the year	Common	+	+	+	+	+	+
5	<i>Ficus carica</i> L./ Anjir	Tree	On roadsides and cultivated in gardens	January -October	Common	+	+	+	-	+	+
6	<i>Ficus caulocarpa</i> (Miq.) Miq.	Tree	Along streams	January -October	Rare	+	-	-	-	-	+
7	<i>Ficus cupulata</i> Hains/Pakhri, Akaibat	Tree	Amidst sandstone, rocks	February - August	Endemic	+	-	-	-	-	+
8	<i>Ficus drupacea</i> Thunb./ Pukar, Kappa	Tree	Along streams	Throughout the year	Rare	+	-	+	-	+	-
9	<i>Ficus exasperata</i> Vahl/ Karvat	Tree	Along streams	December - July	Rare	+	-	-	-	-	+
10	<i>Ficus hederacea</i> Roxb.	Scandent shrubs	Climbing on trees in forest	January - July	Rare	+	-	-	-	-	+

11	<i>Ficus heterophylla</i> L.f./ Bhui dumar	Scandent shrub	Along bank of river	December - June	Rare	+	-	+	-	-	+
12	<i>Ficus hispida</i> L./Bhui gular, Dauduri, Dumi	Tree	On roadsides, in fields	Throughout the year	Common	+	+	+	-	-	+
13	<i>Ficus johannis subsp. afghanistanica</i> Boiss/ Anjir	Shrub	Grown on old wall	September-January	Rare	+	+	+	-	-	-
14	<i>Ficus lacor</i> Buch.- Ham./ Piprani, Pakhri, Pakhari	Tree	Along roadsides	September-December	Rare	+	-	-	-	-	+
15	<i>Ficus lanceolata</i> Buch.-Ham.	Tree	On bank of drains	September-December	Rare	+	-	-	-	-	+
16	<i>Ficus microcarpa</i> L.f./Fan, Phefar, Paddi baddh, Tilman, Gadsai.	Tree	In rock crevices	March - October	Common	+	-	-	-	+	+
17	<i>Ficus mollis</i> Vahl/ Son pakhad, Katbar, Katbaddh, Chitkar	Tree	In rock crevices	Throughout the year	Common	+	-	-	-	-	+
18	<i>Ficus palmata subsp. virgata</i> Forssk./ Anjir, Jangli Anjir	Tree	Usually found in waste lands	March - November	Common	+	-	+	-	-	+
19	<i>Ficus racemosa</i> L./ Gular, Umar, Doomar, Toya, Tuey	Tree	On the bank of drains and river	Throughout the year	Common	+	+	+	+	-	+
20	<i>Ficus religiosa</i> L./Peepal, Pipar, Ali, Peepri	Tree	Along roadsides	March - October	Common	+	+	-	+	-	+
21	<i>Ficus rumphii</i> Blume/ Pilkhan, Palakh	Tree	Along roadsides	September-June	Rare	+	-	-	-	+	+
22	<i>Ficus semicordata</i> Buch.-Ham./ Ghei, ghawi, Korelawa, Bhui	Tree	In mixed forest	Throughout the year	Rare	+	+	+	-	-	+
23	<i>Ficus talboti King</i>	Tree	On bank of drains	September-March	Rare	+	-	-	-	-	+
24	<i>Ficus tinctoria</i> G. Forster subsp. <i>gibbosa</i>	Climbing shrub	On trees and rocks	June - December	Rare	+	-	-	-	-	+
25	<i>Ficus tsjakala</i> Burm. f.	Tree	Amidst rocks	Throughout the year	Rare	+	-	-	-	-	+
26	<i>Ficus virens</i> Dryander /Pakar	Tree	Along river	November - June	Common	+	+	-	-	+	+

Glossary

Achene - a small dry indehiscent one-seeded fruit.

Acuminate - a tapering point.

Aerial root - a root that originates on a branch.

Buttressed - refers to the tree trunks.

Caducous - a plant part that is shed early.

Cauliflorous - flower and fruits are borne on trunks and old branches.

Dioecious - with male and female flowers on different plants.

Epiphyte - a plant that germinates and grows on another plant.

Flagelliflorous - bearing flowers and fruits on the long, slender and pendulous shoots arising from tree trunk.

Gall flowers - the short-styled sterile flowers of the genus *Ficus*.

Globose - spherical in shape.

Heterophyllous - having different forms of leaves on the same plant.

Monoecious - having male and female on the same plant.

Peberulous - covered with minute soft erect hairs.

Pedicellate - flower with stalk.

Receptacle - the fleshy enlarged part on which the flowers are borne.

Sessile - without a stalk.

Tuberculate - with a knob-like projection.

Villous - with long, soft hairs.

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***Ficus benghalensis*, Kanha National Park**