CHAPTER: VII

SYSTEMATIC ENUMERATION OF SPECIES

A. DICOTYLEDONS:
   A.1. POLYPETALAE
       Series: THALAMIFLORAE
               Family I to XIII
       Series: DISCIFLORAE
               Family XIV to XXIV
       Series: CALYCIIFLORAE
               Family XXV to XXXIV
   A.2. GAMOPETALAE
       Family XXXV to LVI
   A.3. MONOCHLAMYDAE
       Family LVII to LXVI

B. MONOCOTYLEDONS:
   B. 1:- OVARY INFERIOR
       Family LXVII to LXVIII
   B. 2:- OVARY SUPERIOR
       Family LXIX to LXXIII
CHAPTER: VII

SYSTEMATIC ENUMERATION OF SPECIES
(FIG: - 05 A-D TO 48 A-D)

A. DICOTYLEDONS

I. RANUNCULACEAE

1. *Ranunculus sceleratus* Linn.


**Local name:** Jal dhania

**Characteristics:**
Erect glabrous, annual; stem 1-2 ft., fleshy and branched; leaves 3-lobed / partite, lower petioled, upper leaves trifid with linear segments; flowers small, yellow; Calyx reflexed, woolly outside; petals oblong; achenes numerous.

**Fl. and Fr.** : October-January.

**Habitat** : Found near margins of stagnant or running water.

II. MENISPERMACEAE

2. *Cocculus hirsutus* (Linn.) Diels


**Local name:** Pilwan

**Characteristics:**
Twining, woody, 4-5 m high, much-branched shrub; branches slender; Leaves oblong-lanceolate to oblong-ovate, cuneate at base, glabrous or slightly puberulous on both surface; Male flowers minute, sub sessile, in axillary fascicles peduncles; sepals ovate-elliptic; Female flower axillary, solitary; fruit are drupes black on drying.

**Fl. and Fr.** : October-January.
**Habitat** : Found twining usually on *Prosopis juliflora* or *Capparis decidua*


**Local name**: Nim giloe

**Characteristics:**
Tall deciduous climber, much-branched; Leaves Ovate to oblong-ovate, glabrous on both surface; Male flowers minute, in two series, sub sessile, sepals ovate-elliptic; petal subequal, membranous; female flower axillary, solitary; fruit are drupes crimson.

**Fl. and Fr.** : March- June.
**Habitat** : Found twining usually on trees and hedges.

### III. PAPAVERACEAE

4. *Argemone maxicana* Linn.


**Local name**: Pili Kateli, Satyanashi

**Characteristics:**
Pricky annual herb; stem tall, branched, covered with prickles; leaves
Leaves alternate, elliptic-oblong, pinnatifid, covered with prickles;
flowers sessile, right yellow, ovary ovate; fruit is capsule, seeds many, black.
Fl. and Fr.: May-June.
Habitat: Common in waste places.

5. **Argemone achroleuca** Sweet
   Local name: Satyanashi
   Characteristics:
   Pricky annual herb; stem tall, branched, covered with prickles; leaves
Leaves alternate, elliptic-oblong, pinnatifid, covered with prickles;
flowers sessile, white (pale white), ovary ovate; fruit is capsule, seeds many, black.
Fl. and Fr.: May-June.
Habitat: Common in waste places.

IV. **BRASSICACEAE**

6. **Sisymbrium irio** Linn.
   Local name: Asalio
   Characteristics:
   Annual herbs, erect, branched; leaves pinnately lobed, laurate;
Inflorescence a terminal raceme; Flowers 5-6mm across, yellow; Sepals
3-4 mm long, oblong, strigose; Petals oblong, cuneate at base, rounded at
apex; stamens long, stigma bilobed. Fruit a siliqua (linear); seeds
brownish-black.
Fl. and Fr.: January -February
Habitat: Common in agriculture fields and wetlands.

V. CLEOMACEAE

7. *Cleome gynandra* Linn.


Local name: Safed-bagro.

Characteristics:
Annual herbs, upto 50 cm high; stem much-branched, clothed with long and short, glandular, spreading hairs; Leaves 3 to 5-foliolate, leaflets unequal, obovate-elliptic, inflorescence many-flowered corymbose raceme; Flowers white, filiform sepals, ovate-obovate; petals obovate to oblanceolate; fruit is capsule; reniform seeds, brown.

Fl. and Fr.: July- November

Habitat: Commonly found in waste lands and wetlands.

8. *Cleome viscosa* Linn.


Local name: Bagro

Characteristics:
Erect, annual herbs, upto 1 mm high, clothed with glandular hairs. Leaves 3 to 5-foliolate; leaflets obovate to elliptic-oblong; racemes leafy, few-flowered; flowers yellow, bracteate, bracts subsessile; sepals, lanceolate, petals obovate; stamens 12-15; ovary ,beaked, densely glandular hairy; fruit is capsules, seed many, reniform, black.

Fl. and Fr.: Almost throughout the year.

Habitat: Found in sandy habitats near water availability.
VI. CAPPARIDACEAE


Local name: Ker.

Characteristics:
Much-branched shrubs, upto 5 m high, twigs zig-zag, glabrous, armed with stipular spines; spine yellowish straight; leaves confined to young twigs, fleshy subsessile, linear, spinous-tipped; inflorescence corymbose racemes, flowers pinkish-red, Sepals elliptic, acute, unequel, tomentose. Petals oblong, obtuse. Stamens 10-15; filaments 1-1.8 cm long, reddish, glabrous., ovary glabrous, breaked. Fruits berry, Seeds many, reniform, black.

Fl. and Fr.: June – November

Habitat: Very common plant of waste lands.

10. *Capparis sepiaria* Linn.

Local name: Patta Ker.

Characteristics:
Much-branched shrub, upto 5 m high; stem branched, twigs zig-zag, leaves ovate; corymbose racemes; flowers pale white; fruits berry, purple-red on maturity; seeds many, reniform, black.

Fl. and Fr.: March – June
Habitat: Near croplands, Frost forests.

VII. CARYOPHYLLACEAE

11. Spergula arvensis Linn.
   Characteristics:
   Annual, herb; branched from base; needle shape leaves, whorled; umbellate cyme; flowers white, keeled seeds, black.
   Fl. and Fr.: December-January
   Habitat: Found in cultivated places and gardens with grasses.

VIII. PORTULACACEAE

12. Portulaca oleracea Linn.
   Local name: Luni
   Characteristics:
   Prostrate or diffuse herbs; branches many; leaves alternate, fleshy, sessile, obovate; flowers yellow; sepals united below into a tube, petals obovate; Stamens 8; ovary ovoid; fruit is capsules; Seeds many, granulate, black.
   Fl. and Fr.: Throughout the year.
   Habitat: Common in moist places and as a weed in cultivated fields.

IX. TAMARICACEAE

Characteristics:
Tree (Shruby), deciduous, perennial; drooping branches; scaly leaves, Inf. dense spike, flowers light pink (pinkish white); fruit is capsule, 
Fl. and Fr.: Throughout out year 
Habitat: Found in salty areas, damaged margins of rivers.

X. ELANTINACEAE


Local name: Jal-bhangra.

Characteristics:
Annual, erect, much-branched herbs, 10-20 cm high; reddish-purple branches, swollen at nodes; leaves oblanceolate; axillary cyme; flowers minute in dense reddish-pink cluster; fruit is capsules; dark brown seeds.
Fl. and Fr.: August-March
Habitat: Commonly found in the moist sandy places and near tanks.

XI. MALVACEAE

15. Abutilon indicum (L.) Sweet.


Local name: Kanghi

Characteristics:
Erect, perennial, shrubs.; stem woody; leaves ovate; solitary axillary; flowers yellow, campanulate; schizocarpic fruits; reniform mericarps.
Fl. and Fr.: October-Jauary.

**Habitat:** Found in wastelands, near crop fields and canals.

16. *Hibiscus caesius* Garke


**Characteristics:**
Erect, perennial, shrub; long stem, branches with bristles; leaves palmate, 3-5 partite, elliptic, simple stellate hairs on veins; flowers axillary solitary, yellow; epicalyx 10; fruit is capsule, 5 valves, each cell with 3-5 seeds, reniform.

Fl. and Fr.: August-October.

**Habitat:** Found in wetlands, moist and shady places.

17. *Malvestrum cormandelianum* (Linn.) Garcke


**Characteristics:**
Annual prostrate herb; stellate branches; leaves ovate-lanceolate, crenate margins; flowers yellow, axillary solitary; globular schizocarps, mericarps 10; seeds brownish-black, reniform, one seed per mericarp.

Fl. and Fr.: Throughout year

**Habitat:** Commonly found in croplands, gardens and wetlands.

18. *Sida cordifolia* Linn.

**Characteristics:**
Perennial, erect undershrubs; branched; leaves cordate(ovate-oblong), crenate margins; flowers yellow, axillary solitary; mericarps 10, seeds trigonous, glabrous, brownish black.

**Fl. and Fr.:** September-January

**Habitat:** found in shady places of trees and wetlands.


**Local name:** Balro

**Characteristics**
Erect undershrub; stem and branches with stellate hairs; leaves oblong-ovate, rounded at base, obtuse at apex, crenate, densely covered with stellate hairs on both surfaces; flowers yellow, axillary solitary; mericarps 7-8, seeds rounded-reniform, black.

**Fl. and Fr.:** July-February

**Habitat:** found near cultivated fields.

20. *Sida spinosa* Linn


**Characteristics:**
Annual, undershrub; stem and branches covered with stellate hairs; leaves ovate-cordate, acute apex, dentate margin; flowers yellow, axillary, solitary; mericarps 5, Seeds glabrous, brownish-black.

**Fl. & Fr.:** August-November

**Habitat:** Common plant in garden and margis of crop fields.


**Local name:** Paras peepal

**Characteristics:**
- Perennial tree; branches with hairs; leaves ovate, acute apex, entire margin; flowers yellow, axillary solitary fruit is capsule mericarps 5, Seeds glabrous, brownish-black.
- **Fl. & Fr.:** August-November
- **Habitat:** Common plant in temples, on road sides also.

**XII. BOMBACACEAE**

22. *Bombax ceiba* Linn.


**Local name:** Semal

**Characteristics**
- Tall tree; brached, branching starts after some height; palmately compound leaf, penta to hepta foliate, leaflets elliptic lanceolate; inf. solitary axillary, flowers large cup shaped, red; fruit is a capsule; seeds brown covered with white wooly hairs.
- **Fl. and Fr.:** December- March
- **Habitat:** Fund in forest area as wild and cultivated in gardens.

**XIII. TILIACEAE**

23. *Corcorus capsularis* Linn.


**Local name**: Amberi

**Characteristics**

Large annual herb; branched; simple leaves, elliptic lanceolate; inf. solitary axillary, flowers yellow; penta carpellary ovary; fruit is a capsule; seeds cuneiform, brown.

**Fl. and Fr.**: Sepember- October

**Habitat**: Found near canals, cultivated plant also.

24. *Grewia tenax* (Forsk.) Fiori


**Local name**: Gangan.

**Characteristics**:

Perennial shrubs, 2-3 m high, with pubescent branches; leaves ovate-oblong, rounded at base, acute or obtuse at apex, palmately 3 to 5-nerved; flowers white in 3-4 axillary cyme, fruit is drupes 2 to 4-lobed, orange when ripe; seeds subglobose, black.

**Fl. and Fr.**: May – February

**Habitat**: Found in sandy plains.

**XIV. ZYGOPHYLLACEAE**

25. *Fagonia cretica* Linn.


**Characteristics**
Erect, spreading perennial herb; branched; trifoliate palmately compound leaf. Inflorescence solitary axillary, flowers reddish yellow, pentacarpellary; schizocarpic fruit.

**Fl. and Fr.**: August

**Habitat**: Found on hard and waste land.

**26. Tribulus terrestris** Linn.


**Local name**: Gokhru

**Characteristics**
Erect, spreading perennial herb; branched; trifoliate palmately compound leaf. Inflorescence solitary axillary, flowers reddish yellow, pentacarpellary; schizocarpic fruit.

**Fl. and Fr.**: August

**Habitat**: Found on hard and waste land.

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**XV. OXALIDACEAE**

**27. Oxalis corniculata** Linn.


**Local name**: Khatti booti

**Characteristics**
Small perennial creeping herb; stem runner rooted at nodes; trifoliate leaves, obcordate; inf. axillary umbel; flowers yellow; penta carpellary ovary; fruit is a linear cylindric capsule; flat-ovoid, brown.

**Fl. and Fr.**: Throughout the year.
Habitat: Common weed of study area.


Local name: Khatti booti

Characteristics
Small perennial acaulescent herb; stem on bulbous root stock, trifoliate leaves, obcordate; inf. axillary umbel; flowers yellow; pedicel and calyx hairy; fruit is a linear cylendric capsule; flat-ovoid, brown.

Fl. and Fr.: Throughout year.

Habitat: Found in shady places.

XVI. RUTACEAE


Local name: Bel, Beel

Characteristics
Long tree; branched, spines on braches; palmately compound trifoliate leaves, alternate, ovate; flowers white; penta carpellary ovary; fruits are berry withglobeose with thick and hard pericarp; flat-ovoid, seeds, brown.

Fl. and Fr.: September-February

Habitat: Common in deciduous forest, Cultivated in gardens.


Local name: Kaith

Characteristics
Long tree; much branched, zig-zag; leaves, alternate, ovate; flowers small, light red; fruits are berrywhite; penta carpellary ovary; fruit is a berry, gobose with thin pericarp, pulp sweet sour; flat-ovoid seeds, slight wooly, brown.

Fl. and Fr.: March-December
Habitat: Common in waste land, cultivated in gardens also.

XVII. SIMAROUBACEAE

31. Ailanthus exelsa Roxb. Linn.


Local name: Ardu, Aldu.

Characteristics
Large deciduous tree, greenish white trunk, branched; bipinnate leaves, leaflet ovate, irregular dentate margin, Inflorecence panicle, flowers greenish white; hairy ovary; fruit is samara; seed single in a samara.

Fl. and Fr.: February- April
Habitat: Waste land plant, cultivated in croplands.

XVIII. BALANITACEAE

32. Balanites aegyptiaca (Linn.) Del.

Local name: Hingota

Characteristics
Small deciduous spiny tree, brown-pale trunk; branched, branches end into thorn; bifoliate leaves, leaflet elliptic, acute apex, rounded base, Inflorescence axillary cyme, pale-green flowers, fruit is globose berry.
Fl. and Fr.: March-July
Habitat: Found in scrub forests and at borders of croplands.

XIX. BURSERACEAE

33. *Boswellia serrata* Roxb. ex Colebr.


Local name: Saalar

Characteristics:
Large deciduous tree; silver white trunk; branched, branches with annular swellings; leaves at tip of branch, lanceolate; white flowers, trigonous fruits, three seeds per fruit, seeds flats to margin.

Fl. and Fr.: December - March
Habitat: Found in deciduous forests.

XX. MELIACEAE

34. *Azadirachta indica* A. Juss.Roxb. ex Colebr.


Local name: Neem.
Characteristics:
Tall evergreen tree; branched, gray-black rough bark; leaves unipinnate, 20-30 cm long, ovate-lanceolate, serrate; flowers white in axillary panicle; Ovary 3-celled, unilocular; fruit is a drupe, single seeded drupes.

Fl. and Fr.: December-May

Habitat: Common in waste lands, planted near roads.

35. Melia azadarach Linn.


Local name: Bakain

Characteristics:

Tall evergreen tree; branched, gray-black rough bark; leaves imparipinnate, 20-30 cm long, ovate-lanceolate, serrate; flowers white in axillary panicles; Ovary pantalocular; fruit is a drupe, one seed in each locule.

Fl. and Fr.: December-May

Habitat: Common in wastelands, planted near roads.

XXI. CELASTRACEAE

36. Maytenus emarginata (Willd.) Ding Hou.


Local name: Kankedo

Characteristics:

Tall shrub; branched, spiny purple branches, spines bear leaves and flowers; simple small abovate leaves; small flowers in dichacial cyme;
flowers white; fruit is globose, red-purple capsule; brown and elliptic seed in each drupe.

**Fl. and Fr.:** October–March.
**Habitat:** Common in wastelands and borders of cropland.

### XXII. RHAMNACEAE

#### 37. *Ziziphus mauritiana* Lam.


**Local name:** Bor

Small evergreen tree, branched; leaves alternate, ovate to ovate-elliptic; flowers in short cyme 10 to 12 flowers, greenish-white; fruits are drupes; elliptic and brown seeds.

**Fl. and Fr.:** January – March
**Habitat:** Found in plains and croplands.

#### 38. *Ziziphus nummularia* (Burm. f.) Wight & Am.


**Local name:** Bordi.

**Characteristics:**

Shrubs with 1-2 m height; branched stem with zigzag branches; Leaves ovate-orbicular, rounded at both ends; flowers greenish white in axillary, cymes; fruits are small, single seeded globose drupes (red); single sphericle seed in a fruit.

**Fl. and Fr.:** January – March.
**Habitat:** Commonly found in waste lands, forest areas and road sides.

### XXIII. ANACARDIACEAE
39. **Mangifera indica** Linn.


**Local name:** Amb, Aam.

**Characteristics:**
Large evergreen tree; branched; leaves, alternate, oblong lanceolate; flowers on terminal panicle; yellowish green; fruits are drupes; ellipticle and light brown seeds.

**Fl. and Fr.:** February - July

**Habitat:** Found in forest area, cultivated in cropland and gardens.

40. **Rhus mysurensis** G. Don.


**Local name:** Bordi.

**Characteristics:**
Deciduous shrub; branched stem; trifoliate leaves, abovate leaflets, wavy margin; flowers in axillary panicle, unisexual, light yellow flowers, fruits are small, single seeded globose drupes (yellow-brown).

**Fl. and Fr.:** July – October

**Habitat:** Commonly found in waste rocky lands or at hilly tracts.

XXIV. **MORINGACEAE**

41. **Moringa oleifera** Lam.

Local name: Sainjana  
Characteristics:  
Large evergreen tree; leaves bipinnate, leaflets abovate, flowers creamish-white in panicles; fruits 20-25 cm long, triquetrous, constricted between seeds; seeds tri-winged, blackish-brown.  
Fl. & Fr.: January to April  
Habitat: Found in roadsides, cultivated in gardens and croplands.

XXV. FABACEAE

42. *Abrus precatorius* Linn.


Local name: Chirmi, Ratti  
Characteristics:  
Perennial climber; much branched; leaves paripinnate, linear, deciduous; pink flower in axillary raceme; pods, oblong, beaked; seeds shining white with black spot.  
Fl. and Fr.: August – January.  
Habitat: Common on clumps of shrubs in forest.

43. *Butea monosperma* (Lam.) Taub.


Local name: Palash, Keshu, Dhak  
Characteristics:  
Deciduous Tree; branched; pinnate leaves, three leaflets, ovate deciduous; saffron (red-orange) flower on axillary raceme; pods with terminal single seed.  
Fl. and Fr.: March- April.  
Habitat: Common in groups in forest (Flame of Forest)

**Local name**: Gokran

**Characteristics**: Perennial, woody climber; leaves elliptic; Inflorescence is solitary axillary; dark blue-white flowers; long beaked pods with 8-10 seeds; yellow-brown seeds.

**Fl. & Fr.**: August- October

**Habitat**: Common on hedges, cultivated also.

45. *Crotalaria burhia* Buch.-Ham. ex Benth.


**Local name**: Senia.

**Characteristics**: Under shrubs, numerous branched; leaves lower larger, upper small, oblong, pale green, silky hairy; yellow flower on terminal raceme; pods oblong, beaked, 1-seeded; shinig black seeds.

**Fl. and Fr.**: August – January.

**Habitat**: Found in sandy uplands areas

46. *Dalbergia sissoo* Roxb.


**Local name**: Shisham

**Characteristics**: 
Large tree; numerously branched; leaves imparipinnate; zig-zag leaf rachis, two pairs of leaflets; lower larger, upper small, Flowers in axillary panicle; yellow- white flowers; pod with 1-4 seeds, lensoid seeds.

**Fl. and Fr. :** March – June.

**Habitat:** Found in roundsides and plains.

47. *Dalbergia lalatifolia* Roxb.


**Local name:** Shisham

Large tree; numerously branched; leaves imparipinnate; zig-zag leaf rachis, three to four pairs of leaflets; Flowers in axillary panicle; yellow-white flowers; pod with 1-4 seeds, lensoid seeds.

**Fl. and Fr. :** March – June.

**Habitat:** Found in roundsides and plains.

48. *Indigofera cordifolia* Heyne ex Roth.


**Characteristics:**

Annual, prostrate or diffuse herbs; leaves simple, ovate-cordate; flowers pinkish-red; pods cylindric, 2-seeded.

**Fl. and Fr:** August-December

**Habitat:** Very common in plains and wetland.

49. *Indigofera linifolia* (Linn. f.) Retz.

Characteristics:
Annual, prostrate/suberect herb; branches from base, many; leaves simple, elliptic-lanceolate; right red flowers in axillary raceme; pods globose; dark brown seeds.
Fl. and Fr.: August-November.
Habitat: found in road sides, grasslands and cultivated fields.

50. *Indigofera linnaei* Ali


Characteristics:
Prostrate, annul herb; laterally branched; leaves obvate rounded at apex, cuneate at base; axillary solitary flowers, pinkish-red; pods strainght, 2 to 3-seeded; seeds light brown.
Fl. and Fr.: August-November.
Habitat: Found in plains, gardens and croplands.

51. *Lathyrus aphaca* Linn.


Local Name: Adak Matar

Characteristics:
Annual, trailing herb; branches from base, many; leaves simple, hastate; yellow flowers, axillary solitary; pods long flattened, 4-6 seeded.
Fl. and Fr.: August-November.
Habitat: Found in crop fields as weed.

52. *Medicago polymorpha* Linn.


**Characteristics:**
Annual, suberect, herb; weak, soft, branched stem; trifoliate leaves abovate; white-pale flowers in axillary raceme; spiral fruits covered small spines; dark brown seeds.

**Fl. and Fr.:** January- March

**Habitat:** Found in aquatic wetlands

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### 53. *Melilotus indica* (Linn.) All.


**Local Name:** Adak Methi

**Characteristics:**
Erect annual herb; stem branched soft; leaves lanceolate; yellow flowers in axillary raceme; pods elliptic single seeded; brown seeds.

**Fl. and Fr.:** January-February.

**Habitat:** Found wetland near running water.

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### 54. *Mucuna pruriens* (Linn.) DC.


**Local Name:** Konch Ki Phali

**Characteristics:**
Climbing herb; branches from base, many; leaves simple, elliptic-lanceolate; right red flowers in axillary raceme; pods globose; dark brown seeds.

**Fl. and Fr.:** August-November.

**Habitat:** Found on road sides, grasslands and cultivated fields.
55. **Pongamia pinnata** (Linn.) Pierre.


**Local Name:** - Karanj

**Characteristics:**
Tall evergreen tree; branched; leaves simple and ovate; white flowers in axillary raceme; single seeded, ovate, beaked and flat pods; dark brown seeds.

**Fl. and Fr.:** April- May

**Habitat:** Found in waste lands, roadsides and gardens.

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56. **Rhynchosia minima** (L.) DC.


**Local name:** Chidi Moth

**Characteristics:**
Annual, twining, much-branched herbs; trifoliate leaves, rhomboid-obovate; Flowers yellow in axillary racemes; pods linear, 2-seeded; seeds ovate, pale green.

**Fl. and Fr.:** July to December.

**Habitat:** Found in gravel soil and hard surface.

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57. **Tephrosia purpurea** (L.) Pers.


**Characteristics:**
Perennial, erect, much-branched, woody, herb; 1 m high; unipinnate leaves; leaflets elliptic-oblong; flowers purplish-pink; pods linear, slightly recurved, 5 to 8-seeded; seeds cylindrical, dark brown.

**Fl. and Fr.:** August-February
**Habitat:** Found in roadsides and wastelands.

58. *Tephrosia strigosa* (Dalz.) Sant. & Mahesh.


**Characteristics:**
Annual, erect, much branched herbs; 20-30 cm high; leaves unipinnate, alternate, subsessile, linear-lanceolate; axillary, solitary, violet flowers; pods linear-oblanceol, flat, hairy, 6-8 seeded; seeds suborbicular, smooth, dark brown.

**Fl. and Fr.:** July-October

**Habitat:** Found in waste sandy plains.


**Characteristic**
Small, perennial herb; branched stem covered with grey hairs; leaves unipinnate, oblanecolate; flowers pinkish-red, in raceme; pods flat, curved; seeds ovate, light brown.

**Fl. and Fr.:** December-April

**Habitat:** Found in wasteland, grows solitary.

60. *Vigna trilobata* (L.) Verde.


**Local name:** Jangal moong

**Characteristics:**

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*Habitat:* Found in roadsides and wastelands.

58. *Tephrosia strigosa* (Dalz.) Sant. & Mahesh.


**Characteristics:**
Annual, erect, much branched herbs; 20-30 cm high; leaves unipinnate, alternate, subsessile, linear-lanceolate; axillary, solitary, violet flowers; pods linear-oblanceol, flat, hairy, 6-8 seeded; seeds suborbicular, smooth, dark brown.

**Fl. and Fr.:** July-October

**Habitat:** Found in waste sandy plains.


**Characteristic**
Small, perennial herb; branched stem covered with grey hairs; leaves unipinnate, oblanecolate; flowers pinkish-red, in raceme; pods flat, curved; seeds ovate, light brown.

**Fl. and Fr.:** December-April

**Habitat:** Found in wasteland, grows solitary.

60. *Vigna trilobata* (L.) Verde.


**Local name:** Jangal moong

**Characteristics:**
Annual, prostrate herb; hairy branches; leaves trifoliolate; leaflets ovate-oblong; yellow flowers, 2 to 4-flowers in a axillary raceme; long cylindric pods, 8-12-seeded; seeds long, papilla present, brown.

Fl. and Fr.: September-December
Habitat: Found in cultivated land as weed.

XXVI. CAESALPIACEAE

61. Bauhinia racemosa Lamk.
Local name: Kachanar
Characteristics:
Deciduous Tree; branched; simple leaves, divided into two equal ovate halves; white flowers on terminal raceme; long pods with 12-20 seeds; black flat seeds.
Fl. and Fr.: March- April.
Habitat: Found in forest.

Local name: Kachanar
Characteristics:
Deciduous Tree; branched; simple leaves, divided into two equal ovate halves; white flowers on terminal raceme; long pods with 12-20 seeds; black flat seeds.
Fl. and Fr.: March- April.
Habitat: Found in forest as well as cultivated gardens.

63. Caesalpinia pulcherrima (Linn.) Swartz. var. flava
Sharma, Fl. Raj (Hadoti). 76. 2002;

Local name: Gultorus

Characteristics:
Evergreen small Tree; branched; bipinnate leaves, ovate leaflet; yellow flower on axillary raceme; pods with 1-2 seeds.

Fl.and Fr.: March- April.

Habitat: Common in road sides of urban area.

64. Caesalpinia pulcherrima (Linn.) Swartz.var. rubra
Sharma, Fl. Raj (Hadoti). 76. 2002;

Local name: Gultorus

Characteristics:
Evergreen small Tree; branched; bipinnate leaves, ovate leaflet; red flower on axillary raceme; pods with 1-2 seeds.

Fl.and Fr.: March- April.

Habitat: Common in road sides of urban area.

65. Cassia alata Linn.

Characteristics:
Shrub, spreading branches; 5-14 pair of leaflets; yellow flower on axillary corymb; fruit is flat pod.

Fl.and Fr.: March- April.

Habitat: Common in road sides (Rawatbhata road).

66. Cassia fistula Linn.


Local name: Amaltas

Characteristics:
Evergreen tree; unipinnate leaves, 3-8 pairs of opposite leaflets, ovate leaflets; yellow flowers in drooping racemes; dark black, cylindrical pods, 40-80 seeds per pod.

Fl.and Fr.: March- April.

Habitat: Common in roadside, cultivated in gardens.
67. *Cassia occidentalis* Linn.


**Characteristics:**
Shrub; branched; pinnate leaves, 3-4 pairs leaflets, ovate leaflets; yellow flowers in axillary corymb; linear oblong pods; green-brown seeds.

**Fl. and Fr.:** October - November.

**Habitat:** Common in groups in wetlands.

68. *Cassia siemia* Lam.


**Local name:** Amaltas

**Characteristics:**
Evergreen tree; unipinnate leaves, 4-16 pairs of opposite leaflets, ovate leaflets; yellow flowers in axillary racemes; dark brown flat pods; flat dark brown seeds.

**Fl. and Fr.:** Almost whole year.

**Habitat:** Common in roadside, cultivated in gardens.

69. *Cassia tora* Linn.


**Characteristics:**
Small, annual herb; branched; pinnate leaves, ovate sessile leaflets; yellow axillary flowers; linear beaked pods.

**Fl. and Fr.:** October - November

**Habitat:** Found in plains after rainy season.

70. *Delonix regia* (Boj.) Raf.

Local name: Gulmohar

Characteristics:
Evergreen tree; branched; bipinnate leaves, numerous small ovate leaflets; red big axillary flowers; flat long woody pods; many flat seeds.

Fl. and Fr.: November- April.

Habitat: Common in road sides, cultivated in gardens.

71. Parkinsonia aculeata Linn.


Local name: Palash, Keshu, Dhak

Characteristics:
Evergreen tree; branched; bipinnate leaves, spines at base of leaves, Axillary raceme; yellow flower on axillary raceme; pods with 2-6 seeds.

Fl. and Fr.: March- April.

Habitat: Common in roadsides and gardens.

72. Peltophorum pterocarpum (D.C.) Backer ex K. Heyne


Characteristics:
Tall evergreen tree; branched; bipinnate leaves, oblong leaflets, yellow flowers on axillary raceme; flat pods with 4-10 flat seeds.

Fl. and Fr.: March- May

Habitat: Found in roadsides and boundaries of croplands.

73. Saraca indica Linn.

Local name: Sita-Asok.

Characteristics:
Evergreen, branched tree, cone like appearance; unipinnate leaves, leaflets oblong ovate, yellow flowers, fruit is pod,

Fl. and Fr.: June-December.

Habitat: Found in Kolipura forest area.

74. *Senna italica* Mill.


Characteristics:
Perennial, erect herbs; 30-40 cm high; stem and branches; leaflets 3-7 pairs, obovate; Flowers yellow in axillary 6-flowered racemes; long glabrous pods; Seeds 6-12 per pod.

Fl. and Fr.: August-January

Habitat: Found in wetlands and waste plains.

75. *Tamarindus indica* Linn.


Local name: Imli

Characteristics:
Evergreen, large tree; branched; unipinnate leaves, oblong leaflets; yellow flower on axillary raceme; pods with dark brown 2-5 seeds.

Fl. and Fr.: March-April.

Habitat: Common in roadsides and forest area.

XXVII. MIMOSACEAE

76. *Acacia jacquemontii* Benth. in Hook


**Local name:** Bu-bhanwali.

**Characteristics:**
Erect, much-branched shrubs; grey-brown bark; zig zag branches; leaves bipinnate, sessile and oblong leaflets; flowers in white-yellow axillary heads; flat ovate oblong pods with 5-6-seed.

**Fl. and Fr.:** December-May.

**Habitat:** Found on sandy plains.

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**77. Acacia nilotica** (Linn.) Willd. ex. Del.


**Local name:** Babul.

**Characteristics:**
Evergreen trees, 6-12 m high; branches show long spines, leaves bipinnate, linear-oblong leaflets, yellow flowers in axillary globose heads; moniliform pods; 10-12 seeds per pod.

**Fl. & Fr.:** September-March.

Ecology: Found usually in waste lands of forest and croplands.

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**78. Acacia senegal** (L.) Willd.


**Local name:** Kumatiyo.

**Characteristics:**
Medium-sized trees, 3-6 m high; spines on branches, white grey bark; bipinnate leaves, elliptic-oblong leaflets; creamy flower in axillary spikes; flat linear pods; 4-6 dark dark brown seeds in each pod.

**Fl. and Fr.:** July-February.

**Habitat:** Found in forest area and croplands.
79. *Acacia tortilis* (Forsk.) Heyne


**Characteristics:**
Small tree, upto 3 m high; reddish-brown bark; stipulate spines upto 1 cm long, curved at apex, white; pinnate leaves, 5-14 pairs of oblanceolate leaflets, cream white flowers in axillary heads; black-brown seeds.

**Fl. and Fr.:** July – December.

**Habitat:** Found on cropland borders and forest area.

80. *Albizia lebbeck* (L.) Benth.


**Local name:** Sares.

**Characteristics:**
Tall deciduous tree; grey bark; bipinnate leaves with 2-4 pairs of leaflets; elliptic-oblong leaflets; pale white flowers in umbellate heads; linear oblong pods with 4-12 seeds.

**Fl. and Fr.:** June – November

**Habitat:** Common plant in forest area and cultivated on road sides.


**Local name:** Goya Khair

**Characteristics:**
Shrub; branched; brach end inti spine; bipinnate leaves, 4-14 pairs of linear leaflets; upper yellow half of spike shows bisexual flowers, lower red half is neuter; clustered fruits with ovoid seeds.

**Fl. and Fr.:** March- April.
Habitat: Found in groups in forest.


**Local name:** Su babool.

**Characteristics:**
Large evergreen spineless tree; branched; bipinnate leaves with 4-9 pairs of leaflets; white flowers in globose pair of heads; flat and long pods 15-20 seeds.

**Fl. and Fr.:** September- March.

**Habitat:** Common in gardens and road sides.


**Local name:** Jinjani

**Characteristics:**
Pricky Shrub; branched, 2 m high; bipinnate leaves with 6-10 pairs of ovate leaflets; pink flowers in axillary pricky globose head; flat, pricky and twisted pods with 3 to 8-jointed.

**Fl. and Fr.** : August – March.

**Habitat:** Found in wasteland of forest area.

84. *Pithecellobium dulce* (Roxb.) Benth.

**Local name:** Jangal Jalebi

**Characteristics:**
Evergreen tree; branched; unipinnate leaves; one pair of elliptic leaflets, leaf modified into spines; greenish white flowers in globose heads; twisted pods with 5-9 seeds.

**Fl. and Fr.:** November - April.

**Habitat:** Common in groups in forest (Flame of Forest)

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**85. Prosopis cineraria** (L.) Druce.


**Local name:** Khejari
Medium-sized tree; 3-10 m high; deep fissured grey bark; straight prickles on slender branches; bipinnate leaves with 7-12 pairs of oblong leaflets; yellow flowers in axillary spikes; pendulous with 10-15 seeds.

**Fl. and Fr.:** March – June.

**Habitat:** Found in waste plains.

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**86. Prosopis juliflora** (Swartz) DC.


**Local name:** Angreji-banwal

**Characteristics:**
Evergreen, small tree, 2-5 m high; branches long, long, paired, axillary, prickles on branches; bipinnate leaves with 15-25 pairs of leaflets; greenish-yellow flowers in axillary spikes, yellow pods with 10-25 seeds.

**Fl. and Fr.:** Throughout the year.

**Habitat:** Found in wastelands and croplands

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**XXVIII. ROSACEAE**
87. *Potentilla supina* Linn.


**Characteristics:**
Prostrate, annual, herb; many hairy branches arise from base; pinnate leaves, 3-9 ovate leaflets; solitary, axillary, yellow flowers; fruits, globose, smooth, achenes.

**Fl. and Fr.** : November-January.

**Habitat** : Found near river banks, margins of cropland.

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88. *Anogeissus pendula* Edgew.


**Local Name** : Dhok

**Characteristics:**
Medium Tree, 4-10 m high; elliptic, alternate leaves; yellow flowers in solitary heads; beaked fruits with wings;

**Fl. and Fr.** : July-November

**Habitat** : Found in forest area.

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89. *Terminallia arjuna* (Roxb ex DC) Wight & Arn.


**Local Name** : Dhok

**Characteristics:**
Large deciduous tree; 6-15 m high; white-gray bark; simple, elliptic opposite broad leaves; ovoid 5-winged fruits.

**Fl. and Fr.** : July-November

**Habitat** : Found in forest area.

XXX. MYRTACEAE

90. *Syzygium cumini* (Linn.) Skeels.


**Characteristics:**
Large deciduous tree; 5-25m high; thick and rough bark; broad elliptic leaves; white flowers in axillary group of heads; fruits purple/black berries, single seeded.

**Fl. and Fr.** : March -July

**Habitat** : Found in forest area cultivated in gardens also.

XXXI. LYTHRACEAE

91. *Lawsonia inermis* Linn.


**Local Name:** Mehandi

**Characteristics:**
Shrub, much branched; Sessile elliptic leaves, Inflorecence terminal cymose, small greenish- white flowers in groups; fruits are capsules; many pyramid shaped seeds in fruits.

**Fl. and Fr.** : March -July

**Habitat** : Grown as hedges in gardens, Found in wasteland also.

XXXII. CUCURBITACEAE

92. *Coccinia grandis* (Linn.) Voigt

**Characteristics:**
Climber, perennial; cylindrical branched stem; ovate triangular leaves, alternate; large white flowers, dioecious, red cylindrical fruits; thin flat seeds.

**Fl. and Fr.** : Throughout year.

**Habitat** : Found near crop fields and on general roadside plants.

93. **Luffa acutangula** (Linn.) Roxb. var. *amara* (Roxb.) Clarke.


**Local name:** Mar-turai

**Characteristics:**
Climber, annual; pentagonal palmate leaves, alternate; female axillary solitary flowers; male axillary raceme, in same axil; oblong, beaked, ribbed (10) fruit. thin flat seeds.

**Fl. and Fr.** : After rainy season.

**Habitat** : Found near crop fields.

94. **Luffa acutangula** (Linn.) Roxb. var. *amara* (Roxb.) Clarke.


**Local name:** Mar-turai

**Characteristics:**
Climber, annual; pentagonal palmate leaves, alternate; female axillary solitary flowers; male axillary raceme, in same axil; oblong, beaked, ribbed (10) fruit. thin flat seeds.
Momordica charantia Linn.


**Local name:** Mar-Karelo, Marelo

**Characteristics:**
Climber, annual; pentagonal palmate leaves, wavy margin, alternate; monoecious plant; yellow axillary solitary flowers; oblong fruit with rough surface; flat oblong seeds.

**Habitat:** Near cropland borders and wastelands. Cultivated varieties of the plant is grown in cropfields.

**Fr. and Fl.:** June – November

Momordica dioica Roxb.ex Willd.


**Local name:** Kikkoda

**Characteristics:**
Climber, perennial; trilobed and trigonal palmate leaves; wavy margin, alternate; dioecious plant; solitary, axillary, yellow, small, male flowers on small peduncle; solitary, axillary, yellow, broad flowers on long peduncle axillary solitary flowers; ellipsoid fruits covered with soft spines.

**Habitat:** Near cropland borders and wastelands.

**Fr. and Fl.:** June – November.

XXXIII. CACTACEAE

Opuntia elatior Mill.

**Local name:** Nagphani

**Characteristics:**
Erect perennial shrub; succulent stem (Phyllode), leaves modify into spines, stem broads into abovate leaf like structure; terminal solitary flowers; pink red flower flowers; purple stemens; fruits are berries (Red).

**Fl. and Fr.:** January- June.

**Habitat:** Found in hilly area and wastelands.

XXXIV. **MOLLUGINACEAE**

98. **Glinus lotoides** Linn.


**Characteristics:**
Annual, prostrate herb; plant body covered with wooly hairs; leaves opposite, obovate; flowers in axillary cluster; fruit is globose capsule; seeds many, covered with linear appendages.

**Fl. and Fr.:** February to May

**Habitat:** Found in waste lands and slits of rocky surface.

99. **Glinus oppositifolius** (Linn.) DC,


**Characteristics:**
Annual herb; base branches prostrate, top branches erect; leaves, oblanceolate, whorled; white-pink flowers in axillary cyme; fruit is ellipsoid capsule; small brown seeds.

**Fl. and Fr.** : July - April.

**Habitat** : Found in aquatic wetlands.

XXXV. RUBIACEAE

**100. Hamelia patens** Jacq.

Evergreen, perennial, woody, shrub, 2-4 meters high; densely branched; simple leaves, whorled, ovate, terminal cyme, orange-red, cylindric flowers; ovoid red berries.

**Fl. and Fr.** : April - September

**Habitat** : Found on roadsides as invasive.


**Characteristics:**

Deciduous tree, grey scaly bark; leaves simple, ovate, opposite decussate; light yellow flowers in terminalheads; fruit capsule; many winged seeds.

**Fl. and Fr.** : July - October.

**Habitat** : Found in forest area near gapernath.

XXXVI. ASTERACEAE

102. *Ageratum conyzoides* Linn.


**Characteristics:**
Erect, annual, herb, stem 20-80 cm long, much branched, leaves opposite, petiolated, ovate to cordate, acute base, acute apex, serrate margin, heads purple/ blue, small terminal corymb, based by involucre, globose, numerous crowded florets, florets packed with scales, corolla 5, tubular, basal placentation, fruits linear acenes.

**Fl. and Fr.**: September- October  
**Habitat**: Moist and shady area.

**103. Blumea mollis** (D. Don) Merr. Phillip


**Characteristics:**

Erect, annual wooly herb, stem 11-55 cm long, branched at base, leaves alternate, narrow at base, ovate, covered with soft hairs, dentate margin, obtuse apex, dense spike of heads, unrobed angled achenes.

**Fl. and Fr.**: January- February  
**Habitat**: Found in wastelands

**104. Caesulia axillaris** Roxb.


**Characteristics:**
Erect, annual, marshy herb. stem 40-100 cm long, branched, leaves alternate, 4-10 cm long, lanceolate, acute base, entire margin, heads homogenous, axillary, sessile, florets white, numerous crowded florets, florets packed in scales, corolla 5, tubular, staminate; fruits flat acenes.

**Fl and Fr.**: November- December

**Habitat**: Found in moist wasteland

105. *Cirsium arvense* (Linn.) Scop.


**Local name**: Brahm dandi, Rissa

**Characteristics**: Erect, annual, leafy Herb stem 60-100 cm long, branched, leaves alternate, obovate, acute base, serrate margin tipped with spines, Flowers pink- purple, corolla 5, tubular, bisexual heads ovoidal, covered by bristles, basal placentation, fruits acenes.

**Fl. and Fr.**: September-March

**Habitat**: Found on waste and hard soil.

106. *Cotula hemisphaerica* (Roxb.) Wall. Ex Benth & Hook.


**Characteristics**: Prostrate, annual, many branched diffused herb, stem glabrous, branched, spinulate, leaves alternate, pinnatifide into thin linear segments, heads bisexual, pale yellow, solitary, angled achenes.

**Fl. and Fr.**: February- April

**Habitat**: Found in wetlands of riverbanks.


**Local Name:** - Oont Katili

**Characteristics:**

Erect, annual, herb, stem erect, branched, spinulated, leaves alternate, pinnatified, lobed, covered with yellow spines, White homogenous heads, globose, solitary, numerous spinulate crowed florets, florets bisexual disc florets only, packed in scales, corolla 5, tubular, covered by bristles, corolla tube white, basal placentation, fruits acenes 4 mm.

**Fl and Fr.**: September - June

**Habitat:** Found on wastelands bordersof croplands.

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108. *Eclipta prostrata* (Linn.) Linn.


**Local name:** Bhringraj

**Characteristics:**

Erect or prostrate, annual, hirsute herb, stem erect/ prostrate 40-60 cm long, branched, leaves simple opposite, sub sessile, lanceolate, entire, solitary heads, peripheral ray florets 2/3 whorls, ligulate, pistillate, disc florets bisexual, tubular, style branched, basal placentation, Fruits brown acenes.

**Fl and Fr.**: September -January

**Habitat:** Found in aquatic wetlands and near running water.

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109. *Grangea maderaspata* (Linn.) Poir

**Characteristics:**
Prostrate, annual herb, stem 11-65 cm long, branched, leaves alternate, sessile, pinnatified broadly ovate to cordate, 3-5 lobed, acute base, serrate- dentate margin, Heads globose, yellow, solitary or paired, involucre bracts, outer ray florets pistillate and filiform, central disc florets bisexual, basal placentation, fruits acenes 2 mm long.

**Fr. and Fr.:** Throughout year

**Habitat:** Borders of ponds.

110. *Gnaphalium pulvinatum* Delile


**Characteristics:**
Prostrate, annual, herb, woolly, stem 20-30 cm long, branched, leaves alternate, abovate, acute base, obtuse apex, entire margin, heads crowded, sub-globose, yellow, ray florets female, ligulate, disc florets bisexual, florets packed in scales, corolla 5, tubular, basal placentation, Fruits acenes.

**Fl and Fr.:** Winter season

**Habitat:** Aquatic wetlands, Moist places

111. *Gnaphalium luteo-album* Linn.

*Gnaphalium luteo-album* Linn. in Sp. Pl. 185. 1753; Hook. f., Fl. Brit. India 3: 288.1881; Duthie, Fl. Gangetic Plain 1: 461. 1905; Maheshwari,
Characteristics:

Erect/Semi prostrate, annual, white wooly herb. stem 15-30 cm long, branched, leaves alternate, sessile, oblong linear, wooly surface, 4mm long, corymb heads white pale, heterogenous, axillary, sessile, florets light yellow, fruits flat cypsela.

Fl. And Fr.: December - March

Habitat: Near croplands and margins of ponds

112. *Launaea procumbens* (Roxb.) Ramayya & Rajgopal


Local Name: Jangi Gobi, Gobi

Characteristics:

Erect, biennial, several flowering stems arise from base, leafy herb, stem 60-80 cm, branched, leaves sessile, whorled, pinnatifid, minutely toothed, acute apex, dentate margin, inflorescence-head, flowers bright yellow, ligulate ray florets and tubular disc florets both present, fruits acenes.

Fl. and Fr.: Throughout the year.

Habitat: General plant of area.

113. *Sphaeranthus indicus* Linn.

**Characteristics:**
Prostrate, Erect, annual, stem 10-60 cm long, much branched, leaves alternate, lanceolate, covered with glandular hairs, acute base, wavy margin, heads spherical globose, compound, pink/pinkish, homogenous, disc florets only, bisexual, corolla 5, tubular, basal placentation, fruits acenes.

**Fl. and Fr.:** Throughout the year.

**Habitat:** Aquatic wetlands, near running water.

**114. Parthenium hysterophorus** Linn.


**Local name:** Gajar ghaas.

**Characteristics:**
Erect, annual, herb, stem 40-150 cm long, much branched, leaves alternate, lanceolate, corymb heads, terminal and axillary, pale white, heterogenous, ray florets 5, many tubular disc florets, flat achenes,

**Fl. and Fr.:** Throughout the year.

**Habitat:** Wasteland, near croplands.

**115. Pulicaria angustifolia** DC.

**Characteristics:**

Erect, annual, herb, woolly, stem 50-60 cm high, branched at base, leaves sessile, linear, abovate, acute base, solitary terminal heads, yellow, heterogenous, ligulate ray florets, 6-8 mm, hairy acenes,

**Fl. and Fr.**: September- January

**Habitat**: Moist and Shady places.

116. *Sonchus asper* (Linn) Hill.


**Local name** - Peeli doodhi

**Characteristics:**

Erect, annual, herb, stem 20-80 cm long, branched, leaves alternate, pinnatified, articulated base, acute apex, sharply spinous dentate, cymose heads, umbrella like, elongated, numerous florets, florets packed by involucre, yellow, ray florets female, ligulate, disc florets bisexual, florets packed in scales, corolla 5, tubular, basal placentation, fruits acenes.

**Fl. and Fr.**: September- February

**Habitat**: Moist places, grassland.

117. *Tridex procumbens* Linn.


**Local Name:** Ghamraj

Prostrate, annual, diffused herb, stem erect/ prostrate 40-60 cm long, nodes show rooting, branched, Leaves simple opposite, sub sessile, ovate/elliptical, hairy surface, acute apex, petiole and young branches densely hairy, Solitary apical heads, 5/6 toothed ligulate ray floret, Many tubular disc florets, silky black cypsela.

**Fl. and Fr.:** September to March.

**Habitat:** Waste and moist lands.

**118. Vernonia cinerascens** Sch.-Bip.


**Local name:** Sandri,

**Characteristics:**

Erect, annual, herb, stem 20-80 cm long, branched, leaves alternate, petiolate, sphathulate,, 3-5 lobed, acute apex, narrow, corymbose head, purple coloured, homogenous, 3-5 bracts in involucre, fruits acenes.

**Fl. and Fr.:** September- February

**Habitat:** Plants near croplands, shady wetlands.

**119. Xanthium indicum** Koen.ex Roxb.

**Local name:** - Adhasisi, Chirchitta

**Characteristics:**
Erect, annual, stem 20-100 cm long, branched, leaves alternate, broadly ovate to cordate, 3-5 lobed, acute base, serrate margin, Male heads globose, numerous crowded florets, florets packed in scales, corolla 5, tubular, staminate; Female heads ovoidal , covered by bristles, florets 2, corolla absent, pistillate, basal placentation, fruits acenes.

**Fl. and Fr.:** August to January

**Habitat:** Wetlands, roadsides, croplands.

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**XXXVII. PRIMULACEAE**

120. **Anagallis arvensis** Linn.


**Characteristics:**
Annual, erect, herb;10-30 cm, quadriangular stem, branched from base; ovate, opposite, sessile leaves; axillary solitary, blue, rotate, flowers; fruit is capsule; trigonous brown-black seeds.

**Fl. and Fr.** : January- April

**Habitat:** Found in cultivated places and gardens with grasses.

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**XXXVIII. SAPOTACEAE**

121. **Manilkara hexandra** (Roxb.) Dub.

Local name: Khirni

Characteristics:
Evergreen tree, 10-20 m high; black-gray bark; ovoidate, alternate leaves; white, axillary solitary, flowers; yellow-red ovoid berries; ovoid seed.

Fl. and Fr.: October-April

Habitat: found in forest area and historical gardens.

122. Manilkara zapota (Linn.) P.van Royen.


Local name: Khirni

Characteristics:
Evergreen tree, 10-20 m high; black-gray bark; leaves ovate, crowned at top of branches; white, axillary solitary, flowers; brown berries; flat black elliptic seed.

Fl. and Fr.: September-March

Habitat: Cultivated in cropland, planted in gardens.

XXXIX. EBENACEAE

123. Diospyros melanoxylon Roxb.


Local name: Tendu patta

Characteristics
Tall deciduous tree; branched, palmately compound leaf, broad elliptic leaves penta to hepta foliate, leaflets elliptic lanceolate; inf. solitary
axillary, flowers large cup shaped, red; fruit is a capsule; seeds brown covered with white wooly hairs.
Fl. and Fr.: December- March
Habitat: Fund in forest area as wild and cultivated in gardens.

XL. OLEACEAE

124. **Jasminum humile** Linn.

Local name: Ban Chameli
Characteristics
Erect, evergreen, perennial shrub; much branched, stem branched green, angular; small elliptic ovate leaves; pale white flowers in terminal corymb; black ellipsoid berries.
Fl. and Fr.: Throughout year
Habitat: Found in borders of some croplands and garden

XLI. NYCTANTHACEAE

125. **Nyctanthes arbor-tristis** Linn.

Local name: Harsingar
Characteristics
Erect, evergreen, large, perennial shrub; much branched, stem branched green, quadriangular; simple, ovate, opposite leaves covered with hairs; axillary solitary, orange coloured, tubular flowers; fruit is a capsule.
Fl. and Fr.: Throughout the year.
Habitat: Found in gardens and hilly tracts of Girdia.

XLII. SALVADORACEAE
126. *Salvadora persica* Linn.


**Characteristics**

Erect, evergreen tree; much branched, drooping branches; simple, opposite, ovate leaves; green yellow, campanulate flowers, axillary or terminal panicle; inflorescence also drooping; fruit is a drupe.

**Fl. and Fr.**: Throughout year

**Habitat**: Found on wastelands, borders of crop fields.

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### XLIII. APOCYNACEAE

127. *Carissa congesta* Wight.


**Local name**: Karonda

**Characteristics**

Erect, spreading perennial shrub; stem spiny, much branched; elliptic, opposite leaves; white flowers in corymb; fruit are violet, elliptic berries.

**Fl. and Fr.**: April- June

**Habitat**: Found on borders of cropfields, cultivated in gardens.


**Local name**: Lal Kaner

**Characteristics**
Erect, spreading perennial shrub; stem branched, glabrous, laticiferous; leaves simple, lanceolate, whorled; terminal cyme, pink-red flowers, fruit is long cylindrical capsule.

**Fl. and Fr.:** Throughout year

**Habitat:** Cultivated in gardens.


**Local name:** Peeli Kaner

**Characteristics**

Erect, spreading perennial shrub; stem branched, glabrous, laticiferous; leaves simple, lanceolate, whorled; terminal cyme, yellow or pale white flowers, fruit is long cylindrical capsule.

**Fl. and Fr.:** Throughout year

**Habitat:** Cultivated in gardens.

**XLIV. ASCLEPIADACEAE**

130. *Calotropis procera* (Ait.) Ait. f.


**Local name:** Aak

**Characteristics**

Perennial, erect, evergreen shrub; stem branched, laticiferous, coverd with cottony hairs; leaves simple, ovate, opposite decussate, laticiferius; flowers white-purple in axillary corymb; fruit is a ovoid follicle; seeds ovate, covered with silky hairs.

**Fl. and Fr.:** Throughout year.

**Habitat:** found in wasteland
131. *Calotropis gigantea* (Linn.) R. Br.


**Local name:** Safed Aak

**Characteristics**
Perennial, erect, evergreen shrub; stem branched, laticiferous, covered with cottony hairs; leaves simple, ovate, opposite decussate, laticiferious; flowers white in axillary corymb; fruit is a ovoid follicle; seeds ovate, covered with silky hairs.

**Fl. and Fr.:** Through out year.

**Habitat:** General plant of urban area.

132. *Ceropegia bulbosa* Roxb. var. *lushii* (Grah.) Hook.


**Local name:** Mastan

**Characteristics**
Perennial, twinner, evergreen, herb; stem green, branched, laticiferous, covered with cottony hairs; leaves simple, linear, opposite decussate, laticiferious; flowers purple-white in axillary corymb; fruit is a ovoid follicle; seeds ovate, covered with silky hairs.

**Fl. and Fr.:** Through out year.

**Habitat:** Found in borders of crop fields.

133. *Cryptostegia grandifolia* R. Br.

Local name: Chabuk Chadi

Characteristics
Perennial, climber, evergreen, shrub; stem green, branched, laticiferous; leaves simple, elliptic, opposite decussate, laticiferous; terminal dichacial cyme, flowers white, funnel shape, purple base; fruit is a ovoid follicle; seeds ovate.

Fl. and Fr.: Throughout year.
Habitat: Found in borders of crop fields.

134. *Leptadenia pyrotechnica* (Forsk.) Decne.


Local name: Kheep

Characteristics
Perennial, erect, evergreen shrub; stem, very thin, branched, laticiferous; leaves small, linear, scale like; leaves fall after some time green stem act as photosynthetic organ; axillary umbel; flowers green white, fruit is a elongate follicle; seeds ovate, covered with silky hairs.

Fl. and Fr.: August- January
Habitat: Wasteland of forest.

135. *Pergularia daemia* (Forsk.) Chiov.


Local name: Godariya bel

Characteristics
Perennial, twinner, evergreen, shrub; stem green, branched, laticiferous, covered with cottony hairs; leaves simple, broad, cordate; opposite
decussate, laticiferius; axillary, drooping corymb; flowers white, fruit is a ovoid follicle, covered with soft spines over follicle; seeds ovate, covered with silky hairs.

**Fl. and Fr.:** Throughout year.  
**Habitat:** Borders of crop fields; present on shrubs in forest area.

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**XLV. BORAGINACEAE**

136. *Heliotropium supinum* Linn.

**Characteristics**  
Annual, prostrate, herb; stem branched, light brown, covered with cottony hairs; leaves simple, alternate, ovate, surface hairy; flowers white, sessile; fruit is nut with persistant calyx.  
**Fl. and Fr.:** November- February  
**Habitat:** Common near wetland of ponds.

137. *Heliotropium strigosum* Willd.

**Characteristics**  
Annual, prostrate, herb; stem branched, light brown, covered with cottony hairs; leaves simple, alternate, linear - lanceolate, surface hairy; flowers white, sessile; fruit is nut with persistant calyx.  
**Fl. and Fr.:** November- February  
**Habitat:** Common near wetland of ponds.
XLVI. EHRETIACEAE

138. **Cordia gharaf** (Forsk.) Ehran ex Asch.


**Local name:** Goondi

**Characteristics**
Long tree; much branched; leaves, simple, broad, alternate, obovate; axillary cyme; flowers small, white; fruits are ovate, drupe, filled with sticky pulp, single seeded.

**Fl. and Fr.:** March-December

**Habitat:** Found in forest area and wastelands.

139. **Cordia dichotoma** Forster


**Local name:** Lessua, Goonda

**Characteristics**
Long tree; much branched; leaves, simple, broad, alternate, elliptic axillary cyme; flowers small, white; fruits are globose, drupe, filled with sticky pulp, single seeded.

**Fl. and Fr.:** March-December

**Habitat:** Found in forest area and wastelands.

XLVII. CONVOLVULACEAE

140. **Convolvulus arvensis** Linn.

Local name: Hiran pagi

Characteristics
Perennial, herb; stem twinner, branched; leaves simple, alternate, oblong ovate, hastate base; axillary cymose; flower small, white, broad funnel shape; fruit globose capsule, seed 4, dark brown.

Fl. and Fr.: December- April

Habitat: Found in waste and grassland.


Local name: Sankhpushpi

Characteristics
Perennial, prostrate, herb; Stem thin, creeping, branched; leaves 4-8 cm, leaves simple, alternate, oblong ovate, hastate base; axillary cymose; flower small, white, broad funnel shape; fruit globose capsule, seed 4, dark brown.

Fl. and Fr.: December- April

Habitat: Found in waste and grassland.

142. *Ipomoea indica* (Burm f.) Merrill.


Local name: Morning glory

Characteristics
Annual, herb, prostrate, stem thin, creeping, branched; leaves 4-8 cm, leaves simple, alternate, circular, cordate base; dense umbellate cyme; flower blue (morning) and pink in (afternoon), broad funnel shape; fruit globose capsule, seed 4, dark brown.
Fl. and Fr.: December- April
Habitat: Found in waste and grassland.

143. *Ipomoea sindica* Staf.


Characteristics
Annual, prostrate, herb; Stem branched, many branches from base; leaves simple, alternate, oblong ovate, hastate at base; axillary cymose; flower small, white, broad funnel shape; fruit globose capsule, seeds grey.

Fl. and Fr.: August- November
Habitat: Found in wasteland, cropfield boundaries.

144. *Ipomoea nil* (Linn.) Roth.


Local name: Kala dana

Characteristics
Annual, twinner, herb; stem thin, green, branched; leaves 4-8 cm, leaves simple, alternate, ovate, cordate base; axillary umbel cyme; flower medium size, bright blue, broad funnel shape, trilocular ovary; fruit globose capsule, seeds black.

Fl. and Fr.: August - November
Habitat: Found in wasteland of forests.

145. *Merremia aegyptia* (Linn) Urban


Local name: Roti bel

Characteristics
Annual, prostrate, twining herb; Stem thin, creeping, rooting at nodes; branched; leaves simple, alternate, circular, axillary cymose; flower small, yellow, funnel shape; fruit globose capsule, seed 4, dark brown.

Fl and Fr.: December- April

Habitat: Found in forest wasteland and grassland.

XLVIII. CUSCUTACEAE

146. Cuscuta hyalina Heyne ex Roth.


Local name: Amar bel

Characteristics
Herb; stem thin, light yellow, twinning, densely brached over host plant; yellow-white flowers in cyme. Fruit is a capsule; seeds 4, brown.

Fl and Fr.: July- October

Habitat: Generally found on trees of forest.

147. Cuscuta reflexa


Local name: Amar bel

Characteristics
Herb; stem thin, dark yellow, twinning, densely brached over host plant; yellow flowers in cyme. Fruit is a capsule; seeds 4, brown.

Fl and Fr.: July- October

Habitat: Generally found on trees of forest.
XLIX. SOLANACEAE

148. *Datura stramonium* Linn.


**Local name:** Dhatura

**Characteristics:**
Erect, perennial shrub; light purple branches; leaves ovate oblong; dentate margin; flowers axillary solitary, long ,white purple, funnel shaped; fruit ovoid, erect, capsule, spinulated densely, 4 valves.

**Fl. and Fr.:** December - May

**Habitat:** Commonly found in wastelands.

149. *Datura inoxia* Mill.


**Local name:** Dhatura

**Characteristics:**
Erect, perennial shrub; stem branched, covered with hairs; leaves ovate lanceolate, margin entire; flowers axillary solitary, long ,white purple, funnel shaped; fruit ovoid, erect, capsule, spinulated densely

**Fl. and Fr.:** Throughout year.

**Habitat:** Commonly found in wastelands

150. *Solanum nigrum* Linn.


**Local name:** Makoy
Characteristics:
Annual herb; densely branched; leaves ovate, irregularly dentate; flowers in axillary cyme; flowers small, pale-white, rotate; fruit ovoid, berries.
**Fl. and Fr.:** October- January
**Habitat:** Found in crop fields and wetlands.


**Local name:** Pasar kantili

**Characteristics:**
Prostrate, annual, pricky herb; stem solid, cylindrical, branched, zig-zag branches; leaves elliptic, lobulated, pricky lamina; Inflorescence axillary solitary; flowers, purple, elongated yellow anthers; yellow globose berries; Flat brown seeds.

**Fl. and Fr.:** December - May

**Habitat:** Commonly found in wastelands.

152. *Withania somnifera* (Linn.) Dunal.


**Local name:** Ajgandh

**Characteristics:**
Shrub, perennial; dichotomously branched; leaves ovate –oblong, entire, acute apex; flowers in axillary cluster; sessile, greenish yellow; fruit is globose berry; yellow brown seeds.

**Fl. and Fr.:** Throughout year.

**Habitat:** Found in wastelands.
L. SCROPHULARIACEAE

153. *Bacopa monnieri* (Linn.) Wettst.

*Bacopa monnieri* (Linn.) Wettst. in Engl. & Prantl. Pflan. 4 (3B) 77. 891;


**Local name:** Brahmi

**Characteristics:**
Annual, prostrate, herb; stem creeping, solid, cylindrical, branched; branches arise from base; leaves sessile, small, spathulate, opposite: Inflorescence axillary solitary; flowers, white, purple, rotate; fruit is ovoid capsule.

**Fl. and Fr.:** August - May

**Habitat:** Found in wetlands and moist wastelands.

154. *Striga angustifolia* (D. Don.) Saldhana


**Characteristics:**
Annual, erect, herb; 1-1.5 ft. high; solid, cylindrical, dichotomously branched; leaves simple, alternate, linear, bidentate margin, inflorescence axillary solitary; flowers, white, tubular; fruit is ovoid capsule.

**Fl. and Fr.:** August – October

**Habitat:** Found in grasslands.

LI. BIGNONIACEAE

155. *Kigelia africana* (Lam.) Benth. syn *K. pinnata* (Jacq.) DC

**Local name:** Balam Kheera,

**Characteristics:**
Tall evergreen tree; much branched, gray-black rough bark; leaves long, elongate ovate, imparipinnate, 20-30 cm long, ovate-lanceolate, serrate; flowers cup shaped, dark red; long ovate elongated woody fruits.

**Fl. and Fr.:** July- October.

**Habitat:** Found in forest area.

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**156. Tecomella undulata** (Sm.) Seem.


**Local name:** Roheeda

**Characteristics:**
Evergreen tree, gray-black rough bark; much branched, drooping branches; leaves simple, opposite, elliptic-oblong, entire margin; inflorescence axillary receme; flowers large, orange-red, infundibulate; fruit is a long linear capsule, winged minute seeds.

**Fl. and Fr.:** December - July

**Habitat:** Found in cropland and forest area.

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**157. Tecoma stans** (Linn.) Juss. ex Kunth.


**Characteristics:**
Evergreen, perennial, shrub; much branched; unipinnate leaves, 5-7 leaflets, elliptic lenceolate; inflorescence terminal raceme, flowers large, yellow, tubular, long yellow stamens; fruit is long capsule, winged seeds.

**Fl. and Fr.:** Throughout year

**Habitat:** Found in boundries of gardens.

### LII. PEDALIACEAE

#### 158. *Sesemum indicum* Linn.


**Local name:** Til

**Characteristics:**
Annual, erect, herb; stem soft, branched, spreading; upper leaves lenceolate, lower leaves segmented, alternate, opposite, serrate margin; flowers white, infundibulate, axillary, solitary; fruit is beaked, oblong capsule; minute black seeds.

**Fl. and Fr.:** July - December

**Habitat:** Wild in grassland, cultivated as oil crop.

#### 159. *Pedallium murex* Linn.


**Local name:** Bada Gokhru

**Characteristics:**
Succulent herb, annual; stem soft, much branched, creeping, spreading; leaves simple, opposite, ovate, serrate margin; flowers yellow, infundibulate, axillary, solitary; fruit is capsule, quadriangled, one spine on each angle of capsule.

**Fl. and Fr.:** July - December

**Habitat:** Common in wastelands.
LIII. MARTYNIACEAE


**Local name**: Baghnakhi

**Characteristics**: Annual, erect, herb, stem succulent, branched, covered with glandular hairs; leaves ovate, opposite, dentate margin, flowers in axillary raceme, tubulat, white, purple, infundibulate; fruits are green drupes with two terminal hooks, seeds black, oblong.

**Fl. and Fr.**: July – November.

**Habitat**: Found in wastelands.

LIV. ACANTHACEAE


**Local name**: Adusa

**Characteristics**: Erect, shrub; 1-2 m; stem green-brown, branched, many ascending branches; Leaves simple, opposite, elliptic, acute apex, acute base; cream white flowers on spike, fruit is capsule.

**Fl. and Fr.**: February - October

**Habitat**: Found in forest area, on sides of canals.

162. *Barleria acanthoides* Vahl.


**Local name:** Vajradanti

**Characteristics:**
Small, erect, priky, shrub; much branched; leaves, simple, alternate, oblong – ovate; flowers, white, tubular, in axillary group; fruits is ellipsoid capsule, flat ovoid seeds.

**Fl. and Fr.**: August- February

**Habitat:** Found in hard surfaces of forest area.

163. *Barleria prionitis* Linn.

**Local name:** Kala bans

**Characteristics:**
Erect, perennial shrub; stem pricky at nodes and terminals, branched; leaves, simple, alternate, oblong – ovate; flowers, yellow tubular, in axillary group; fruits is ellipsoid capsule, flat ovoid seeds.

**Fl. and Fr.**: September - January

**Habitat:** Found in hilly tracts and wastelands.

164. *Elytraria acaulis* (Linn. f.) Lindau

**Characteristics:**
Prostrate, herb; very small stem, leaves, simple, spathulate, radicle, whorled; green-white, biliped, flowers on long branched spike; fruits is brown, ovoid capsule; very small, ovoid seeds.

**Fl. and Fr.**: February - August

**Habitat:** Found in forest area, cultivated in cropland and gardens.
165. *Hygrophila auriculata* (Schum.) Hein.


**Characteristics:**

Erect, annual, herb; stem angular, branched, thick at nodes, spines at nodes, hairs on internodes; leaves, simple, whorled, leniar lanceolate, sessile; purple flower in group at node; fruits is linear capsule, flat ovoid seeds.

**Fl. and Fr.:** July- December

**Habitat:** Found near water bodies and wetlands.

166. *Perisotophe paniculata* (Forsk.) Brum.


**Characteristics:**

Erect, annual, herb; stem angular, branched; leaves, simple, hairy, opposite, lanceolate; flower pink, biliped, in terminal cyme; group at node; fruits is linear capsule, ovoid seeds

**Fl. and Fr.:** July- December

**Habitat:** Found in forest area and on cropland.


Characteristics:
Erect, annual, herb; stem quadri angular, branched, thick at nodes; leaves, simple, hairy, opposite, ovate; flower blue, companulate, biliped, in axillary cyme; fruits is linear fusiform capsule, ovoid small seeds.

**Fl. and Fr.**: July - December

**Habitat**: Found in wasteland and gardens.

**LV. VERBENACEAE**

**168. Lantana camara** Linn.


**Local name**: Badbina

**Characteristics:**
Large evergreen shrub; stem branched, branches many, small hook spines on surface of branches, leaves simple, ovate, opposite decussate, capitate spike; orange or yellow tubular flowers; fruit is globose, fleshy, black drupe.

**Fl. & Fr.**: Throughout the year.

**Habitat**: Found in roadsides, wastelands and boundaries of croplands.

**169. Lantana wightiana** Wall. ex, Gamble


**Local name**: Badbina

**Characteristics:**
Large evergreen shrub; stem branched, branches many, small hook spines on surface of branches, leaves simple, ovate, opposite decussate, capitate spike; white tubular flowers; fruit is globose, fleshy, black drupe.

**Fl. & Fr.**: Throughout the year.

**Habitat**: Found in roadsides, wastelands and boundaries of croplands.
170. **Tectona grandis** Linn.


**Local name:** Sagaon

**Characteristics:**
Large deciduous tree; stem dichotomously branched; leaves simple, ovate, large, opposite; white, tubular flower in dichorial cyme; fruits are tetragonal drupes.

**Fl. and Fr.:** August – December

**Habitat:** Found on boundaries of croplands and roadsides.

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171. **Leucus aspera** (Willd.) Link.


**Characteristics:**
Annual herb, densely hairy, many branches; leaves simple, opposite, linear lanceolate, serrate margin; flowers labiate in axillary and terminal verticillasters; fruits are nuts, trigonous nutlets.

**Fl. and Fr.:** September-January

**Habitat:** Found in cropfield boundaries.

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172. **Ocimum canum** Sims.


**Local name:** Ban tulshi
**Characteristics:**
Annual, erect herb; branched and densely hairy, quadriangular stem; leaves simple, opposite, linear lanceolate, serrate margin; flowers labiate in axillary and terminal verticillasters; posterior sepal very broad; fruits are nuts, trigonous nutlets.

**Fl. & Fr.:** August - October

**Habitat:** Found on open wastelands.

173. *Salvia aegyptiaca* Linn.


**Characteristics:**
Annual, erect herb; much branched and densely hairy, leaves simple, opposite, linear lanceolate, densely hairy on both surfaces; flowers labiate in axillary and terminal verticillasters; perfect stamens two only, fruits are nuts, trigonous nutlets.

**Fl. and Fr.:** November - January.

**Habitat:** Found in moist areas.

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**LVII. NYCTAGINACEAE**

174. *Boerhavia diffusa* Linn.


**Local name:** Punarnava

**Characteristics:**
Perennial diffused herb; grows prostrate but sexual braches grow upward; pink coloured branches; leaves simple, opposite, ovate; flowers in terminal panicles; axillary panicle; flowers pink. 5 ribbed anthocarp.

**Fl. and Fr.:** July - March
**Habitat:** Found in roadsides and wasteand area.

175. *Boerhavia rapens* Linn.


**Local name:** Punarnava

Perennial prostrate herb; pink coloured branches; leaves simple, ovate, unequal pair of opposite leaves; flowers in terminal panicles; axillary panicle; flowers pink. 5 ribbed anthocarp.

**Fl. and Fr.:** July - March

**Habitat:** Found in roundsides and grassland.

176. *Bougainvillea glabra* Choisy


**Characteristics:**

Evergreen, shrub, cliber; stem woody, branched, armed with spines; leaves simple, ovate, alternate; flowers in cluster of cyme, involucral bract become magenta coloured, flower tubular.

**Fl. and Fr:** August-December

**Habitat:** Very common in plains and wetland.

LVIII. AMARANTHACEAE

177. *Achyranthes aspera* Linn.


**Local name:** Andhi Jhada

**Characteristics:**
Annual, erect herb, stem dichotomously branched, angular, leaves simple, lanceolate, opposite, marin entire; whitish-green flowers in terminal spike; bracts of flower are membranous and spiny; cylindrical seeds.

**Fl. and Fr.**: Throughout the year.

**Habitat**: Found in dry wasteland and road sides.


**Characteristics**:
Annual, erect herb; stem angular, herbaceous, branched, leaves simple, alternate, oblong ovate; green flowers in terminal or axillary spike; fruit is ovoid capsule; seeds black.

**Fl. and Fr.**: Throughout the year.

**Habitat**: Found in wetlands.

179. *Amaranthus spinosus* Linn.


**Characteristics**:
Annual, erect herb; stem herbaceous, branched, spine on nodes; leaves simple, alternate, oblong ovate; green white flowers in terminal or axillary spike; fruit is ovoid capsule.

**Fl. and Fr.**: Throughout year.

**Habitat**: Found in wetland and near cropfields.

180. *Celosia argentea* Linn.


**Characteristics**:
Annual, erect, herb; ascending, angular stem with long branches; leaves simple, elongate-lanceolate, entire margin; flowers in terminal pink-white spike; fruit is a capsule, seeds globose.

**Fl. and Fr.**: July- December

**Habitat**: Found in wasteland near crops fields.

**LIX. CHENOPODIACEAE**


**Local Name**: Bathli

**Characteristics**:

Erect annual herb; stem soft, dichotomously branched; leaves simple, alternate, ovate, dentate margin, powdery appearance on lamina, flowers light green in terminal panicle; globose seed.

**Fl. and Fr.**: December -March

**Habitat**: Found as agriculture weed.

182. *Chenopodium murale* Linn.


**Local Name**: Bathua

**Characteristics**:

Erect annual herb; stem soft, dichotomously branched; leaves simple, alternate, triangular, acute apex, acute base, dentate margin, leathery appearance on lamina, flowers light green in terminal panicle; globose seed.

**Fl. and Fr.**: December- March.

**Habitat**: Found on road sides and aricultural weed.
LX. POLYGONACEAE

183. Polygonum plebeium R. Br.


**Characteristics:**
Annual, prostrate herb; densely branched; leaves simple, alternate, lanceolate; pink flowers in axillary cluster; fruit is nut; nutlets black.

*Fl. and Fr.*: December- April

**Habitat:** Found in wetland of pond.

184. Rumex dentatus Linn.


**Characteristics:**
Annual, erect herb; stem branched, fistular, leaves cauline and radicle, simple, linear-lanceolate; 6 lobe parienth, flowers green on nodes, whorled, appear like set of teeth; fruit is nut.

*Fl. and Fr.*: January to April

**Habitat:** Found in wetlands and moist cropland.

LXI. ARISTOLOCHIACEAE

185. Aristolochia bracteolata Lamk.


**Characteristics:**
Perennial, prostrate herb; stem angular, branches spreading; leaves simple, alternate, reniform, margin wavy; light yellow flowers; solitary axillary; fruit is elongated capsule.

**Fl. and Fr.:** August-November

**Habitat:** Found in roadsides and cropfield.

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**LXII. SANTALACEAE**

186. *Santalum album* Linn.


**Local name:** Lal Chandan

**Characteristics:**
Small, evergreen tree; semi root parasite; bark red; leaves alternate, thin, elliptic, acute apex; terminal bichacial cyme; flowers red-brown; fruit is a globose drupe.

**Fl. and Fr.:** April – September.

**Habitat:** Found in gardens (Chhatravilas Garden)

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**LXIII. EUPHORBIACEAE**


**Characteristics:**
Annual, erect herb; much branched herbs; 20-30 cm high; leaves simple, alternate, ovate, linear-lanceolate; flowers yellow green in axillary spikes; tepals minute, female flowers without leafy bracts, trilobed ovary, flower is capsule, ovoid seed.

**Fl. and Fr.:** Through out year

**Habitat:** Commonly found
188. *Crozophora rottleri* (Geis.) A.Juss.


**Characteristic**
Annual herb; green hairy stem, leaves simple, alternate, broadly ovate, inflorescence terminal or axillary raceme, male flowers sessile, yellow, female flowers green-yellow, pedicellate, tricarpellary ovary, fruit is a capsule, covered with stellate hairs, seeds globose.

**Fl. and Fr.**: September-April

**Habitat**: Found near running water of canals.

189. *Croton bonplandianum* Bail.


**Characteristics**:
Perennial herb, erect; 50-60 cmm high; branched, leaves simple, alternate, lanceolate, wavy margin; inflorescence terminal raceme; top of spike with yellow male flowers, base of spike with female flowers, ovary tricarpellary, stellate hairs on surface; fruit is a capsule, globular seeds with white spongy cap.

**Fl. and Fr.**: February- May

**Habitat**: Found in wastelands.

190. *Euphorbia caducifolia* Haines.


**Local name**: Danda Thor.

**Characteristics**:
Succulent, fleshy, dendroid shrub; branches green act as photosynthetic organ, leaves shown in rainy season and fall soon; leaves simple,
alternate, obovate; Inflorescence is cyathium, flowers red coloured, many male flowers, single female flower; fruit is a capsule; ovate, brown seeds.  
Fl.and Fr.: January- MayApril.  
Habitat: Found in hilly waste areas.

Characteristics:  
Annual herb; 70-80 cm. high; Deciduous Tree; branched; simple leaves, divided into two equal ovate halves; white flowers on terminal raceme; long pods with 12-20 seeds; black flat seeds.  
Fl.and Fr.: March- April.  
Habitat: Found in forest as well as cultivated gardens.

Local name: Dudhi  
Characteristics:  
Annual, sub-prostrate shrub; 20-30 cm high; stem weak, branched covered with glandular hairs; leaves simple, opposite, lanceolate, inflorescence cyathium; many male flowers single female flower in a cyathium; fruit casule, ovular seeds.  
Fl.and Fr.: Throughout the year  
Habitat: Common in wasteland, grassland and moist places.

Characteristics:
Evergreen tree, much branched; gray bark; leaves simple, alternate, ovate; inflorescence terminal raceme; top of raceme male flower and on base female flowers; tricarpellary ovary; fruit is capsule; ovate seeds.

**Fl. and Fr.:** December - March

**Habitat:** Found in forest area (Kolipura)

194. *Jatropha gossypifolia* Linn.


**Characteristics:**
Shrub; 1-1.5 m high; branched, branches covered with glandular hairs; leaves palmate, 5 lobes, lobes are ovate lanceolate; cordate at base alternate, flowers in terminal and axillary corymb, flowers with dark red bracts; fruits, capsule, ovate seeds with caruncle.

**Fl. and Fr.:** Throughout year.

**Habitat:** Found in moist areas of roadsides.


**Local name:** Bhui Amla

**Characteristics:**
Annual, erect herb; 40-60 cm high; branched, branches with leaves appear like a pinnately compound leaf; leaves simple, ovate, opposite; axillary minute male flowers on upper and female flowers in lower portions of branches, tepals 5; ovary tricarpellary, 2 ovules per locule; fruit is capsule, seeds ovate.

**Fl. and Fr.:** Throughout year
Habitat: Common plant of moist area, gardens and grasslands.

196. *Ricinus communis* Linn.


Local Name: Arandi

Characteristics:
Small, evergreen, perennial tree; soft wooded, branched; annual herb; branched; leaves palmate, 6-12 lobes, lobes are ovate lanceolate; alternate, flowers in terminal raceme, yellow male flowers, green female flowers; fruit is casule, ovate seeds with caruncle.

Fl. and Fr.: October - November

Habitat: Found in plains after rainy season.

**LXIV. ULMACEAE**

197. *Holoptelea integrifolia* (Roxb.)Planch.


Local Name: Bandar Baati

Characteristics:
Large, deciduous tree, bark gray, much branched; leaves simple, alternate, cordate; flowers dioecious but plant is monoecious; yellow-green flowers in clusters; fruit is orbicular samara. Single seeded.

Fl. and Fr.: January to June.

Habitat: Common in roadsides and forest area.

**LXV. MORACEAE**

198. *Ficus benghalensis* Linn.

Local Name: Badd, Bargad

Characteristics:
Very large, evergreen, much branched tree; long prop root present for additional support; leaves simple, alternate, obovate, covered by downy hairs; flowers develop internally; inflorescence is axillary, paired hypanthodium, male flowers near mouth and female flowers in center; fruit is syconus; globular seeds.

Fl.and Fr.: Throughout year
Habitat: Found in roadsides, forest areas and croplands.

199. Ficus racemosa Linn.

Local name: Goolar

Characteristics:
Very large, evergreen, much branched tree; long prop root present; leaves simple, alternate, elliptic, covered by downy hairs; flowers develop internally; inflorescence is axillary, paired hypanthodium, male flowers near mouth and female flowers in center; fruit is light red, syconus; globular seeds.

Fl.and Fr.: Throughout the year.
Habitat: Found in forest area and roadsides.

200. Ficus palmata Forsk.

Local name: Adakh Anjeer

Characteristics:
Very large, evergreen, branched tree; leaves simple, alternate, broad covate, finely dentate margin, covered by downy hairs; flowers develop...
internally; inflorescence is axillary, paired hypanthodium, male flowers near mouth and female flowers in center; fruit is syconus; globular seeds.

**Fl. and Fr.:** August-January

**Habitat:** Found in wetlands and waste plains.

### 201. *Ficus religiosa* Linn.


**Characteristics:**
Very large, evergreen, much branched tree; long prop root present for additional support; leaves simple, alternate, cordate, glabrous, flowers develop internally; inflorescence is axillary, paired hypanthodium, male flowers near mouth and female flowers in center; fruit is syconus; globular seeds.

**Local name:** Peepal

**Fl. and Fr.:** March-April.

**Habitat:** Common in roadsides and forest area.


**Local name:** Shahtoot

**Characteristics:**
Very large, evergreen, much branched tree; long prop root present for additional support; leaves simple, alternate, obovate, covered by downy hairs; flowers develop internally; inflorescence is axillary, paired hypanthodium, male flowers near mouth and female flowers in center; fruit is syconus; globular seeds.

**Fl. and Fr.:** December-May.

**Habitat:** Found on sandy plains.
203. *Casuarina equisetifolia* Linn.


**Local name:** Jhau

**Characteristics:**
Erect, deciduous, conical, monoecious, much-branched tree; grey-brown bark; drooping branches; leaves long, scaly- lanceolate; male spikelets axillary in group, female spikelets in conelike cluster. Fruit is samara.

**Fl. and Fr.:** Throughout year.

**Habitat:** Found in forest plains.
A: *Abutilon indicum* (Linn.) Sweet (MALVACEAE)

B: *Acacia nilotica* (Linn.) Willd. (MIMOSACEAE)

C: *Ailanthus excelsa* Roxb. (SIMAROUBACEAE)

D: *Aegle marmelos* (Linn.) Corr (RUTACEAE)
A: *Acacia tortilis* (Forsk.) Heyne (Mimosaceae)

B: *Acalypha indica* Linn. (Euphorbiaceae)

C: *Achyranthes aspera* Linn. (Amaranthaceae)

D: *Adhatoda vasica* Nees. (Acanthaceae)
FIG. :- 7  A – D

A :- *Acacia jacquemontii* Benth. (MIMOSACEAE)

B :- *Aloe vera* Linn. (LILIACEAE)

C :- *Albizia lebbek* (Linn.) Benth. (MIMOSACEAE)

D :- *Anagallis arvensis* Linn. (PRIMULACEAE)
A: *Argemone mexicana* Linn. (PAPAVERCEAE)

B: *Argemone ochroleuca* Sweet. (PAPAVERACEAE)

C: *Aphuda mutica* Linn. (POACEAE)

D: *Aristida adcensionis* Linn. (POACEAE)
A: *Balanites aegyptiaca* (Linn.) Delile (SIMORABACEAE)

B: *Bacopa monnieri* (Linn.) Wettst. (SCROPHULARIACEAE)

C: *Asparagus racemosus* Linn. (LILIACEAE)

D: *Azadirachta indica* Linn. (MELIACEAE)
A: *Barleria prionitis* Linn. (ACANTHACEAE)

B: *Barleria acanthoides* Vahl. (ACANTHACEAE)

C: *Bauhinia racemosa* Lamk. (CAESALPINIACEAE)

D: *Bauhinia variegata* Linn. (CAESALPINIACEAE)
FIG. :- 11 A – D

A :- Butea monosperma Roxb. (PAPILIONACEAE)

B :- Bombax ceiba Linn. (BOMBACACEAE)

C :- Caesalpinia pulcherrima (Linn.) Sw. var. flava. (CAESALPINIACEAE)

D :- Caesalpinia pulcherrima (Linn.) Sw. var. rubra (CAESALPINIACEAE)
A :- *Calotropis gigantea* (Linn.) R.Br.  
(ASCLEPIADACEAE)  

B :- *Calotropis procera* (Ait.) R.Br.  
(ASCLEPIADACEAE)  

C :- *Callistamon citrinus* (Curtis) Skeels.  
(MYRTACEAE)  

D :- *Canna indica* Linn. var orientalis  
(CANNACEAE)
FIG. :- 13 A – D

A :: Capparis decidua (Forsk.) Edgew. (CAPPARIDACEAE)

B :: Capparis sepiaria Linn. (CAPPARIDACEAE)

C :: Cannabis sativa Linn (CANNABINACEAE)

D :: Boswellia serrata Triana & Planch (BURSERACEAE)
FIG. :- 14  A – D

A :-  *Cassia alata* Linn.  
    (CAESALPINIACEAE)

B :-  *Cassia fistula* Linn.  
    (CAESALPINIACEAE)

C :-  *Cassia siemia* Lam.  
    (CAESALPINIACEAE)

D :-  *Cassia occidentalis* Linn.  
    (CAESALPINIACEAE)
A: *Cassia tora* (Linn.) Roxb. (CAESALPINIACEAE)

B: *Casuarina equisetifolia* Linn. (CASUARINACEAE)

C: *Cenchrus setigerus* Vahl. (POACEAE)

D: *Chenopodium murale* Linn. (CHENOPODIACEAE)
A: *Centella asiatica* (Linn.) Urban (APICACEAE)
B: *Cirsium arvense* (Linn.) Scop. (ASTERACEAE)
C: *Coccinia grandis* (Linn.) J.O. Voigt. (CUCURBITACEAE)
D: *Convolvulus arvensis* Linn. (CONVOLVULACEAE)
Fig. :- 17 A – D

A :- Corchorus capsularis Linn.
(TILIACEAE)

B :- Cordia gharaf (Forsk.) Ehren. ex Asch.
(EHRETIACEAE)

C :- Cotula hemisphaerica (Roxb.) Wall ex Benth. & Hook. f.
(EUPHORBIACEAE)

D :- Crozophora rotteri Gies
A. Juss.ex. Spreng.
(ASTERACEAE)
FIG. :- 18  A – D

A :- *Cuscuta hyalina* Heyne ex Roth.  
(CUSCUTACEAE)

B :- *Cuscuta reflexa* Roxb.  
(CUSCUTACEAE)

C :- *Crotalaria medicaginea* Lamk.  
(PAPILIONATAE)

D :- *Croton bonplandianum* Baill.  
(EUPHORBIACEAE)
Fig. 19 A–D

A: Cryptostegia grandiflora R.Br. (PERIPLOCACEAE)
B: Cynodon dactylon (Linn.) Pers. (POACEAE)
C: Cyperus alopecuroides Rottb. (CYPERACEAE)
D: Cyperus difformis Linn. (CYPERACEAE)
FIG. :- 20  A – D

A :- *Cyperus kalininga* Endl.  
(CYPERACEAE)

B :- *Cyperus pygmaeus* Rettd.  
(CYPERACEAE)

C :- *Cyperus rotundus* Linn.  
(CYPERACEAE)

D :- *Dendrocalamus strictus* (Roxb.) Nees.  
(POACEAE)
**FIG. :- 21 A – D**

A :- *Dalbergia sisso* Roxb.  
    (PAPILIONACEAE)

B :- *Dalbergia latifolia* Roxb.  
    (PAPILIONACEAE)

C :- *Datura innoxia* Mill.  
    (SOLANACEAE)

D :- *Datura stramonium* Linn.  
    (SOLANACEAE)
A: *Delonix regia* (Boj.ex Hook.) Raf.  
*CAESALPINIACEAE*

B: *Dichrostachys cinerea* (Linn.) Wight & Arn.  
*MIMOSACEAE*

C: *Diospyros melanoxylon* Roxb.  
*EBENACEAE*

D: *Dregea volubilis* Benth. ex Hook.  
*ASCLEPIADACEAE*
FIG. :- 23 A – D

A :- Echinops echinatus Roxb.
(ASTERACEAE)

B :- Eclipta prostrata (Linn.)L. Mant.
(ASTERACEAE)

C :- Elytraria acaulis (Linn.)Kuntz.
(ACANTHACEAE)

D:- Gomphrena celosiodes Mert.
(AMARANTHACEAE)
FIG. :- 24 A – D

A :- *Euphorbia caducifolia* Linn. (EUPHORBIACEAE)

B :- *Euphorbia heterophylla* Linn. (EUPHORBIACEAE)

C :- *Euphorbia hirta* Linn. (EUPHORBIACEAE)

D :- *Glinus oppositifolius* (Linn.) D.C. (MULLUGINACEAE)
A: *Ficus benghalensis* Linn. (MORACEAE)

B: *Ficus palmata* Forsk. (MORACEAE)

C: *Ficus racemosa* Linn. (PAPILIONATAE)

D: *Hamelia patans* Jacq. (RUBIACEAE)
A: *Eriochloa procers* (Retz.) Hubb. (POACEAE)

B: *Eragrostis japonica* (Thunb.) Trin. (POACEAE)

C: *Grangea maderspatana* (Linn.) Poir. (ASTERACEAE)

D: *Gnaphalium luteo-album* Linn. (ASTERACEAE)
A: *Holoptelia integrifolia* (Roxb.) Planch. (ULMACEAE)

B: *Heliotropium supinum* Linn. (BORAGINACEAE)

C: *Hibiscus caesius* Gracke (MALVACEAE)

D: *Heteropogon contortus* (Linn.) Roem & Schult. (POACEAE)
A: *Ipomoea nil* (Linn.) Roth (Convolvulaceae)

B: *Ipomoea indica* Stapf. (Convolvulaceae)

C: *Hygrophila auriculata* (Schumach.) Hein. (Acanthaceae)

D: *Jatropha gossypifolia* Linn. (Euphorbiaceae)
FIG. : 29 A – D

A : Lantana camara Linn. (VERBENACEAE)

B : Lantana wightiana Wall. ex Gamble (VERBENACEAE)

C : Kigelia pinnata D.C. (BIGNONIACEAE)

D : Leptadenia pyrotechnica (Forsk.) Decne (ASCLEPIADACEAE)
A: *Lathyrus aphaca* Linn. (PAPILIONACEAE)

B: *Luffa acutangula* (Roxb.) Clarke (CUCURBITACEAE)

C: *Limonia acidissima* Linn (RUTACEAE)

D: *Leucaena leucocephala* (Lam.) de Wit. (MIMOSACEAE)
FIG. :- 31 A – D

A :: Mallotus philippensis (Lam.) Muell. (EUPHORBIAECEAE)

B :: Mangifera indica Linn. (ANACARDIACEAE)

C :: Manilkara zapota (Linn.) P.Royen (SAPOTACEAE)

D :: Manilkara hexandra (Roxb.) Dubard (SAPOTACEAE)
A: *Malvestrum cormandelianum* (Linn.) Garcke (MALVACEAE)

B: *Martynia annua* Linn. (MARTYNIACEAE)

C: *Maytenus emarginata* (Willd.) Ding Hou. (CELASTRACEAE)

D: *Melilotus indica* All. (PAPILIONACEAE)
A: *Medicago polymorpha* Linn
   (PAPILIONACEAE)

B: *Merramia aegyptia* Linn.
   (CONVOLVULACEAE)

C: *Mimosa hamata* Willd.
   (MIMOSACEAE)

D: *Mitragyna parvifolia* (Roxb.) Korth
   (RUBIACEAE)
FIG. :- 34  A – D

A : - *Momordica dioica* Roxb. ex Willd (CUCURBITACEAE)

B : - *Mucuna pruriens* (Linn.) D.C. (PAPILIONACEAE)

C : - *Moringa oleifera* Lam. (MORINGACEAE)

D : - *Morus alba* Linn. (MORACEAE)
FIG. :- 35  A – D

A :- *Opuntia elatior* Mill.  
(CACTACEAE)

B :- *Oxystelma secamone* (Linn.) K.Schum.  
(ASCLEPIADACEAE)

C :- *Oxalis corniculata* Linn.  
(OXALIDACEAE)

D :- *Oxalis corymbosa* D.C.  
(OXALIDACEAE)
A: *Pandanus odoratissimus* Linn. (LILIACEAE)

B: *Pedaliun murex* Linn. (PEDALIACEAE)

C: *Parkinsonia aculeata* Linn. (CAESALPINEIACEAE)

D: *Parthenium hysterophorus* Linn. (ASTERACEAE)
A: *Peltophorum pterocarpum* (D.C.) Backer ex K. Heyne (CAESALPINIACEAE)

B: *Pergularia daemia* (Forsk.) Chiov. (ASCLEPIADACEAE)

C: *Peristrophe paniculata* (Forsk.) Brum. (ACANTHACEAE)

D: *Phalaris minor* Retz. (POACEAE)
A: *Phoenix sylvestris* (Linn.) Roxb. ([ARECACEAE](#))

B: *Phyllanthus fraternus* Webster ([EUPHORBIACEAE](#))

C: *Pithecellobium dulce* (Roxb.) Benth. ([MIMOSACEAE](#))

D: *Polygonum plebeium* R.Br. var *indica* (Roth) Hook. ([POLYGONACEAE](#))
FIG. :- 39  A – D

**A** :- *Polypogon monspelensis* (Linn.) Desf.  
(POACEAE)

**B** :- *Pongamia pinnata* (Linn.) Pierre  
(PAPILIONACEAE)

**C** :- *Potentilla supina* Linn.  
(ROSACEAE)

**D** :- *Ranunculus sceleratus* Linn.  
(RANUNCULACEAE)
FIG. :- 40  A – D

A :- *Rhynchosis minima* (Linn.) D.C.  
(MALVACEAE)

B :- *Ruellia tuberosa* Linn.  
(ACANTHACEAE)

C :- *Salvadora persica* Linn.  
(SALVADORACEAE)

D :- *Santalum album* Linn  
(SANTALACEAE)
A: *Saraca indica* Linn.  
(CAESALPINIACEAE)

B: *Sida ovata* Forsk.  
(MALVACEAE)

C: *Sida spinosa* Linn.  
(MALVACEAE)

D: *Sonchus arvensis* Linn.  
(MALVACEAE)
**FIG. :- 42 A – D**

A :- *Setaria verticillata* (Linn.) P. Beauv  
B :- *Schoenoplectus articulatus* (Linn.) Palla  
(POACEAE)

C :- *Scirpus lateriflorus* Gmel.  
(CYPERACEAE)

D :- *Sorghum halepense* (Linn.) Pers.  
(POACEAE)
FIG. :- 43  A – D

A :- *Solanum nigrum* Linn.  
(SOLANACEAE)

B :- *Solanum virginianum* Linn.  
(SOLANACEAE)

C :- *Spergula arvensis* Linn.  
(CARYOPHYLLACEAE)

D :- *Sphaeranthus indicus* Linn.  
(ASTERACEAE)
A: *Syzygium cumini* (Linn.) Skeels (MYRTACEAE)

B: *Striga angustifolia* (D.Don.) Sald. (SCROPHULARIACEAE)

C: *Tamarix ericoides* Rottl. (TAMARICACEAE)

D: *Tamarindus indica* Linn. (CAESALPINIACEAE)
FIG. :- 45  A – D

A :- Tecoma undulata (Sm.) Seem.  
(BIGNONIACEAE)

B :- Tectona grandis Linn. f.  
(VERBINACEAE)

C :- Thespisia populnea Solad.  
(MALVACEAE)

D :- Terminalia arjuna (Roxb. ex DC) Wight & Arn.  
(COMBRETACEAE)
A: *Tinospora cordifolia* (Willd.) Meirs. (MENISPERMACEAE)

B: *Tridax procumbens* Linn. (ASTERACEAE)

C: *Thevetia peruviana* (Pers.) Merrill. (White) (APOCYNACEAE)

D: *Thevetia peruviana* (Pers.) Merrill. (Yellow) (APOCYNACEAE)
A: *Urginea indica* (Roxb.) Kunth. (LILIACEAE)

B: *Urginea indica* (Roxb.) Kunth. (LILIACEAE)

C: *Withania somnifera* (Linn.) Dunal. (SOLANACEAE)

D: *Xanthium indicum* Koen.ex Roxb. (ASTERACEAE)
A: Ziziphus mauritiana Lamk. (Rhamnaceae)

B: Mimordica charantia Linn. var. charantia (Cucurbitaceae)

C: Convolvulus microphyllus Sieb. ex Spreng (Convolvulaceae)

D: Ziziphus nummularia (Burn. f.) Wt. Am. (Rhamnaceae)