OBSERVATIONS AND RESULTS

The present investigation is focused on the collection of ethnomedicinal plants from the forest area and tribal patches of Akola District (MS) India. About 320 medicinal plants belonging to 88 families were collected (Data not shown). However, to avoid the repetition and to concise the writing work, only 145 plant species belonging to 57 plant families is presented here with their ethnomedicinal importance. Most of the plants are provided with their habit description, however, each plant is discussed in the presented data include its Botanical name, Vernacular name, Family, Habit, Habitat, Place of collection, Brief description and its ethnomedicinal uses. The plants with their ethnomedicinal specifications are arranged alphabetically.

Botanical Name: *Abelmoschus ficulneus* L. (SSCB-48/320) (Plate-19, Fig.4)

Vernacular Name: Ran Bhendi.

Family: Malvaceae

Habitat: Common along road sides and hedges.
**Description:**

Wild erect annual herb, branching racemose covered with satellite hairs. Leaves simple, petiolate, alternate lobes, palmately incised, inflorescence solitary axillary. Flowes solitary large, white, complete, bisexual, actinomorphic, hypogynous, pentamorous, gamosepalous, polypetalous. Stamens indefinite, monoadelphous, stamina tube long and anthers kidney shaped. Pentacarpellary syncarpous superior ovary. Fruit capsule covered with hairs, ribbed and green, seeds smooth, round and black.

**Ethnomedicinal uses:**

The korku medicine men prescribe the root powder on dog bite while the gonds are found to use the fruit extract to cure urine stone.

**Botanical Name: Abutilon indicum L.**

(SSCB-49/320)

(Plate-19, Fig.1)

**Vernacular Name:** Petari, Mudra, Shikka.

**Family: Malvaceae**

**Habitat:** Common along road sides.

**Description:**

Greyish-tomentose undershrubs, reaching 1 m or more in height. Leaves broadly ovate or ovate-lanceolate or sub-orbicular, velvety on both the surfaces, margins dentate; petiolate. Flowers yellow or orange-yellow, solitary, axillary. Carpels 10-25, reniform, dark brown, with minute scattered, stellate hairs.
Ethnomedicinal Uses:

Andh community peoples use the Infusion of roots in fever. They also use to take root decoction internally twice a day for a week to cure jaundice. In Bhils, the leaves and seeds are crushed with water to make paste and applied for 15-30 days to cure syphilis. Korku peoples use to take leaf paste, orally to cure piles. They take about 10 g root powder with water twice a day for 3 months to cure tuberculosis. Banjara healers administered the leaf and root paste for migraine pain. A decoction of the root is given for chest conditions such as bronchitis. Seed paste and paste of leaves are applied locally to cure piles.

The leaf powder is useful in uterus displacement (Mohapatra and Sahoo 2008). Paste of leaves is applied on injuries, boils and scorpion bites (Venkat Ramana M. 2008), and also used in jaundice (Gul Jan et al., 2009).

Botanical Name: *Abras precatorius* L. (SSCB-108/320) (Plate-11, Fig.1)

Vernacular name: Gunja/ Ratti

Family: Fabaceae

Habit: Bushy herb

Place of collection: Near Kapasi village

Description:

A much branched, perennial, slender and deciduous woody tree climbing herb. Stem cylindrical, wrinkled with smooth bark. Leaves stipulate and pinnately compound, leaflet 7-24, 0.5-2.5 cm in length, oblong, obtuse, truncate at both ends. Flowers in axillary raceme, smaller, pinkish white
coloured. Pods about 2 cm long, tergid, oblong with 3-5 seeds. Seeds are oval and red colored with black blotch.

**Ethnomedicinal uses:**

The seed of Gunja are used by local Banjara people to heal skin damages and swellings. The seed powder mixed with water is applied locally to reduce swellings and skin damages. White seeds kept in unboiled cow milk overnight and then given to women in the morning for 15 days at the end of menstruation cycle to prevent contraception.

**Botanical Name:** *Acalypha indica* L.  
(SSCB-128/320)  
(Plate-19, Fig.1)

**Family:** Euphorbiaceae

**Habit:** Annual herb

**Part used:** Leaves

**Place of collection:** Common in rainy season

**Description:**

An annual herb, up about 75cm high. Leaves 3-8cm long, ovate, thin usually 3-nerved; margins of the leaves toothed; leafstalks longer than leaves. flowers auxiliary erect spikes; female flower supported by conspicuous wedge-shaped bracts: male flower : minute , borne towards the top of their spike. Fruits small, hairy, concealed in the bracts.

**Ethnomedicinal uses:**

The local peoples use this plant on Jaundice. The leaves crushed with sugar candy and curd taken orally early in the morning for three days. The leaves extracted with garlic and the juice is taken as anthelmintic.
Botanical Name: *Acanthospermum hispidum* DC.  
(SSCB-167/320)  
(Plate-17, Fig.2)

Vernacular Name: Gokhuru

Family: Asteraceae

Habit: Annual herb

Place of collection: Katepurna, Khatkali

Description:

Erect, diffusely branched, hary annual herb. Leaves simple, subsessile, ovate, spathulate. Inflorescence head, subsessile, solitary in the fork of dichotomous branching, greenish yellow. Achenes 5-10, triangular with numerous lateral spines.

Ethnomedicinal uses:

This plant is used by the local peoples to cure skin diseases. Leaves are claimed to cure fever.

Botanical Name: *Achyranthes aspera* L.  
(SSCB-212/320)  
(Plate-28, Fig.2)

Vernacular Name: Aghada, Agdya, Apamarga, Kutri.

Family: Amaranthaceae

Place of collection: PDKV campus Akola

Habit Description:

Erect, woody, perennial herbs, 20-80 cm tall; stems simple or branched, ribbed, pubescent. Leaves broadly elliptic, elliptic-lanceolate or ovate-lanceolate, 4-13 x 2-5 cm, glabrous or sparsely pubescent. Flowers pale
green, in terminal, simple or branched spikes. Utricles oblong-cylindric, about 0.2 cm long, truncate at apex, brown.

**Ethnomedicinal uses:**

**Bhil** peoples boiled the leaves and consumed to relieve internal piles and the roots are used as a brush to relieve pain and clean the teeth. In **Korku** community root powder is given once a day for easy delivery to women. They also use fresh roots for hydrophobia.

Root inserted in vagina as abortifacient, chewed to prevent cold, powder in stomach pain (Jain, 1965). Infusion of root astringent (Kirtikar and Basu, 1975). Maheshwari et al., (1980) and Saxena and Vyas (1983) have reported root of the plant to check dysentery. Root juice mixed with sugar is given in veneral diseases (Yadav and Bhamare, 1989). One teaspoon powder of whole plant is taken with warm water for pneumonia (Parveen et al., 2007). Stem is used as toothbrush, also ash of the plant is used as tooth powder; it is used to relieve pyorrhea and toothache (Badgujar et al., 2008). The root juice is used for cough, common cold, diarrhoea and dysentery (Kunwar et al., 2009).

**Botanical Name:** *Adhatoda zeylanica* Medik. (SSCB-133/320)

**Vernacular Name:** Adulsa, Adursa,

**Family:** Acanthaceae

**Place of Collection:** Katepurna sanctuary.

**Description:**

Evergreen, erect, bushy shrubs with short internodes; branches thikened above the nodes. Leaves elliptic-lanceolate, glabrous. Flowers white;
in axillary and terminal spikes. Capsules clavate, pubescent, 4-seeded. Seeds orbicular-oblong, tuberculate.

**Ethnomedicinal Significance:**

**Bhil** use to gargle with the juice of plant with salt to cure tonsillitis. Leaf extract is taken internally to relieve cough and cure asthma. **Korku** peoples use the juice of flowers as eyes drop to cure ophthalmic complaints.

Two teaspoonful decoctions prepared from leaves mixed with leaves of *Ocimum sanctum* in 2:1 ratio is given 3 times a day for 3-5 days to control cough, cold and fever, (Bhattarai, 1990, 1992a; Jha and Bhattarai, 1989; Manandhar, 1991; Mueller-Boeker, 1993; Parajuli, 2000; Shrestha and Pradhan, 1986). Leaf, root, bark, flower expectorant (Dwivedi _et al._., 2008).

**Botanical Name:** *Aerva lanata* (L.) A.L. de Juss. ex Schult.

(SSCB-16/320)

(Plate-28, Fig.3)

**Vernacular Name:** Kapuri, Madhuri.

**Family:** Amraranthace

**Place of collection:** PDKV agriculture waste land, Patur ghat area.

**Habitat:** Common in cultivated fields, forest and gardens.

**Description:**

Erect or suberect, woody herbs, 10-25 cm tall, branched from base pubescent or woolly. Leaves elliptic, obovate or suborbicular, 0.5-1.5 x 0.2-1 cm, pubescent above, cottony beneath. Flowers greenish-white, in axillary heads, forming globose clusters. Utricles ovoid, indehiscent, smooth, black.
Ethnomedicinal uses:

**Andh** peoples take orally the juice of roots to cure liver congestion, jaundice, biliousness and dyspepsia. **Bhils** take decoction of fresh plant for the treatment of gonorrhea, kidney disorders, cutaneous infections and sugar in urine. Root paste used with other roots to cure piles. **Korku** vaidoos recommend a decoction of the plant to be taken internally for a few days to dissolve the stone and to clear the urinary tract.

Juice of whole plant is taken orally to treat cough, sore throat and wounds (Ignacimuthu *et al.*, 2006). The whole plant: astringent, cooling, vermifuge and diuretic (Vanila *et al.*, 2008). Plant juice taken internally in burning sensation at the time of urination (Venkat Ramana, 2008). Root paste is applied on mouth, once in a day for three days for eruptive disorders in children (Jagtap *et al.*, 2009).

**Botanical Name:** *Ageratum conyzoides* L.  
(SSCB-151/320)  
(Plate-17, Fig.1)

**Vernacular Name:** Osadi

**Family:** Asteraceae

**Place of collection:** Common, Agriculture waste land of PDKV Akola

**Description:**

The genus is annual herb with about 0.5 to 1 meter height. The stem is herbaceous and hairy. The leaves are simple and pubiscent crushy. Flowers are minute, vary in colour from white to faint pink or creamish.
Ethnomedicinal uses:

The plant infusion is given in diarrhea. The leaf paste is applied externally to cure cuts, sores and wounds (Gond). The leaves of the plants are ground and the extracted juice is then applied externally to cuts or wounds only once.

Botanical Name: Aloe vera (Linn.) Burm. f. Fl.  (SSCB-72/320)

Vernacular Name: Korphad, Dritkumari.

Family: Liliaceae

Place of Collection: Patur ghat forest, Narnala forest

Habitat : On the hill slopes.

Description:

A Perennial herb, stem short, thick. Leaves sessile crowded, lanceolate, concave, and spiny toothed at margins. The leaves are thick and fleshy. Flowers generally yellow coloured.

Ethnomedicinal uses:

Andh practitioners prescribe pulp of juice of one fresh leaf per day for about a week to cure kidney stones, fever and menstrual complaints. Local Bhil people take pulp juice of leaf to cure piles, jaundice, cancer and stomachache and apply locally to recover the burnt skin and for wound healing.
Botanical Name: *Alternanthera sessilis* R. Br. (SSCB-126/320)

(Plate-28, Fig.4)

**Family:** Amranthaceae

**Place of collection:** Agricultural field of PDKV, Akola

**Habitat:** Common in waste land

**Description:**

This is a perennial herb with prostrate stems, rarely ascending, often rooting at the nodes. Leaves obovate to broadly elliptic, occasionally linear-lanceolate, 1-15 cm long, 0.3-3 cm wide, glabrous to sparsely villous, petioles 1-5 mm long. Flowers in sessile spikes, bract and bracteoles shiny white, 0.7-1.5 mm long, glabrous; sepals equal, 2.5-3 mm long, outer ones 1-nerved or indistinctly 3-nerved toward base; stamens 5, 2 sterile. In the wild it flowers from December till March.

**Ethnomedicinal uses:**

The local peoples use the plant on snake bite as antidote. The plant extract is also said to cure eye inflammation.

Botanical Name: *Alysicarpus vaginalis* (L) DC (SSCB-229/320)

(Plate-13, Fig.2)

**Vernacular name:** Shewara

**Family:** Fabaceae

**Habit:** Perennial shrub

**Part used:** Roots

**Place of collection:** Narnala forest.

**Description:**
Alysicarpus is an annual or short lived perennial herb with erect to prostrate habit. Stem may be up to 100 cm, smooth but hairy. The leaflets are generally two, lanceolate, 5x3 mm, petiole comparatively longer. Flowers arranged on terminal inflorescence, flowers pinkish or purple coloured.

Ethnomedicinal uses:
Root juice is given in fever. The roots ground to make juice and a cup of root juice daily is given to counter common fever in Korkus.

Botanical Name: *Andrographis paniculata* (Burm.1) Wall, ex Nees in Wall. (SSCB-145/320) (Plate-16, Fig.4)

Vernacular Name: Kalmegh, Bhui-neem.

Family: Acanthaceae

Place of collection: Along waste land of agricultural fields and forest edges collected from Katepurna forest area.

Habitat: Frequent on the forest edges.

Description:
Erect, stout, branched, rigid, annual herbs; branches angled. Leaves elliptic-lanceolate, 2.5-8 x 1.5-2 cm, glabrous. Flowers whitish with purple streaks, axillary, solitary. Capsules linear-oblong, 0.8-1.5 cm log, glabrous.

Ethnomedicinal uses:
According to Banjara healers leaf paste is applied topically at the bitten site of snake, beetle and scorpion and also leaf powder is taken orally twice a day to cure diabetes.
Bhil vaidoos recommend one teaspoon of fresh plant juice twice a day for seven days to treat snake-bite and scorpion-bite. It also arrests excess menstruation. A dense paste of leaves is applied externally in piles.

The plant shows hepatoprotective activity (Handa et al. 1990). Whole plant is effective in Cold, flu and hepatoprotection (Koul and Kapil, 1994; Sharma et al., 2002a) and also in Malaria (Devarapalli, 2007). Leaf juice taken internally as an anti-cobra venom (Ganesan et al., 2006). Leaf powder is mixed with cow or goat's milk and taken orally to treat diabetes (Ignacimuthu et al., 2006). Leaves are used in fever and piles (Vanila, et al., 2008).

**Botanical Name:** *Anisomeles indica* (L) R. Br.  
(SSCB-82/320)  
(Plate-22, Fig.3)

**Vernacular name:** Pitambari

**Family:** Lamiaceae

**Habit:** Annual herb

**Part used:** Leaves

**Place of collection:** Narnala forest near Rani Lake.

**Description:**

A 1.5 to 2.0 m tall bushy shrub. The leaves simple, chordate, opposite, hairy. Flowers in nodal cluster spike of about 10-15 cm, flowers pinkish, bilabiate.

**Ethnomedicinal uses:**

The leaf juice is used as teether for the children. The leaf juice (about 5ml) twice daily is given to the children during teeth formation to counter the pain. A paste of the leaves is applied to cure eczema (*Gond* and *Korku*).
Botanical Name: *Argemone mexicana* L. (SSCB-319/320)

(Plate-27, Fig.2)

**Vernacular Name:** Pivla dhotra, Kateringni.

**Family:** Papaveraceae

**Place of Collection:** Purna river bank in Akola, Mahan Lake near Barshitakali.

**Habitat:** Common weed in the agricultural fields and waste land.

**Description:**

Herbs or undershrubs, prickly, divaricately branching from below. Leaves sinuate-pinnatifid, 10-15 x 4-4.5 cm, spiny on margins and on veins beneath, base sub-amplexical. Flowers solitary, terminal, bright yellow. Capsules 5-locular, prickly.

**Ethnomedicinal uses:**

**Bhils** use the paste of seeds with salt and mustard oil is used as tooth-paste by those suffering from pyorrhea. The Bhils apply fresh leaves or their juice on eyes in conjunctivitis. Bhils apply seed-oil with root-powder in chronic skin diseases. **Banjara** healers prescribe about 2 spoonful leaf juice to woman twice a day for 12 days to promote pregnancy. **Andh** peoples use the yellow latex to cure ulcers of the lips and pimples and for wound healing.

It has been reported that the latex is employed to treat eye complaints (Maheshwari *et al.*, 1980, 1981; Saxena and Vyas, 1981; Maheshwari and Singh, 1984a) and relieve toothache (Singh *et al.*, 1987), while the root, stem and seed to treat skin diseases (Maheshwari *et al*, 1980; Saxena and Vyas, 1981, 1986; Singh and Maheshwari, 1983; Maheshwari and Singh, 1984 a).
Seeds are poured in ‘Mahua oil’ and are applied to eczema and itching (Parveen et al., 2007). Leaf paste on boils (Venkat Ramana, 2008).

**Botanical Name:** *Aristolochia bracteolata* Lamk. (SSCB-170/320) (Plate-30, Fig.3)

**Vernacular Name:** Sapsan.

**Family:** Aristolochiaceae

**Place of collection:** Shahanur forest baseline agriculture fields.

**Habitat:** Occasional in fields.

**Description:**

Slender, decumbent, glabrous, perennial herbs, woody at base. Leaves broadly ovate or reniform, 3-6 x 4.5-8 cm, glaucous below. Flowers dark purple, axillary, solitary. Capsules oblong-ellipsoid, 1.5-2.2 x 1-1.5 cm, glabrous, ribbed.

**Ethnomedicinal uses:**

**Bhils** of this area apply leaf-juice mixed with mustard-oil to cure skin diseases viz. eczema. Fresh root paste is applied externally to treat snake-bite and scorpion-sting. **Korkus** use leaf juice along with black pepper one teaspoonful twice a day is given for the treatment of malarial fever. Leaf-paste is used as a remedy for itche and insect bites.

Leaves are useful in snake bite poisoning and burning sensation (Vanila, et al., 2008).
Botanical Name: *Asparagus racemosus* Willd. (SSCB-217/320) (Plate-25, Fig.3)

Vernacular Name: Sasarmuli, Shatavari.

Family: Liliaceae

Place of collection: Paturghat forest area, Narnala forest.

Habitat: Wild in the hilly tracts of forest.

Description:

A wild, an extensively scadent, branched, spinous, climber. Root stock tuberous, branches angular, woody. Leaves spiny, cladode 2-6 together. Flowers in spike, small, white, complete, bisexual, actinomorphic, hypogynous, trimerous, tricyclic, perianth segment 6, white. Stamens 6, polyandrous, anthers purple. Ovary tricarpellary syncarpous, stigma 3. Fruit gobose, red when ripened.

Ethnomedical uses:

**Bhil** tribals use boiled tuber extract with milk and sugar to increase the weight and strength of all ages. **Banjara** and **Andh** practiceners used to give raw or boiled tuber to children on an empty stomach in the morning for about one week to stop bed-wetting.

The juice of the tubers is given as a remedy for diarrhoea and the tubers paste mixed with milk is given to **Korku** women for inducing lactation.

Shatavari is the main Ayurvedic rejuvenative for women. It is recommended for women who had hysterectomies, as it supplies many female hormones. It also helps to maintain urinary tract and strengthens the immune system. It purifies the blood (Subhose *et al.*, 2005). Roots adaptogen,
galactogogue (Dahanukar et al., 1997; Gupta and Mishra, 2006). Roots form a constituent of medicinal oil used for nervous and rheumatic complaints (Ramchandran et al., 1986; Srivastava, 1989). The dried roots are burnt and fumes are inhaled under a blanket for curing fever (Bhattacharjee, 1998). It is lactogogue, used in diabetes, vaginal uterine prolapse and increases sexual vigor (Choudhary et al., 2008). Root is tonic, aphrodisiac, diuretic, carminative, appetizer and antispasmodic (Kunwar et al., 2009).

**Botanical Name:** *Atylosia scarabaeoides* (L.) Benth (SSCB-106/320) (Plate-12, Fig.4)

**Vernacular Name:** Ran Tur.

**Family:** Fabaceae

**Place of collection:** Narnala

**Description:**

Slender, twining, hairy, pubescent, annual- perennial herb. Leaflets, elliptical to ovate, obtuse and mucronate at apex. Petiole 1-4 cm, Flowers in corymbose raceme. Calyx small, corolla slight extended. Fruits 2-5 seeded, densely hairy.

**Ethnomedicinal use:**

This plant is supposed to have many medicinal properties. The tribals claims that the plant is being used in legs pain, night fever, dropsy, anaemia, hemiplegia, burns, wounds, small pox, syphilis, gonorrhea, cholera, dysentery and even in snake bite. However, they do not discose the information about how they administer it and what is the mode of drug preparation.
Botanical Name: *Bacopa monnieri* (L.) Wettstein in Engl. & prantl.

(SSCB-154/320)

(Plate-27, Fig.1)

Varnacular Name: Brahmi, Jadpala.

Family: Scrophulariaceae

Place of collection: Katepurna forest area near river bank.

Habitat: Frequent in marshy and swampy places.

Description:

Prostrate, succulent herb. Normal tap root at the base and also adventitious roots at the aerial nodes. Stem aerial, weak. Leaves simple, opposite decussate, succulent, glabrous on both the surface. Flowers white, solitary axillary, complete, bisexual, slightly zygomorphic, tetracyclic, pentamerous epipetalous, corolla lobes subequal, glistening with shining dots. Stamens epipetalous. Capsule ovoid, acute, glabrous. Seeds minute, brown.

Ethnomedicinal uses:

Andh peoples apply warmed paste of leaves on the abdomen to cure stomochache. They also keep warmed leaves as such on the swellings to get relief and take orally the paste of plant and ginger along with water to cure urinary duct inflammations. Korku prescribe the decoction of plant as a nerve tonic and also promote fertility and prevent miscarriage.

Banjara use the plant extract is used in snake bite, scorpion sting and in asthma.

Root is purgative, bark with inflorescence in snake bites (Vanila *et al.*, 2008). Whole plant is used as a nervine tonic (Dwivedi *et al.*, 2008).
In Ayurveda, it is recommended in epilepsy, ulcers, spleen enlargement, indigestion, its significance as a brain tonic is also noteworthy and this property is attributed to saponin mixture consisting of Bacoside A, B and other saponins (Singh et al., 1982). Some of the traditional preparations with brahmi are brahmi Ghrita (in ghee, clarified butter), sarasvatarishta (a decoction used as a brain tonic), Brahmi rasayana (a rejuvenating formulation with other herbs), Brahmi taila (medicated oil), Brahmi sarbat (a cooling drink).

**Botanical Name:** *Baliospermum montanum* (Willd.) Muell.-Arg. in DC.  
(SSCB-219/320)  
(Plate-21, Fig.1)

**Vernacular Name:** Danti, Jamalgota.

**Family:** Euphorbiaceae

**Place of collection:** In the vallies of Narnala hilly tracks.

**Habitat:** Occasional along streams, in moist and shady places.

**Description:**

Stout undershrubs. Leaves variable in shape and size; the upper small, lanceolate; lower large ovate, palmately 3-5 lobed, glabrous. Flowers greenish-yellow, in axillary racemes or condensed panicles. Fruits ovoid, pubescent, trilobed.

**Ethnomedicinal uses:**

**Bhil** tribals use root decoction twice a day for a week to cure jaundice. Seed paste is applied externally on swellings and seed oil applied locally in rheumatic pains. **Gond** practicenors use root decoction in asthma and seeds
are used as purgative. Leaves decoction is prescribed by Gond healers in asthma and bronchitis. Seed powder is used as an antidote to snake-bite.

**Botanical Name:** *Barleria lawii* T. And.  
*(SSCB-29/320)*  
*(Plate-16, Fig.3)*

**Vernacular Name:** Kate Koranti

**Family:** Acanthaceae

**Place of collection:** Shahanur, Khatkali

**Habitat:** Open waste lands of forest

**Description:**

It grows as a shrub 60 -100 cm tall. The leaves are dark green on the upper surface and pale green on the lower surface. They are elliptic to narrowly ovate. The flowers are about 5 cm long, funnel-shaped in violet, pink, or white color. The fruits are about 1.5 cm long ellipsoid capsules. They become glabrous and glossy at maturity.

**Ethnomedicinal uses:**

The roots are used in cough and leaves to reduce inflammation *(Korku)*. The root decoction is given in cough and leaf juice is administered to reduced inflammation *(Gond).*
Botanical Name: *Bauhinia vahlii* Wight & Arn. Prodr.  
(SSCB-242/320)  
(Plate-14, Fig.2)

Vernacular Name: Jomar; Sehari, Velya kanchan.

Family: Caesalpiniaaceae

Place of collection: Narnala forest.

Habitat: Frequent on hill slopes.

Description:

Woody climbers with circinate tendrils. Leaves 10–40 x 15—45 cm, orbicular, cordate at base and lobed at apex, 11-13 nerved. Flowers white in long-peduncled terminal corymbose-racemes. Pods woody, 20-30 x 4-8 cm, rusty tomentose. Seeds 6-12, flat, dark brown.

Ethnomedicinal uses:

In *Gond* tribes seed powder with milk is taken orally in sexual debility and as a health tonic. *Korku* tribal people make the root paste and mix it with jaggery and used it in bone fracture. Seed powder with milk is prescribed orally as an aphrodisiac and to treat antifertility in women.

Botanical Name: *Bauhinia purpurea* L.  
(SSCB-183/320)  
(Plate-12, Fig.1)

Vernacular name: Kachnar

Family: Caesalpiniaaceae

Habit: Tree

Place of collection: Narnala

Description:
A well developed small tree or bush. Leaves 10-30 x 12 -40 cm, orbicular, cordate at base and lobed at apex, 11-13 nerved. Flowers Pink in long-peduncled terminal corymbose-racemes. Pods woody, 20-30 x 4-8 cm, rusty tomentose. Seeds 6-12, flat, dark brown.

**Ethnomedicinal uses:**

The seed powder is used for lice eradication. Dried seed powder mixed with coconut oil applied once before taking bath, twice or thrice a week.

**Botanical Name:** *Blepharis repens* (Vahl) Roth *(SSCB-56/320)*

**Vernacular Name:** Hadsan.

**Family:** Acanthaceae

**Place of collection:** Paturghat area and Shahanur hill slopes.

**Habitat** : Frequent on hill slopes

**Description:**

Diffuse or procumbent, much branched, pubescent herbs. Leaves whorled, elliptic or slightly obovate, whitish beneath. Flowers white or pale blue, solitary, axillary or 2-3 together. Capsules ovoid-ellipsoid, compressed. Seeds echinate with blunt spines.

**Ethnomedicinal uses:**

**Andhs** use to drop the juice of seeds in the ear to cure earache. The plant is boiled with the milk and taken as a tonic for sound health by the tribals. The Banjara tibals consume the plant paste along with jaggery and apply the paste of plant for joining the fractures and also used in persistent fever. Powder of
entire plant along with milk is taken for fracture remedies and as an aphrodisiac in Gond tribes.

**Botanical Name:** *Blumea lacera* (Burm f) DC in Wight.  
(SSCB-12/320)  
(Plate-18, Fig.2)

**Vernacular Name:** Bhamurda, Burandu, Kakronda.

**Family:** Asteraceae

**Place of collection:** Barshitakali forest.

**Habitat:** Weed, in the forest and fields.

**Description:**


**Ethnomedicinal uses:**

**Bhils** use leaf extract in bronchoitis, bleeding piles and burning sensation.

**Gonds** kept roots in mouth cures diseases of mouth. Leaf extract is rubbed over ribs of children to cure cramp disease.

Herb used as febrifuge, diuretic and anti-scorbutic (Ambasta, 1986).

Leaf juice astringent, febrifuge, stimulant, diuretic. Roots febrifuge, deobstruent, roots mixed with pepper used in bleeding piles and in cholera. (Kirtikar and Basu, 1975; Chopra et. al, 1992). Leaves are used in urinary complaints (Vanila, *et al.*, 2008).
Botanical Name: *Boerhaavia diffusa* L. (SSCB-139/320) (Plate-27, Fig.4)

**Vernacular Name:** Khaparkhuti, Punarnava, Tambadi vasu.

**Family:** Nyctaginaceae

**Place of Collection:** Sendona forest.

**Habitat:** On the hill slopes.

**Description:**

Perennial, diffuse herbs; roots fusiform. Leaves broadly ovate, elliptic-oblong or suborbicular, 0.5-3.2 x 0.4-3.1 cm, glabrous. Flowers pink, in axillary and terminal, very long peduncled panicles of umbels, Anthocarps clavate, 0.2-0.3 x 0.1 cm, fusiform or obovoid, turbinate, bluntly 5-ribbed, glandular.

**Ethnomedicinal uses:**

In **Bhils** decoction of plant is given once a day in the early morning continuously for two weeks to treat leucorrhoea. In **Banjara** the root of a plant is crushed with little amount of water and taken with milk in the morning as tonic and to treat malaria. The **Gond** tribals take the decoction of roots as an expectorant to cure asthma and jaundice. The **Korku** tribals consider decoction of roots orally the most perfect medicine for night-blindness and jaundice. Root paste is applied topically to treat hydrocele.

The whole plant has been reported to treat liver complaints (Rajwar, 1983), the root as abortifacient (Maheshwari and Singh, 1987), to treat asthma (Sharma *et al.*, 1979; Singh *et al.*, 1980), cough, heart diseases, piles, eye diseases, rheumatism (Rajwar, 1983), inflammation, urinary troubles (Singh *et al.*, 1980), and jaundice (Sharma *et al.*, 1979), while the leaf to treat eczema...
and itches (Saxena and Vyas, 1981). Root paste is applied to treat hydrocele (Ignacimuthu et al., 2006). Leaves boiled with rice, garlic and water are rubbed on body for rheumatism (Parveen et al., 2007). Decoction of plant is given for the treatment of leucorrhoea and dried plant powder is smoked as cigarette for treatment of asthma (Rout and Thatoi, 2009).

**Botanical Name:** *Bombax ceiba* L. (SSCB-110/320) (Plate-32, Fig.1)

**Vernacular Name:** Katesaur.

**Family:** Bombacaceae

**Place of collection:** Patur ghat area, Katepurna sanctuary and Narnala forest.

**Habitat:** In the the forests and fields.

**Description:**

Tall, deciduous trees with conical prickles; stems and branches grey, glabrous. Leaves crowded at ends of branches, petiolate, digitately 5-7 foliolate; leaflets ovate-lanceolate or broadly ovate, glabrous, base acute, margins entire. Flowers bright red or blood red. Capsules oblong, 5 valved, woody.

**Ethnomedicinal Significance:**

In *Bhil* community young root-tips are dried in shade and cooked as vegetable for the patients suffering from impotence. Bhils take orally gum-powder with water to cure acute diarrhoea and dysenteryand as an aphrodisiac Extract of stem bark is used as a nervine tonic. The powder of dry flowers with honey is given to the ladies suffering from excessive bleeding during menstruation in *Banjara*. In *Korku* the leaves are used as a vegetable to make
the semen thick and increase sperm counts. The paste of young fresh green leaves is applied as an ointment on cracked skin, particularly on lips. The tribals use resin for leucoderma and peptic ulcer. The tribals take orally the extract of roots against snake-bite for inducing vomiting and eat-gum to cure spermatorrhoea.

Root bark in dysentery, fracture (Acharya and Pokhrel, 2006). The petals of the flower are used to cure menorrhoea (Mohapatra and Sahoo, 2008). Bark in haematuria (Dwivedi et al., 2008).

Botanical Name: *Boswellia serrata* Roxb. ex Colebr. (SSCB-175/320)

Vernacular Name: Salai, Salan.

Family: Burseraceae

Place of Collection: Narnala forest area.

Habitat: In the hilly tracts of the forests.

Description:

Trees, 5-7 m tall with greenish-grey bark. Leaves imparipinnate apically clustered; leaflets ovate, truncate and oblique at base. Flowers greenish-white, in fascicled or panicled-racemes crowded at the ends of the leafless branchlets. Fruits ovoid, trigonous, glabrous.

Ethnomedicinal uses:

Korku tribes take gum and resin orally as an effective medicine against scorpion-sting and for diarrhoea, rheumatic pains and inflammation.

Bhil tribes use the leaf-juice to cure eye infections and decoction of bark is taken orally to cure chronic cough and cold. Extract of stem bark is taken orally by the tribes to cure stomachache.
The plant is beneficial in treating bronchial asthma (Gupta et al., 1998). Extract of gum resin was also recommended for possible therapeutic use in other arthritis types (Kimmatkar, 2003). Gum is burned in fire to create smoke, which is taken on to skin in ricket (Jagtap et al., 2009).

**Botanical Name:** *Buchanania lanzan* Speng.  
**Vernacular Name:** Charoli  
**Family:** Anacardiaceae  
**Place of Collection:** Katepurna, Narna  
**Description:**  
A medium-sized deciduous tree, growing to about 50 ft tall. It bears fruits each containing a single seed, which is popular as an edible nut, known as *chironji*. It is common in our forests mostly in eroded ravine lands. It avoids waterlogged areas, but occurs locally in clay soils. It can be identified by the dark grey crocodile bark with red blaze. A good species for afforesting bare hill slopes. It has tickly leathery leaves which are broadly oblong, with blunt tip and rounded base. Leaves have 10-20 pairs of straight, parallel veins. Pyramidal panicles of greenish white flowers appear in early spring. Fruits ripen from April to May and remain on the tree for quite a long time.  
**Ethnomedicinal uses:**  
The gum obtained from the bark, is swallowed directly to combat chest and body pain. The bark gum is administered by Gond healers to swallow directly in the form of small tablets (thrice daily for 10-15 days) to cure chest and body pain.
Botanical Name: *Butea monosperma* (Lamk.) Taub. (SSCB-116/320) (Plate-13, Fig.4)

Vernacular Name: Palas, Palash, Paladi.

Family: Fabaceae

Place of collection: Katepurna, Paturghat, Bharshitakali, Narnala forest.

Habitat: Very common in the hilly tracts of the forests.

Description:

Deciduous trees with crooked trunk and irregular branches, 6-8 m tall.

Leaves 3-foliolate; leaflets obliquely rounded, 9-18 x 6-9 cm, coriaceous.

Flowers orange-red, in panicles on naked branches. Pods flat, 13-19 x 3-4.7, softly pubescent, ligulate.

Ethnomedicinal uses:

**Banjara** peoples use the decoction of shoots in piles. Paste prepared from the pods is applied locally in scorpion bite. The powder of the dry leaf is taken twice daily for one month to cure white discharge and menorrhoea.

Shoot paste is applied twice a day for one week in piles by **Andhs**. They also use stem paste on the affected parts for cuts and wounds. The root decoction is used in urinary troubles. The Stem bark decoction is used in loose motions by **Bhils**. Seed powder with goat milk is given as an aphrodisiac. Seed powder is taken orally as contraceptive.

Flowers are gently warmed and placed over stomach in acute stomach-ache (Yadav and Bhamre, 1989). *Butea monosperma* is consistently used by the tribal communities for the treatment of diabetes (Rana *et al.*, 1999) as well
as in modern medicine. The flowers are active against worms, diarrhoea, dysentery, piles, colic pains due its tannins content (Khare, 2004). The powder of the dry leaf is taken twice daily to cure white discharge and menorrhoea (Mohapatra and Sahoo, 2008). Seeds used as oral contraceptive (Dwivedi et al., 2008). Gum is eaten in leucorrhoea bark extract is given after childbirth (Muhammad and Khan, 2008). Stem bark juice is used in kidney stones (Venkat Ramana, 2008).

**Botanical Name:** *Cadaba fruticosa* (L.) Druce (SSCB-246/320) (Plate-21, Fig.2)

**Vernacular Name :** Tankal, Taynkalu.

**Family:** Capparaceae

**Place of collection :** Narnala forest.

**Habitat :** Very common in the hilly tracts of the forests.

**Description:**

Shrubs about 2-4 m tall. Leaves elliptic-oblong, 0.2-2 x 3-5 cm, glabrous with mucronate apex, petiolate. Flowers yellowish, 2-4.5 cm across in terminal racemes. Fruits 0.5-2.8 cm long, pendulous brownish, torulose.

**Ethnomedicinal Uses:**

**Gond** practiceners administered root decoction as anti-helmenthic and leaf decoction in uterine troubles. Oil extracted from stem and root applied in rheumatic pains and swellings. **Bhils** apply leaf paste to cure fractured bone and leaf extract in sores.

Leaf juice is used as a remedy for dysentery, stimulant, purgative, fever, cough and lungs problem (Watt & Breyer-Brandwijk, 1962).
Leaf paste mixed with castor oil is applied for bone fracture (Ganesan et al., 2006).

**Botanical Name:** *Caesalpinia crista* L.  
**Family:** Caesalpiniaceae  
**Habit:** Shrub  
**Part used:** Stem Bark  
**Place of collection:** Narnala forest, Patur Ghat, Katepurna sanctuary.

**Ethnomedicinal uses:**

The stem bark is used to recover the ladies problem after menses. The stem bark extracted with water to make juice and given along tea (1:1) to combat the problem after menses (Gond).

**Botanical Name:** *Calotropis gigantea* (Linn.) R. Br. in Aiton f.  
**Family:** Asclepiadaceae  
**Place of Collection:** Katepurna.  
**Habitat:** Less common, in waste places and along streambeds.

**Description:**

Wild, perennial shrub with milky latex, xerophytic. Stem and leaves covered by waxy coating, stem thick, laticiferous. Leaves simple, sessile exstipulate, fleshy. Flowers in polychasial umbellate cyme, complete,

**Ethnomedicinal uses:**

The hot leaves are applied on abdomen to relieve the abdominal pain in Korku community. In Bhils Root decoction is given for lactation. Flowers (2-3) consumed to cure cough and asthma. The root paste is applied locally in the treatment of herpes.

Root decoction is given to women in empty stomach for continuous two weeks once a day for treatment of leucorrhoea and irregular menstruation in Andh tribe. Latex applied locally to induce uterine contraction during child birth and also applied locally to eject out thorns in Banjara community.

Milky latex has purgative property, leaves applied on burns, root bark antidysenteric (Hajra and Vaisya, 1981). Plants used in asthma, fevers with enlarged liver, cough and skin diseases (Srivastava, 1989). Juice is purgative and good for tooth ache (Sikdar and Dutta, 2008). Leaves with castor oil hydrocoel (Venkat Ramana, 2008). It is used in arthritis, inflammation and keeping out thorns from wounds.

**Botanical Name:** *Calotropis procera* (Willd) R. Br.  
(Plate-24, Fig.2)  
(SSCB-24/320)

**Vernacular name:** Rui/ Jilledu

**Family:** Asclepiadaceae
**Place of collection:** Common along roadside and waste land.

**Ethnomedicinal uses:**

The plant extract is used over dog bite, in cough and asthma. The plant latex is useful to cure skin infection (Local vaidos). The entire plants made into extract and mix with sugar (3:1) and applied over dog bites. The latex is applied locally over skin infection. Flower powder mixed with honey and administered in 2 spoonfuls twice a day for a month (Korku).

**Botanical Name:** *Canna indica* L. (SSCB-159/320) (Plate-35, Fig.3)

**Vernacular name:** Suneri, Sabajya

**Family:** Cannaceae

**Habit:** Leafy herb

**Place of collection:** Barshitakli.

**Description:**


**Ethnomedicinal uses:**

Dried root powder along with cow urine is administered by Banjara tribals to plaster on rheumatic joints and swellings. Roots are also given in
Gond tribe to relieve from body swellings, fever and to increase the flow of urine.

**Botanical Name:** *Capparis tomentosa* Blatt. & Hallb (SSCB-77/320)  
(Plate-32, Fig.2)

**Family:** Capparaceae

**Habit:** Shrub

**Part used:** Flower

**Place of collection:** Narnala forest area.

**Description:**

*Capparis tomentosa* is often a spiny scrambler or a small tree that grows up to 10 m tall, with an upright trunk up to 13-15 cm in diameter and covered with scattered spines. Trees are well branched and branches are normally covered with thick yellow hairs; even the robust, recurved spines are often hairy. Leaves soft and velvety, light green to greyish-green, sometimes rusty coloured, alternate, 2.5-8 cm long, 1.3-3.8 cm wide, oval, oblong, or egg shaped, usually thickly velvet but sometimes smooth; tip usually rounded with a sharp, short point, sometimes notched or blunt; base rounded or narrowed; margin entire and rolled under. Spines grow in the axils of the leaves and are short, downward hooked and sharply pointed, broad based and vicious. Petiole up to 10 mm long, densely velvety. Buds grow in clusters and open into large, fragrant flowers with pale yellowish-green petals, up to 3.5 cm in diameter, encircling a tuft of long, slender, white or pink stamens 3.5 cm long; conspicuous gynophore. The flowers develop into pendulous fruits from the size of a cherry to that of a golf ball, with a stout neck or stalk, globose, 3.5
cm in diameter, pink to bright orange when ripe, often hanging in great numbers, with a semi-transparent bluish-grey flesh surrounding and strongly adhering to the brown seeds. Seeds are oval and smooth.

**Ethnomedicinal uses:**

The flowers are used by tribals to cure Asthma. Gond healer recommend 2-3 flowers made into paste mixed with salt and given to cure Asthma (once daily for about one month).

**Botanical Name:** *Cardiospermum halicacabum* L. (SSCB-201/320)  
(Plate-27, Fig.3)

**Vernacular Name:** Ghanfodi, Kapalfodi, Tachki.

**Family:** Sapindaceae

**Place of collection:** Barshitakali.

**Habitat:** Common during the monsoon period in shady places or depressions, often climbing on shrubs.

**Description:**


**Ethnomedicinal uses:**

**Korku peoples** apply leaf paste to cure joint pains. They also consume soup prepared from fresh leaves to cure rheumatic pains.
Leaf juice with black pepper is administered by Gond healers for a week to cure pain during menstrual period and Root paste mixed with milk to facilitate abortion. Bhils drop the sap of plant in the ears to cure earache and apply leaf paste on head to control hair loss.

Paste of leaf is applied to cure skin diseases (Singh et al., 1997). Decoction of fresh leaf is taken internally to get relief from cold and cough (Muthukumara et al., 2004). Leaf paste mixed with ghee is taken to relieve gas trouble (Ganesan et al., 2006). Whole plant used for treating rheumatoid arthritis (Ragupathy and Newmaster, 2009).

Botanical Name: *Careya arborea* Roxb.  

(SSCB-200/320)  

(Plate-33, Fig.1)

Vernacular Name: Kumbhi, Kumbi.

Family: Lecythidaceae

Place of collection: Near the river bank of Katepurna.

Habitat: Rare, along the streams and rivers.

Description:

Medium-sized tree with large ovate, ovate-oblong leaves clustered at the end of the branchlets, old leaves often red/purple; flowers large, white and pink, in dense spikes, fruits large globose green, crowded with calyx tube, deciduous.

Ethnomedicinal uses:

Stem bark decoction is taken in empty stomach once a day for a week to cure leucoderma. Decoction of root bark is taken in piles. Decoction of
stem-bark is used as red dye (by Gonds and Rajgonds). Bhils use to take powder of stem bark with honey in cough and cold. Fruit decoction is prescribed orally for snake-bite.

Bark juice is used in dysentery with vommitng. Leaf juice in earache (Bhandary et al., 1995). Stem bark is boiled with water and taken in empty stomach to cure piles (Rout and Thatoi, 2009).

**Botanical Name:** *Cassia fistula* L. (SSCB-139/320)

**Vernacular Name:** Amaltas, Bahava.

**Family:** Caesalpiniaceae

**Locality:** Patur forest and Narnala.

**Habitat:** On the hill slopes.

**Description:**

Small trees, 5-8 m tall. Leaves 20-40 cm long; leaflets 4-8 pairs, ovate, 5-12 x 2.5-6 cm, glabrous above, pubescent beneath. Flowers bright yellow, in large drooping racemes. Pods cylindric, 20-50 cm long.

**Ethnomedicinal uses:**

Leaf juice is taken orally thrice a day in constipation. Extract of leaves is administered orally against jaundice. Stem bark extract and fruit pulp is used to cure stomachache (Korku). In Andhs Fresh fruit pulp is administered twice daily to cure asthma. Fruit pulp is advised for constipation. Leaf poultices are applied externally for paralysis and rheumatism. Bhils use the paste of the Root bark and leaves are applied externally for skin infections diseases. A decoction of the root bark is recommended for cleansing wounds.

**Botanical Name:** *Cassia occidentalis* L. (SSCB-70/320)

**Local Name:** Gurrap

**Family:** Caesalpinaceae

**Part used:** Leaves

**Place of collection:** Narnala forest.

**Description:**

The plant is annual herb or undershrub. The leaves are lanceolate or ovate-lanceolate, pinnately compound, usually in 3-4 pairs, membranous, glaucous. The flowers are arranged in short raceme and yellow in colour. Pods generally recurved, compressed and glabrous. The seeds are ovoid and dark olive green.

**Ethnomedicinal uses:**

The plant is used against eye infection. Fresh leaf juice poured in 3-4 drops once at night for 3-4 days (do not take excess dose). To cure toothache root paste kept on affected teeth daily once (before going to bed), for until cure.
Botanical Name: *Caesalpinia bonduce* (L) Roxb. (SSCB-67/320)

Vernacular Name: Chilar

Family: Ceasalpiniaceae

Habit: Shrub

Place of collection: Katepurna

Ethnomedicinal uses:

The stem bark is used **Gonds** and **Rajgonds** to recover the ladies problem after menses. The stem bark extracted with water to make juice and given along tea (1:1) to combat the problem after menses.

Botanical Name: *Celosia argentea* L. (SSCB-22/320) (Plate-28, Fig.1)

Vernacular Name: Kombda, Kurdu, Rankurdu.

Family: Amranthaceae

Locality : PDKV Akola agriculture field.

Habitat : Common weed of cultivated fields.

Description:

Erect, much branched, annual herbs, glabrous. Leaves variable in size and shape, ovate, ovate-lanceolate, elliptic-lanceolate or linear-lanceolate, glabrous. Flowers pink, turning white at length, in terminal dense, cylindric or lanceolate, spikes.

Ethnomedicinal use:
Bhils use to give plant powder with a cup of milk to the ladies twice a day for a week to cure white discharge. Gonds use this plants for the cure of kidney stone.

A leaf extract shows wound healing and seeds extract anti-hepatotoxic effects (Hase, 1997). *C. argentea* seeds are widely used in Indian folk medicine for the treatment of diabetes mellitus (Vetrichelvan *et al*., 2002). *Celosia argentea* is used in traditional medicine for sores, ulcers and skin eruptions, (Priya *et al*., 2004). Powder of whole plant is given with cup of milk in white discharge (Jagtap *et al*., 2009).

**Botanical Name:** *Centella asiatica* (L.) Urban (SSCB-122/320) (Plate-30, Fig.1)

**Vern Name:** Brahmi, Mandukparni, Golpan.

**Family:** Apiaceae

**Locality** : Telhara.

**Habitat** : Cultivated.

**Description:**


**Ethnomedicinal uses:**

In Banjara Leaf juice (2-3drops) is dropped into nostril to cure sinusitis. Plant decoction is administered daily once for a week to clear voice. In Andhs Decoction of leaf powder taken orally twice a day for two weeks to get relief from cough, cold and asthma. Decoction of leaves is used against
conjunctivitis and other eye injury. In Gonds and Rajgonds leaf juice is taken orally twice a day for three weeks to cure jaundice. Leaf paste is applied in rheumatic pains and applied locally to heal cuts and wounds. Dry powder (10 g) of whole plant with a cup of milk daily is prescribed by Bhils as a brain tonic to improve the memory power. An oil extract from the plant is used to promote hair growth.

Decoction of leaves is used against conjunctivitis and other eye injury; crushed leaves are mixed in a cup of water with a tablespoon of salt and taken once daily for stomachic, indigestion and flatulence (Albert and Gosai, 2006). The plant is a stomachic and used in leprosy, indigestion, skin diseases, epilepsy and asthma (Baral & Kurmi 2006). The whole plant is useful in bronchitis, skin diseases, blood disorders, asthma and leprosy. It is alterative, tonic and diuretic (Dash & Gupta 1994, Joshi 2006). Whole plant is memory enhancer; wound healer (Sharma et al., 2000; Suguna et al., 1996)

The whole plant has medicinal properties, used in dysentery, liver trouble, nerve disorder, and stomach problem and induces appetite, taken with milk to improve memory, good for skin disease and a blood purifier, given to women after childbirth (Sikdar and Dutta, 2008). Leaf juice is used in urinary problems and cuts and wounds (Kunwar et al., 2009).
Botanical Name: *Cleome gynandra* L.  
(Plate-32, Fig.3)

**Local Name:** Pandhari Talavan

**Family:** Cleomaceae

**Habit:** Annual Herb

**Part used:** Leaves

**Place of collection:** Along the purna river side, Akola.

**Description:**

It is an annual wildflower native to Africa but has become widespread in many tropical and sub-tropical parts of the world. It is an erect, branching plant generally between 25cm and 60cm tall. Its sparse leaves are each made up of 3-5 oval-shaped leaflets. The flowers are white. The seed is a brown 1.5mm diameter

**Ethnomedicinal uses:**

The local people use extract of this plant to get rid of earache. The fresh leaf juice is poured in 3-4 drops thrice daily, till the cure of earache.

Botanical Name: *Cleome viscosa* L.  
(Plate-32, Fig.4)

**Vernacular Name:** Piwli-tilwan, Kanpala.

**Family:** Cleomaceae

**Place of collection:** PDKV Akola agriculture waste land and road side.

**Habitat:** Common weed in waste lands and along roadsides.

**Description:**
Annual herbs, glandular pubescent, 50-90 cm tall. Leaves 3-5 foliolate; leaflets sessile, ovate or obovate, glabrous above, pubescent beneath. Flowers-yellow, axillary solitary or passing into lax racemes. Siliquas cylindrical 4-9 cm long, minutely beaked, compressed.

**Ethnomedicinal uses:**

Juice of leaves is put into ears to cure tooth-ache and to relieve earache (Korku). Seed powder is used orally to cure bleeding piles and for deworming the stomach of children. They use leaf paste as an external application to wounds and ulcers. The oil extract from seeds used to cure skin diseases. The juice of the leaves has been used to relieve earache and fever (Andhs).

Fruit juice is used in earache and fever (Tarafder and Rai, 1981). Seeds carminative and anthelmintic (Ambasta, 1986). Roots cardiac stimulant and vermifuge, leaves externally applied on wounds and ulcers, juice to relieve earache (Chopra et. al, 1992). Leaf paste is applied topically to heal wounds and paste of root in malarial fever (Bhandary et al., 1995). Leaf paste is applied topically to heal wounds (Ignacimuthu et al., 2006).

**Botanical Name:** *Clerodendrum serratum* (L.) Moon.  
(SSCB-244/320)

**Vernacular Name:** Bambaku, Barangi, Bharang-mul, Bharungi.

**Family:** Verbanaceae

**Place of collection:** Narnala hills.

**Habitat:** Found occasionally on rocky ground in forest areas.

**Description:**

**Ethomedicinal uses:**

Leaf powder with zinger paste given in bronchitis for a week. Decoction of root and 2-3 black pepper is taken to cure asthma. Root paste is applied on the affected areas of rheumatism. Leaf decoction is good remedy for snake bite (**Gonds** and **Rajgonds**). Decoction of root is taken in malarial fever and ophthalmic complaints. The paste of leaves is applied externally to ripen the wounds (**Bhils**).

Root, leaf, stem are used as anti-malarial; anti-asthmatic, anti-allergic (**Gupta and Gupta, 1967**; **Sivarajan and Balachandran 1999a**) and anti-inflammation **Narayanan et al., (1999)**; used against asthma and diverse form of skin diseases (**Jeeva et al., 2005**). Whole body parts are ground with water to prepare a paste which is applied to cure fever (**Albert and Gosai, 2006**).

The plant is a popular folk medicine commonly available in the region. It can be a potential source of traditional pharmaceutical drugs meant for ophthalmic complaints and for snake bite.
**Botanical Name:** *Clematis triloba* Heyne ex Roth (SSCB-54/320)

**Vernacular name:** Murhari

**Family:** Ranunculaceae

**Habit:** Herb, climber

**Place of collection:** Barsitakali

**Habitat:** A fairly common climber or shrubs and trailing among grasses

**Description:**


**Ethnomedicinal uses:**

The decoction of whole plant except root is given in asthma, whereas decoction of root with flowers of *Maduca longifolia* is given to stop menstruation by the local tribes. Some local medicinemen also prescribe the parasitic worms and snake bite.

**Botanical Name:** *Clitoria ternata* L. (SSCB-154/320) (Plate-13, Fig.1)

**Vernacular Name:** Gokarna.

**Family:** Fabaceae

**Habitat:** Common along road sides.
Description:


Ethnomedicinal uses:

The infusion of leaves is used by local tribals on cough, skin diseases and to increase eye sight. The root powder is given in fever.

Botanical Name: Chlorophytum borivilianum Sant. & Fernand

(SSCB-135/320)

(Plate-25, Fig.2)

Vernacular Name: Safed Musali, Jangli-musali.

Family: Liliaceae

Locality : Narnala.

Habitat : Rare, found in moist places along plains and lower hill slopes.

Description:


Ethnomedicinal uses:

Tubers are used to treat diarrhoea and dysentery and also used to promote lactation. Tuber powder is given with milk and sugar in menstrual
disorder and as health tonic (Bhil). Decoction of tubers is taken twice a day to cure diabetes. Oil obtained is massaged in rheumatic pains (Andhs). Powder of tuber is taken with milk is good remedy for impotency and sexual debility (Gonds).

Traditionally safed musli was used for lack of libido male impotency and oligospermia. It is also widely used as a general health promotive tonic and for delaying the ageing process. Varying its common use for health promotion, it is also used for increasing lactation, treating various gynecological disorders, arthritic conditions and to control diabetes mellitus (Purohit and Prajapati 2003). Alcoholic extract has shown a potential antidiabetic and antihyperlipidaemic effects in diabetic rats and its effects are similar to that of insulin (Chakraborty and Aeri 2008).

**Botanical Name:** *Cocculus hirsutus* (L.) Diels.  
**Vernacular Name:** Vasanvel, Vasan.  
**Family:** Menispermaceae  
**Place of collection** : Shahanur forest, Katepurna forest range.  
**Habitat** : Very common, spreading on bushes, on hill slopes and in plains.  
**Description** :  
Herbaceous twiners, young parts densely villous. Leaves 3-5 nerved, variable in shape and size, generally ovate, 2-6 x 2-5 cm. Flowers greenish, minute; males in short axillary panicles; females in axillary clusters or in racemes. Drupes 3 together, purple, 0.8-1.6 cm across.
Ethnomedicinal uses:

Extract taken in peptic ulcers. The leaf extract taken internally alongwith milk for treatment of spermatorrhoea. The extract of roots taken internally in paralysis (Bhils).

The decoction of roots is good remedy for diarrhoea, when taken orally. The leaf juice taken internally to cure bleeding piles. Tribes use the leaves as a vegetable to cure nightblindness and mental disorder (Gonds).

Leaf paste is used in stomach heat, excess bile, mental disorders caused by headache, blood dysentery (Saxena et al., 1981). Juice of leaves mixed with water taken to cure gonorrhoea, used externally for eczema, prurigo and impetigo (Chopra et al., 1992). Leaves are good remedy for anti-inflammation, (Nayak and Singhai, 1993). Leaf extract is taken orally in urine withheld (Devarapalli, 2007).

Botanical Name: Coccinia indica Wight & Arn. (SSCB-188/320) (Plate-29, Fig.1)

Vernacular name: Kundru

Family: Cucurbitaceae

Habit: Climber

Place of collection: Narnala forest.

Description:

The plant is annual herb, spreading on ground and twining on tree. The stem is pentangular. Leaves are generally triangular, dented, 2-5 cm in length and about 2 cm in breadth. Flowers arises in bunches of two or more, white or
yellow colour. Fruits are slimy in touch, fleshy or pulpy and barrel shaped and scarlet red coloured on ripening.

**Ethnomedicinal uses:**

The plant is used against heart diseases and hypertension by local gond tribe. Fresh leaf juice is mixed with local wine and taken twice in a week (1:1 V/V).

**Botanical Name:** *Coleus barbatus* (Andr.) Bth. (SSCB-79/320)

**Vernacular Name:** Dagdimool, Sadamas.

**Family:** Lamiaceae

**Place of collection**: Narnala.

**Habitat**: Frequent, in crevices of rocks.

**Description**:

Perennial herbs, 30-60 cm tall, with thick, subfleshy root-stock; stems more or less cylindric ascending and woody at base, villous. Leaves elliptic-obleng or lanceolate, crenate-serrate. Flowers on spike-like racemes; calyx tubular. Corolla tubular, pale-purplish or blue, 4-lobed; lower lip boat-shaped, and curved upwards. Stamens slightly exserted beyonid the corolla tube.

**Ethnomedicinal uses:**

The root powder with honey is given in asthma and painful urination. Young roots are used as vegetable and to make pickles (*Banjara*). Root decoction is given twice a day to cure diabetes. Leaf decoction is taken to cure stomacache (*Korku*).
One teaspoonful root powder with a glass of water or milk is administered as a good health tonic and to develop strong muscles (Bhil).

Forskolin is bronchodilative and hypotensive (Hussain et al., 1992). Its tuberous roots are useful in the treatment of congestive heart failure, glaucoma, asthma, cancer and in preventing immature greying of hair (Hegde, 1997). Forskolin is also useful in preventing the clotting of blood platelets, in reducing intraocular pressure in glaucoma and as an aid to nerve regeneration following trauma (Sharma, 1998).

**Botanical Name:** *Colocasia esculenta* (L) Schott. *(SSCB-61/320)*

**Local Name:** Kochai

**Family:** Araceae

**Habit:** Perrenial herb

**Part used:** Tuber

**Place of collection:** Water logged area of Agriculture fields. Common

**Description:**

A perennial herb, grow about a meter high. The stem is rhizomatous, petiole long, slender or pulvinous and fleshy. The leaves are shiple, large, chordate which ventral green and dorsal green with purple or pinkish tintch. This plant is always found near the sewage water ponds and water logged area.

**Ethnomedicinal uses:**

The local tribals use the tuber juice to improve hair growth. The root tubers are made into paste and the paste is applied on scalp (2-3 times per week) to improve the hair growth and quality.
Botanical Name: *Cochlospermum religiosum* (L) Alston.  

*(SSCB-162/320)*  

*(Plate-33, Fig.2)*

**Family: Cochlospermaceae**

**Habit:** Tree

**Part used:** Bark

**Place of collection:** Narnala forest (rare)

**Description:**

The plant is rare in the region, only two plants observed. The plant show tree habit. The stem in branched and grayish coloured. The leaves are palmate and 5 lobed. The flowers are large, bright yellow or golden colored. The seeds are found to covered with hairs.

**Ethnomedicinal use:**

The stem bark is used on bone fracture by Korku healers. The stem bark is made into paste and applied in plaster for 2-3 months to join the broken bones.

Botanical Name: *Combretum roxburghii* Spr.  

*(SSCB-97/320)*

**Family: Combretaceae**

**Habit:** Tree

**Part used:** Leaves

**Place of collection:** Patur ghat forest, Narnala forest area.
Ethnomedicinal uses:

The leaf ash is used to apply on skin infections. The leaves are burnt to form ash and the leaf ash is use to apply externally on the infected area of skin.

Botanical Name: *Commelina benghalensis* L. (SSCB-36/320)

Family: Chenopodiaceae

Habit: Herb

Part used: Entire plant.

Place of collection: Common during rainy season.

Description:

A creeping herb with ascending prostrate stems; leaves broadly ovate, up to 5 cm long and 4 cm wide, pubescent, narrowed at base but not distinctly petiolate; spathe funnel-shaped, about 1-1.4 cm wide, green, flattened, flowers bright blue.

Ethnomedicinal uses:

This plant is used in leprosy. The tribals made extract from entire plant and given in leprosy.

Botanical Name: *Coix lacryma-jobi* L. (SSCB-64/320)

(Vernacular Name: Gurlu, Kasai, Kasai-bija.

Family: Poaceae

Place of collection: Dharghad.)
Description:

Annual herbs, erect, rooting at lower nodes, 1-1.5 m tall. Leaves linear-lanceolate, glabrous or sparsely hairy. Racemes 1-many, with flat peduncles; female spikelets solitary, enclosed by hard, ovoid, shining bead-like structure; males elliptic-lanceolate, upto 1.2 cm long. Grains flat, reddish-brown.

Ethnomedical uses:

Root paste is applied externally to treat leprosy (Korku). The roots have been used in the treatment of menstrual disorders (Gond). Leaf decoction is used as female oral contraceptive after menstruation. Seed powder with milk is prescribed to cure cancerous wounds (Local peoples). Seed decoction is good remedy for inflammation, diarrhoea and rheumatic conditions (Bhils).

Seeds are anti-inflammatory (Otsuka et al., 1988). The seeds are also used traditionally for their anti-tumour properties (Huang 1992). Methanol extract of the seeds showed anti-inflammatory properties (Seo W.Get al., 2000); anti--tumor, anti-cancer (Chang et al., 2003) activity. The dried seed kernels are used in rheumatoid arthritis and can be consumed in everyday meals (Jing-Nuan, 2005). Leaf juice is taken in diarrhoea, dysentery, fever, small pox and as tonic (Hynniewta & Kumar, 2008).

Botanical Name: *Convolvulus arvensis* L. (SSCB-115/320) (Plate-31, Fig.1)

Vernacular Name: Kup- wel

Habit: Climber

Part used: Leaves
**Place of collection:** Katepurna

**Description:**

*Convolvulus arvensis* is a perennial with rhizomes and glabrous procumbent or twining stems that are slightly ridged with vertical grooves on the surface. The leaf is ovate-oblong to lanceolate, 1.5-5 cm long and 1-3 cm wide, with an acute or mucronate apex and a hastate, sagittate or cordate base. The leaf margin is entire or divided into three lobes, with lateral ones spreading and the middle one ovoid elliptic, narrowly triangular, lanceolate, oblong or suborbicular. Palmate veins begin at the base of leaf and become pinnate for the remainder of the leaf.

The axillary cyme is composed of one to three flowers, the pedicel is significantly longer than the calyx, with hairy sepals being 2.5-5 mm long. The two outer sepals are oblong to elliptic, hairy margined, and shorter than inner sepals, which are suborbicular and somewhat lobed with a membranous margin. The broad funnel-shaped corolla is 15-26 mm long, five-lobed, white or pink, and occasionally has a pinkish or whitish midpetaline band or bands.

The flowers appear from June to August. Fruits that appear from June to September are ovoid global or conical capsules, about 5-8 mm in length.

**Ethnomedicinal uses:**

The leaves of this plant are useful against skin diseases. The paste of leaves either alone or in combination with some oil is applied externally on the infected skin.
Botanical name: *Costus speciosus* (Koen.) Smith. (SSCB-31/320)

Veracular Name: Jangli-adrak

Family: Costaceae

Place of collection: Narnala

Habitat: Not common, on slopes of hills.

Description:


Ethnomedicinal Significance:

Rhizome paste is applied over swollen testis of children. Dried powder of rhizome is taken orally to cure rheumatism. Boiled rhizome is consumed in general debility (*Korku*). Spoonful rhizome powder with a glass of water in empty stomach is taken as aphrodisiac. Juice of rhizome is taken to cure urinary tract infections (*Bhil*). Infusion rhizome is taken orally to cure asthma. Decoction of fresh rhizome is useful in snake bite. Rhizome applied externally on ulcers. Infusion of rhizome is taken orally to cure asthma, bronchitis, skin diseases (*Gonds*). Dried powder of rhizome with water is taken orally for 2-3 weeks to cure rheumatism in *Banjara*.

Rhizomes bitter, astringent, purgative, depurative, stimulant, antihelminthic, said to be useful in snake bite (Srivastava, 1989). It is used to make sexual hormones and contraceptives (Warrier *et al*, 1994). Dry root-powder is taken orally by the tribals for rheumatic pain (Katewa & Guria,
The previous reports authenticate that the root stock of this plant is used as astringent, purgative stimulant, and antihelminthic. It also cures, fever, cough and other respiratory disorders (Chunekar, 1982; Sharma, 1983 and Bhattacharjee, 1998). Rhizome is used in body ache, ear-ailment, sexual delibity (Choudhary et al., 2008).

**Botanical Name: Crinum asiaticum L.**

(SSCB-232/320) (Plate-29, Fig.3)

**Family: Amarylidacee**

**Habit:** Herb

**Part used:** Leaves and Tuber

**Place of collection:** Narnala.

**Description:**

The plant grows from an underground bulb. The lower leaves form a stout pseudo-stem from which the leaves emerge in a rosette. The leaves can grow up to 2m long. The flowers are delightfully scented. The fruit is a globe which turns shiny white when ripe then splits open to reveal irregularly shaped seeds.

**Ethnomedicinal uses:**

This plant is prescribed by local vaidoos in earache and as wound healer. The tuber paste is applied locally to cure wounds. 2-3 drops of fresh leaf juice is poured in daily twice to cure earache.
**Botanical Name:** Curculigo orchioides Gaertn. Fruct.  
(Plate-34, Fig.3)  
(SSCB-240/320)

**Vernacular Name:** Kali Musali.

**Family:** Hypoxidaceae

**Place of Collection:** Patur ghat forest.

**Habitat:** Occasional on the hill slopes, under the bushes of forests.

**Description:**

Perennial, erect herbs, 10-30 cm tall, with stout, tuberous rootstocks. Leaves linear or linear-lanceolate, radical, sessile or petiolate, glabrescent. Flowers deep yellow, in small racemes.

**Ethnomedicinal uses:**

The tuber paste mixed with lime juice is effective in tumors. Tuber paste is taken with curd in empty stomach for two weeks to cure white discharges of women (Korku). Tuber is made into paste and applied externally as an antidote to snakebite. Root paste is applied externally to cure piles and acne (Banjara). Andh tribals make a powder of roots and give it orally with milk to those suffering from quick ejaculation of sperms during intercourse.

It is a small, geophilous herb, the tuberous rootstock of which is used as a rejuvenating and aphrodisiac drug. It cures morbid vata and pitta, improves complexion and is useful in general debility, deafness, cough, asthma, piles, skin diseases, impotence, jaundice, urinary disorders, leucorrhoea and menorrhagia (Nadkarni, 1954; Mooss, 1978).

Tuber paste is applied for acne (Geerinck, 1993). Roots are diuretic, tonic, aphrodisiac, antidiarrhoeal, and are used in liver problems, piles, asthma and gonorrhoea (Anonymous, 1995, Bajracharya, 1979, Joshi,
Tuber is antidote, antinematodal and used in constipation, leuchorrhea, sexual vigour (Choudhary et al., 2008). Tubers with milk are taken in seminal disorders and leucorrhea (Venkat Ramana, 2008). Tuber is made into paste and applied externally as an antidote to snakebite (Rout and Thatoi, 2009). Roots are used as a tonic and to treat paralysis (Kunwar et al., 2009).

**Botanical Name:** *Cuscuta reflexa* Roxb.  
(SSCB-34/320)  
(Plate-29, Fig.4)

**Vernacular Name:** Amar-bel, Amar-vel.

**Family:** Cuscutaceae

**Place of collection:** Deori and Tandulwadi villages on Akot road.

**Habitat:** Occasional on bushes.

**Description:**

Stem parasites with greenish-yellow, leafless, twining and hanging pale yellow, fleshy stems. Flowers white or creamy-white, solitary or in umbellate clusters in short racemes. Capsules globose 0.5-0.8 cm across, glabrous, circumsessile near the base.

**Ethnomedicinal uses:**

The decoction of seeds in high doses causes abortion. Plant paste is applied on swollen testicles (Banjara). Bhils take orally the decoction of stem (30 ml) to cure jaundice, urinary disorder and stomacache. Plant paste applied on the scalp to prevent hair fall. Andh: Tribals take orally the decoction of stem to cure diarrhoea, cholera and asthma, fever, cough and cold.
Plant juice is used in jaundice, fever (Manandhar, 2002; Rajbhandari, 2001), asthma, bronchitis, headache, rheumatism, itches, skin diseases and bilious disorders (IUCN, 2004). Whole plant parts are crushed and applied on the scalp to prevent premature hair fall, graying of hair and control of dandruff (Albert and Gosai, 2006). Juice extracted from plan is used in jaundice (Gul Jan et al., 2009).

Botanical Name: *Cymbopogon flexuosus* Wats. (SSCB-51/320) (Plate-34, Fig.4)

Vernacular name: Tikhadi/ Gauti Chai

Family: Poaceae

Habit: Annual herb

Part used: Entire plant

Place of collection: Rani Lake Narnala forest.

Ethnomedicinal uses:

This species is used as a carminative and stimulant. Its specific use lies in the treatment of blood disorders, coughs and indigestion. The local tribes crush the plant, boiled along with tea to taken daily to relieve from cough, indigestion and blood purification. The oil is used in cosmetic industries and medicines.

Botanical Name: *Cyperus iria* L. (SSCB-81.320)

Vernacular Name: Galmotha.

Family: Cyperaceae

Place of collection: Katepurna sanctuary.
**Habitat**: Common in waste land forest.

**Description:**

Stem tufted, trigonal and upto 1m tall. Leaves simple, equaling the stem, Inflorescence compound umbalate, upto 20 cm across. Spikelets oblong, linear.

**Ethnomedicinal uses:**

The local tribals use this plant as astringent, stimulant and tonic. Some are also recommend it for stomache pain.

**Botanical Name**: *Datura stramonium* L. (SSCB-40/320) (Plate-11, Fig.3)

**Vernacular Name**: Datura, Dhotra.

**Family**: Solanaceae

**Place of collection**: Akola agriculture waste land.

**Habitat**: Common, along the roadsides.

**Description**:

Herbs, 70 cm high, annuals or perennials, erect, profusely branched. Leaves ovate, margins shallowly many angled or lobed. Flowers white, solitary. Capsules ovoid-ellipsoid, 4-valved, prickled. Seeds many, ovoid-reniform, black.

**Ethnomedicinal uses:**

In **Andh** Fresh leaf poultice is applied externally in rheumatic or glandular swellings. Leaves and seeds were once smoked for treating asthma. Leaves are boiled in mustard oil and massage in rheumatism and body pains. Roots decoction is good remedy for toothache (**Bhils**).
Fruit juice is effective in earache, swellings, healing wounds, burns, ulcers and leaf juice in sinus infection (Korku).

Root is good for toothache (Sikdar and Dutta, 2008). Leaf or whole plant anti inflammatory, antispasmodic (Dwivedi et al., 2008). Seed paste is used for boils (Kunwar et al., 2009).

**Botanical Name:** *Delonix regia* (Hook) Rafin.  
*(SSCB-91/320)*  
*(Plate-14, Fig.4)*

**Veracular, Name:** Gulmohar.

**Family:** Caesalpinaceae

**Place of collection :** Common in gardens, Collected from Neharu park Akola

**Description:**

*Delonix regia* is a tree 10-15 (max. 18) m high, attaining a girth of up to 2 m; trunk large, buttressed and angled towards the base; bark smooth, greyish-brown, sometimes slightly cracked and with many dots (lenticels); inner bark light brown; crown umbrella shaped, spreading with the long, nearly horizontal branches forming a diameter that is wider than the tree’s height; twigs stout, greenish, finely hairy when young, becoming brown. Roots shallow. Leaves biparipinnate, alternate, light green, feathery, 20-60 cm long; 10-25 pairs of pinnae, 5-12 cm long, each bearing 12-40 pairs of small oblong-obtuse leaflets that are about 0.5-2 cm long and 0.3 cm wide; petiole stout. The numerous leaflets are stalkless, rounded at the base and apex, entire thin, very minutely hairy on both sides, green on the upper surface. At the base of the leaf stalk, there are 2 compressed stipules that have long, narrow, comblike teeth. Corymb 15-30 cm long, borne laterally near the end of the
twig, each with loosely arranged, slightly fragrant flowers; flowers 5-13 cm across, with 5 equal petals, on slender stalks 5-7.6 cm long. Petals 5-6.5 cm long, 2-3 cm wide, orbicular, broadly spoon shaped, rounded but broader than long, slightly wavy-margined or crisp, tapering into claws about 2.5 cm long, widely extended and bending backwards before falling. Petals 4, orange-red, almost scarlet, 1 longer and narrower than the others, whitish inside with red spots and streaks; stalk very long, slender and hairy. Sepals 5, thick, green outside and reddish with yellow border within, reflexed when the flowers open, pointed, finely hairy, about 2.5 cm long. Stamens 5 with 10 red filaments; pistil has a hairy 1-celled ovary about 1.3 cm long and slender style about 3 cm long. Fruit green and flaccid when young, turning to dark brown, hard, woody pods, 30-75 cm long, 3.8 cm thick, 5-7.6 cm broad, ending in a short beak when mature, with many horizontally partitioned seed chambers inside, indehiscent, finally splitting into 2 parts. The conspicuous pods hang down and remain attached most of the year even when the trees are leafless. Seeds 30-45, hard, greyish, glossy, to 2 cm long, oblong and shaped very much like date seeds, transversely mottled with a bony testa.

**Ethnomedicinal uses:**
The local tribals use the bark of this plant to relieve the stomach pain. The bark powder is also known to use against skin diseases

**Botanical Name:** *Digera muricata* L.  
**Family:** Amranthaceae  
**Habit:** Herb  
**Part used:** Flowers and seeds
**Place of collection:** Agriculture waste land, Akola.

**Description:**

*Digera muricata* is an annual herb, growing to 20-70 cm tall. It can be seen growing wild in waste areas. Their stems are simple or branched from the base, nearly hairless. Alternately arranged leaves, 1-9 cm long and 0.2-5 cm broad, are narrowly linear to broadly ovate. Their leaf stalks are long, up to 5 cm, base is narrowed, and the tip pointed. Their flowers are borne on slender spike-like racemes, which can be as large as 30 cm long.

**Ethnomedicinal uses:**

The plant show Laxative properties. It is also been used to cure urinary disorders and diseases by gond tribes.

**Botanical Name:** *Dioscorea bulbifera* L.  
(SSCB-86/320)  
(Plate-35, Fig.1)

**Vernacular Name:** Jatashankar.

**Family:** Dioscoreaceae

**Place of collection:** Paturghat forest.

**Habitat:** Frequent in forest edges and hill slopes.

**Description:**

Perennial, herbaceous, stout, climbers, tuberous; bulbils in leaf-axils, warted. Leaves alternate, broadly ovate to orbicular-reniform, 5-15 x 3-13 cm, membranous. Flowers greenish-yellow in axillary, pendulous spikes. Capsules quadrately oblong, 1.5-2 x 0.5-1.2 cm, reflexed.
Ethnomedicinal uses:

Tubers are cooked and eaten by Bhil tribals in times of scarcity and juice of the tuber is applied on swellings, pains, cuts and wounds. Banjara peoples use tubers to cure dysentery, syphilis. Juice of bulbil is administered for stomachache. Juice of the tuber is taken to cure piles. Powder of the dried tuber is taken orally as contraceptive early in the morning (Andh).

Tuber is used by tribal ladies as contra receptive and to cure asthma (Choudhary et al., 2008). Bulbil with salt, Curcuma and jaggary pills used in typhoid (Katewa et al., 2008). Tubers in dysentery and syphilis (Dwivedi et al., 2008).

Botanical Name: Dioscorea pentaphylla L. (SSCB-180/320) (Plate-35, Fig.2)

Vernacular Name: Dukar-kand, Shend-wel, Mankand.

Family: Dioscoriaceae

Place of collection: Narnala

Habitat: Frequent in forest hill slopes.

Description:

Twining, perennial herbs with oblong root tubers. Stem slender, prickly, glabrous. Leaves alternate, 3-5-foliolate; leaflets obovate-elliptic or oblong. Male flowers in slender, solitary, axillary racemes or fascicled panicles. Bracts broadly ovate or orbicular with brown spots. Stamens 3 perfect; staminodes 3, minute. Pistillode 3-lobed. Female flowers in axillary pendulous spikes. Capsule cordately oblong.
**Ethnomedicinal uses:**

Decoction of tuber is also given for early recovery of fractured bone. Tuber are cooked eaten as vegetable *(Gond)*. Leaf paste mixed with musurd oil is massaged to treat rheumatism *(Korku)*. The powder of tuber is given orally in abdominal pain after delivery. Decoction of tuber is given for curing asthma or cough *(Bhils)*.

**Botanical Name:** *Diospyros melanoxylon* Roxb. *(SSCB-274/320)*

**Vern Name:** Tembhurni, Tendu.

**Family:** Ebnaceae

**Place of collection:** Paturghat forest, Shahanur forest and Narnala forest.  

**Habitat** : Common in forest.

**Description** :

Trees 15 m tall. Leaves alternate or subopposite, elliptic to elliptic oblong. Male flowers 3-12, in tomentose, paniculate cymes; female flowers subsessile, solitary. Fruits globose or ovoid; fruiting calyx flat with thick undulate lobes. Seeds 2-8.

**Ethnomedicinal uses :**

Decoction of flower is effective in night-blindness and diarrhoea. Leaf paste is applied in scabies and tumorous glands *(Bhil)*. Decoction of stem bark used in diarrhoea, indigestion, leucorrhoea and anaemia. Powder of dried flowers with honey is used as aphrodisiac and in anaemia *(Korku)*. Fruit decoction is useful in diarrhoea. Decoction of stem bark is good remedy for inflammation of spleen. Paste of fruit is applied in bone fracture *(Gond)*.
Botanical Name: *Echinops echinatus* Roxb.  
(Plate-17, Fig.3)

Vernacular Name: Ulati, Utkantak.

Family: Asteraceae

Place of collection: Along Katepurna and Narnala forest roads.

Habitat: Common along roadsides and on waste lands.

Description:

Cottony woolly, erect, annual herbs, 10-30 cm tall. Leaves lyrate-sinuate with spinous-tipped lobes, 2-10 cm long. Heads, solitary, white, 0.3—0.4 cm across, spinous. Achenes obconcial, 0.3—0.4 cm long, villous; pappus short, yellow, forming a short cylindric brush above achenes.

Ethnomedicinal uses:

A few drops of root extract are given to infants to promote emergence of teeth. Root juice given in fever, opthalmia and urinary troubles. Decoction of whole plant is effective in stomachache and diabetes (*Korku*). Paste prepared from powder of the root bark is mixed in water or honey is applied on male genitals externally one hour before intercourse (*Bhil*). Root bark powder of this plant and tuber powder of *Curculigo orchoides* in equal proportion is taken with milk or honey twice a day to avoid premature ejaculation (*Gond*).

Roots are used for easy delivery and relief from labour pains (Muhammad and Khan, 2008).
Botanical Name: *Eclipta prostrata* L. (SSCB-294/320) (Plate-17, Fig.4)

Family: Asteraceae

Vernacular Name: Bhringuraja, Maka.

Place of collection: Katepurna, Narnala base line.

Habitat: A common weed in different types of habitats but grows luxuriantly in moist damp areas.

Description:


Ethnomedicinal use:

Andhs apply the paste of leaves to their head as a hair dye and to check premature fall and also to give cooling effect to the brain. Banjara healers prescribe few drops of oil of plant to cure liver and spleen enlargement. Leaf-juice is taken orally in jaundice twice daily until cure. Korku use the leaf-juice is taken orally with honey in dysentery, night-blindness and jaundice by the tribals. The leaf-juice mixed with urine and applied on white patches on the body. Bhils use the leaf paste as an antiseptic to ulcers, cuts and wounds. It is believed that the herb taken internally and applied externally blackens hair.

Traditionally the drug is extensively used against jaundice (Aiyer and Kolammal, 1962; Kurup et al., 1979). Whole plant is hepatoprotective and promotes hair growth (Chandra et al., 1987). Leaf extract
used on fresh injury (Borse et al., 1990). Juice and honey in remedy for catarrhal in infants (Chopra et al., 1992). Leaf powder is mixed with coconut oil & applied on the hair regularly for healthy and black hair (Ignacimuthu et al., 2006). Leaf in cuts, scabies (Acharya and Pokhrel, 2006). Roots are used as a tonic for the liver (Kunwar et al., 2009). Whole plant is liver tonic, antiseptic (Dwivedi et al., 2008).

The plant is popular in the preparation of established drugs for liver ailments like Liv-52, Livomyn etc. Its antihepatotoxic activity has been studied in detail by Handa et al., 1984. In Ayurveda drug is known as Bhringarajah, is acrid, hitter, hot and dry, reduceskapha and vata and is a good rejuvenator. It is good for the hair and skin, expels intestinal worms, cures cough and asthma and strengthens body. It is considered a specific in night blindness, eye diseases, headache and disease pertaining to hair and its growth.

**Botanical Name:** *Erythrina indica* L.  
**(SSCB-307/320)**  
**(Plate-13, Fig.3)**

**Family:** Fabaceae

**Vernacular Name:** Pangara

**Habit:** Tree

**Part used:** Leaves

**Place of collection:** Katepurna sanctuary, Narnala forest.

**Description:**

*E. indica* is a compact shrub with knobby stems. The leaves are simple ovate. It posses dense clusters of deep crimson flowers, that spread broadly open.
Ethnomedicinal uses:
The leaves are said to have wormicidal properties. The leaf juice (20 ml) once daily is given to children having intestinal worms for 15 days in Korku tribes.

**Botanical Name:** *Euphorbia hirta* L.  
(SSCB-11/320)  
(Plate-20, Fig.3)

**Vernacular Name:** Dudhi

**Family:** Euphorbiaceae

**Habit:** Herb

**Place of collection:** Common open ground weed.

Ethnomedicinal uses:
The tribals of this area use this plant on Jaundice. Fresh leaves of *E. hirta* and *Phyllanthus amarus* extracted and mixed with sugar and curd and administered 2 spoonful, thrice a day for 4 days. The root extract is given to stop vomiting. The latex is applied on warts to cure.

**Botanical Name:** *Evolvulus alsinoides* (L.)  
(SSCB-109/320)  
(Plate-31, Fig.2)

**Vern Name:** Samber Wel, Shankhapushpi.

**Family:** Convolvulaceae

**Place of collection:** Patur ghat forest and Sendona forest.

**Habitat** : Very common, on rocky, gravelly soil of grasslands, waste lands along roadsides and even on old walls.

**Fls. & Frts.** : September -October.
Description:

Prostrate, trailing or rarely erect, silky pubescent, perennial herbs. Leaves oblong-lanceolate or elliptic-ovate. Flowers axillary, solitary or in 1-3 flowered cymes; bracts 2; pedicels filiform. Calyx densely silky. Corolla light blue with white mid-petaline bands. Stamens 5, exserted. Capsules globose, 4-valved, glabrous. Seeds 4 or less, ovoid, glabrous, grey.

Ethnomedicinal uses:

The whole herb is used medicinally in the form of decoction in fever, nervous debility, loss of memory and syphilis. Tribals smoke the leaves to cure chronic bronchitis (Korku). The fresh flowers with sugar or honey are eaten as a brain tonic by the tribals. Decoction of whole plant is taken 2-3 times a day in fever, asthma, cold and cough (Andh). In Bhils Plant powder is taken orally by the tribal ladies twice in a day for 15 days to cure leucorrhoea. Leaf juice is applied on scabies. The oil extracted from whole plant promotes the growth of hair. Decoction of plant is given in malarial fever. Banjara peoples use the decoction of entire plant to improve memory.

The juice of plant is applied to treat scabies (Manandhar, 1985). Leaves are recommended for asthma and mental disturbances; decoction of roots, thrice a day is consumed for three days for curing cough and cold, (Rajaqkaruna et al., 2002). Whole plant of E. alsinoides is used for the treatment of venereal diseases, (Ayyanar M. et al., 2005). E. alsinoides is used as spermopiotic (Hegde et al., 2006). Tribals consume leaf juice of E. alsinoides internally for fever, (Sandhya B. et al., 2006). The fresh leaves are boiled in water and the decoction is used for jaundice (Gul Jan et al., 2009).
Shankhpushpi is a reputed drug of Ayurveda and reported as a brain tonic, nervine tonic, alternative and laxative, (Upadhya et al., 1993; Shah et al., 2000).

**Botanical Name:** *Ficus hispida* L.  
**(SSCB-113/320)**

**Vernacular Name:** Bhui-umber, Kadumber.

**Family:** Moraceae

**Place of collection** : Tamgaon.

**Habitat** : Katepurna, Patur ghat.

**Description** :

Shrubs to medium sized trees, up to 10 m tall. Bark brownish, lenticellate; pink. Leaves simple, opposite, decussate; stipules caducous. Inflorescence syconia clustered on tubercles of main trunk, older branches and leafless branches; flowers unisexual. Syconium, globose, up to 2.5 cm across.

**Ethnomedicinal uses:**

Decoction of root is prescribed in leucoderma. Latex is applied on ringworm. Juice of fruits mixed with honey is prescribed in leucorrhoea. Young fresh leaves pounded with milk and *Piper longum* are prescribed for cough and asthma. Stem bark is used in anaemia, and wounds *(Bhil)*. Powder of fruits with milk is given as aphrodisiac. Green fruits are boiled and eaten by ladies for more milk secretion. Root paste is applied externally to cure bleeding piles *(Banjara).*

According to Ayurveda, it is astringent to bowels; useful in treatment of biliousness, ulcers, vomiting, vaginal complains, fever, inflammations and leprosy. According to Unani system of medicine, its latex is aphrodisiac, tonic and inflammations; useful in piles, nose-diseases, gonorrhea etc.

**Botanical Name:** *Ficus racemosa* L.  
(SSCB-84/320)

**Vernacular name:** Umber

**Family:** Moraceae

**Habit:** Tree

**Place of collection:** Patur, Narnala

**Ethnomedicinal uses:**

The leaves are astringent and use to cure spongy gums. Latex use to treat diarrhea and piles and fruits are said to have astringent and carminative properties (Korku healers). The astringent leaves of this species are used as a mouthwash for spongy gums. The latex of the stem is useful in the treatment of piles and diarrhea (Mix with double quantity of water and taken daily for one month). Ripened fruits are edible, astringent and carminative.
Botanical Name: *Gloriosa superba* L. (SSCB-248/320) (Plate-25, Fig.1)

Vernacular Name: Kal-lawi, Kalihari, Kolhyacha maka, Langli.

Family: Liliaceae

Place of collection: Narnala.

Habitat: Occasionally found on slopes of hills.

Description:

A wild scrambling glabrous twiner, twins with the help of leaftip tendril. Root stock bifurcately branched. Stem herbaceous. Leaves sessile, alternate, spirally twisted at the tip to form the tendril. Flowers in solitary axillary, large showy decorative. Flowers complete, bisexual, actinomorphic, trimerous, perianth segment 6, greenish at the base but turning to orange. Stamens 6, polyandrous, golden yellow to red. Gynoecium tricarpellary syncarpous, placentation axile. Fruit capsule, oblong.

Ethnomedicinal uses:

About 10 mg tuber powder is taken orally by the tribal ladies only once to regularize menstrual disorder (Andh). In Bhils root paste is applied locally an antidote to snakebite and scorpion sting. The root is given internally as an effective antidote against cobra poison. Paste is prepared and mixed with the paste of *Piper longum* and is administered once a day regularly for a month for cure of rheumatism (Korku).

Duke (1985) has reported the abortifacient action of the plant rhizome. In traditional medicine system, tuber is used for the treatment of bruises and sprains (Rastogi & Mehrotra, 1993), colic, chronic ulcers, hemorrhoids, cancer, impotence, nocturnal seminal emissions and leprosy.
(Nadkarni, 1978). The plump roots of the plant have been used in the treatment of parasitic skin infections, leprosy, and internal worms (Mutshinyalo, 2001; Dhushara, 2004). Tuber is used to develop sterility and in vaginal uterine prolapse (Choudhary et al., 2008). Paste of tuber is prepared and mixed with the paste of *Piper longum* and is administered once a day regularly for a month for cure of rheumatism (Rout and Thatoi, 2009).

In Ayurveda and Yunani systems of medicine, the tuber of plant is well known due to its pungent, bitter, acrid, heating, anthemintic, laxative, alexiteric and abortifacient nature. It is widely used in the treatment of ulcers, leprosy, piles, inflammations, abdominal pains, intestinal worms, thirst, bruises, infertility and skin problem (Kirtikar & Basu, 1935; THDC, 2002). However, ingestion of all parts of the plants is extremely poisonous and can be fatal (Senanayake & Karalliedde, 1986).

**Botanical Name:** *Grangea maderaspatana* (L.) Poir.  
(SSCB-183/320)  
(Plate-21, Fig.3)

**Vernacular Name:** Mutkhari, Machi pathree.

**Family:** Asteraceae

**Place of collection:** Katepurna.

**Habitat:** Very common along river beds.

**Description:**

Prostrate or procumbent, glandular-pubescent herbs, 20-30 cm long. Leaves oblanceolate, pinnatifld, lobed, pubescent. Heads bright yellow, solitary, axillary and terminal or leaf opposed. Achenes glandular-pubescent; pappus shortly tubular.
Ethnobotanical uses:

In **Andhs** Leaf juice (10ml) is used to cure obstructed menses, it was recommended in empty stomach continuously for a week early in the morning. In **Bhils** The whole plant decoction twice a day to regulate stomach disorder and to increase production of milk in females. Juice of leaves (2-3 drops) is dropped in ear for earache. Leaves decoction is prescribed in **Korkus** to cure stomachache and amenorrhoea.

Plant decoction is prescribed in hysteria. Plant paste is applied to cuts and wounds as antiseptic.

**Botanical Name:** *Grewia tiliacifolia* Vahl,  
**Vernacular Name:** Dhamani, Damana, Pharsa.

**Family:** Tiliaceae

**Place of collection:** Patur ghat area.

**Habitat:** Common on lower slopes of hills.

**Description:**

Erect shrubs or small trees, 4-5 m tall; bark rough, excorticating irregular patches. Leaves broadly ovate-oblong. Flowers yellow or greenish-yellow, in axillary or extra-axillary cymes. Drupes globose.

**Ethnomedicinal uses:**

About 20-30 ml of a decoction made from the stem bark is administered once daily for 2-3 days to cure wounds, cough and cold (**Bhils**). Stem powder with honey is taken internally to make semen thick. Decoction of the bark is taken in uterinary complaints (**Andhs**).
Bark cures dysentery (Ambasta, 1986). Wood powder is emetic, antidote to opium poison, aphrodisiac, heals wounds, cures cough, burning sensation, throat complaints, biliousness (Chopra et al., 1992). Ahamed et al., (2009) reported wound healing property of bark. Aqueous extract of *G. tiliaefolia* leaves possess analgesic activity along with antipyretic activity (Sakat and Juvekar, 2009). Bark paste is applied on the navel in urinary problems (Jagtap et al., 2009). Ripened fruits eaten and said to improve digestion (Madhu and Suvartha, 2009).

**Botanical Name:** *Helicteres isora* L.  
(SSCB-58/320)

**Vernacular Name:** Marophali, Muradsheng.

**Family:** Sterculiaceae

**Place of collection** : Narnala and Katepurna.

**Habitat** : Plants fairly common in the forest.

**Description:**


**Ethnomedicinal Uses:**

The powder of dry fruits is taken orally with water twice or thrice a day for 3 to 4 days to cure stomachache, diarrhoea and dysentery (*Bhil*).

**Korku** Tribals take orally an extract of roots as a remedy for leucorrhoea and spermatorrhoea. Paste of the fruit with honey is very effective in stomachache in children. The root bark extract is taken orally to cure bronchitis. **Andhs** use
to take Fruit paste with honey internally as a remedy for diarrhoea, stomachache, chronic dysentery in children, general practice in tribals.

Juice of root beneficial in diabetes (Ambasta, 1986). Roots chewed to control internal haemorrhages; their decoction is used for the same purpose and to induce fertility in women (Ramchandran et al., 1986). Roots used in children’s diarrhoea, the pulverized plant with hot water are taken in the morning and at night in coughs. The leaves are used against giddiness (James A Duke, 1986). Bark in dysentery and diarrhoea, juice or roots in diabetes, stomach affection and snake-bite (Chopra et al., 1992). Fruits in colic, flatulence (Dwivedi et al., 2008).

**Botanical Name:** *Heliotropium eichwaldi* Steud. Ex. DC.  (SSCB-142/320)

**Vernacular Name:** Bhurundi

**Family:** Boraginaceae

**Habit:** Herbaceous

**Place of collection:** Katepurna

**Description:**

The plant is annual herb, pubiscent or stringose. The leaves are simple, alternate, subsessile. Inflorescence generally terminal cyme, unilateral and scorpoid. Corolla white or blewish colored and lobed.

**Ethnomedicinal uses:**

The leaf juice is used to cure ulcers. The leaf paste is applied locally to combat scorpion bite. It is also used to cure earache.

(SSCB-112/320)

(Plate-24, Fig.4)

Vernacular Name: Anantamul, Kawdi, Kharahadi.

Family: Asclepiadaceae

Place of collection: Narnala forest, patur ghat.

Habitat: Common on the hill slopes & also trailing on the ground.

Description:

Straggler with branchlets perched on thickets in turban like fashion. Milky latex. Leaves especially of juvenile plants glaucous. Flowers yellow.

Ethnomedicinal uses:

Root powder mixed with water is used to cure leucorrhoea, rheumatism and syphilitic ulceration when applied continuously. Root decoction is given in snakebite (Banjara). Korku use to take Root powder with jaggery orally against gonorrhoea and tonsilitis by tribals. Root decoction is taken once a day for blood purification. In Andhs, Root is powdered and given with honey in jaundice. Latex is applied in the form of paste for sores and wounds.

A number of workers have recorded the use of the plant for the treatment of various ailments like antidote to scorpion sting, snake bite, fever (Sharma *et al.*, 1979; Maheshwari and Singh, 1984 b; Maheshwari *et al.*, 1986), as blood purifier (Sharma *et al.*, 1979), cooling effect, venereal diseases including gonorrhoea (Singh and Maheshwari, 1983, 1985) and tonsilitis (Saxena and Vyas, 1983). The plant shows hepatoprotective activity (Baheti *et
Root is made into paste and applied on wounds soon after snakebite. Paste is given orally too (Rout and Thatoi, 2009).

**Botanical Name:** *Heteropogon contortus* L.  
(Plate-35, Fig.4)

**Vernacular name:** Kusal gavat

**Family:** Poaceae

**Habit:** Herb

**Part used:** Entire plant

**Place of collection:** Narnala forest, Katepurna sanctuary.

**Ethnomedicinal uses:**

The local tribes and villagers use this plant in the treatment of appendicitis and to relieve related stomach pain.

**Botanical Name:** *Holarrhena antidysentrica* (Roth)  
(SSCB-153/320)

**Vernacular name:** Kuda

**Family:** Apocyanaceae

**Habit:** A small tree

**Place of collection:** Khatkali

**Description:**

A small tree with pale white bark. The leaves are broadly ovate or obovate. Flowers white in terminal dense corymbose cyme. Follicles cylindrical with white spots, seeds oblong.
Ethnomedicinal uses:

The local tribal medicinemen recommend against diarrhea, dropsy and stomach pain. Seeds in the powdered form are used as anthilmenthic and given against intestinal worms.

Botanical Name: *Hygrophila auriculata* (Schum.) Heine.

(SSCB-238/320)

(Plate-16, Fig.1)

Vernacular Name: Talam, Talimakhana.

Family: Acanthaceae

Place of collection : Bori, Van.

Habitat: Swampy places.

Description:

A stout herb; stems fasciculate, sub-quadrangular, erect, 0.6-1.5 cm. high, thickened at the nodes, hispid with long hairs; Leaves sessile, whorled in verticels of 6 at each node, all with straight sharp yellow spine in their axil. Flowers in whorls of 8 (in 4 pairs) at each node; Corolla purple blue, widely 2-lipped; Fruit capsule, linear oblong, pointed, 4-8 seeded.

Ethnomedicinal uses:

Decoction of leaves is taken internally in the case of anemia and edema. Powder of the seed is used in the stone of kidney and gallbladder (Andh). In Korku, Leaf powder is taken twice a day for a week against bronchitis, cough and epidemic fever. Decoction of seed powder is given for the disorders of urinogenital system. Seed powder with milk is good remedy for spermatorrhea and seminal debilities (Bhils). Decoction of root is taken in
the treatment of kidney stones & inflammation of urinary bladder. Seed decoction is used against cancerous wounds (Banjara).


**Botanical name:** *Hyptis suaveolens* (L). Poiet. (SSCB-181/320)

(Plate-23, Fig.1)

**Vernacular name:** Bhut-ganja

**Family:** Lamiaceae

**Habit:** Herb

**Place of collection:** Abundant as weed

**Description:**

The plant grow as weed, generally 4-5 fit height, hair. The stem angular, ribbed, green- grayish. The leaves simple, chordate and hairy. The flowers in raceme, bluish colored, corolla lobed (typical bilabiate). Scented plant.

**Ethnomedicinal uses:**

It is very common road side plant from June to December; The leaves of this plant is use to cure eye infections. An infusion of leaves poured in 1-2 drops thrice a day for 3-4 days or till cure.
Botanical Name: *Indigofera tinctoria* L.  
(FSCB-220/320)  
(Plate-15, Fig.4)

**Family:** Fabaceae

**Vernacular Name:** Pandhar Phalli

**Habit:** Herb/ bushy

**Part used:** Leaves

**Place of collection:** Narnala forest area

**Ethnomedical uses:**

The locals use the leaves of this plant on burns and dog bite. For dog bite a glassful of leaf juice is daily administered for 3 days

Botanical Name: *Indigofera linifolia* (L) Retz.  
(FSCB-293/320)  
(Plate-15, Fig.3)

**Local name:** Khawwa

**Family:** Fabaceae

**Habit:** Annual herb

**Part used:** Leaves

**Place of collection:** Common in open land grasses, collected from Popatkehed.

**Description:**

Wild annual herb, stem branched and herbaceous, whitish, covered with hairs. Leaves simple, alternate, acute on both ends, subsessile, stipulate. Flowers axillary raceme, complete, bisexual, zygomorphic, gamopetalous. Corolla papilionaceous, at least 2 times larger than calyx, polyperalous, bright
coloured. 10 stamens, diadelphous, gynoecium monocarpellary ovary unilocular, placentation marginal. Pod minute, whitish.

**Ethnomedicinal uses**

The local tribals use this plant to cure febrile eruptions in children and amenorrhoea. The plant is uprooted and mixed with oil and this oil is then applied around the head to treat febrile eruptions.

**Botanical Name:** *Kalanchoe pinnata* (Lamk) Pers. (SSCB-311/320)

**Vernacular Name:** Dagadphodi, Panphuti

**Family:** Crassulaceae

**Place of collection :** Narnala forest; now a day used as garden plant.

**Habitat :** Grown as common ornamental in gardens.

**Description:**

Glabrous perennial herbs; stems hollow. Lower and uppermost leaves simple, the middle ones usually pinnately compound with 3-5 leaflets, opposite, blades flat, elliptic, margins crenate, petioles 2-10 cm long. Flowers in panicle cymes, each one pendent on pedicels 1-2.5 cm long; sepals pale yellow, streaked with red, connate, cylindrical, inflated and papery; corolla 3-6 cm long, the exerted part maroon, sparsely glandular pubescent.

**Ethnomedicinal Significance:**

**Bhil** Practitioners prescribe 2-3 fresh leaves along with clove orally in the treatment of kidney stones. Pounded fresh material is applied as a poultice for sprains, eczema, infections and burns. **In Andhs** Warmed extract of the juice is prescribed orally for dysentery and improving sexual strength.
**Banjara:** Leaves extract is used in urinary trouble and quick healing of wounds.

Decoction of the plant is used in cuts to stop bleeding (Bhandary *et al.*, 1995).

**Botanical Name:** *Lagaseea mollis* Cav.  (SSCB-254/320)

**Local name:** Nikargua

**Family:** Asteraceae

**Habit:** Annual herb

**Part used:** Leaves

**Place of collection:** Common in agriculture land during the rainy season.

**Ethnomedical uses:**

- This plant is use by local tribes as antiseptic and to treat cuts and injuries. The leaf paste is advocate to apply on the cuts and injuries to cure.

**Botanical Name:** *Lantana camara* L.  (SSCB-96/320)

**Vernacular name:** Raimuniya

**Family:** Verbanaceae

**Habit:** Shrub

**Place of collection:** Common along road side.

**Description:**

- A bushy shrub, well branched 0.5 to 2.00 m height. Leaves are simple alternate, chordate and crushy. Flowes in umbalate cluster, mix of red, orange and yeloow flowers.
Ethnomedicinal uses:

The local people use this plant to cure gastrointestinal disorders.

Botanical Name: *Launaea nudicaulis* L.  
Family: Asteraceae  
Habit: Herb  
Part used: Leaves  
Place of collection: PDKV Agriculture campus, Akola

Ethnomedicinal uses:

The leaf paste is applied on the forehead of children to reduce the chronics of headache and fever by the tribals specifically Andh tribes.

Botanical Name: *Lawsonia inermis* L.  
Vernacular Name: Mehndi.  
Family: Lythraceae  
Place of collection: Akola, Akot, Shahanur, Katepurna.  
Habitat: Planted as hedges.  
Description:

Large, glabrous shrubs, 3-5 m tall. Leaves broadly lanceolate, glabrous. Flowers yellowish-white, in large terminal panicled-cymes or corymbosely branched panicles. Capsules globose.

Ethnomedicinal Significance:

In Banjara seeds are crushed to obtain oil which is applied over head for a month to control hair fall and baldness. A leaf paste is applied to cracks of the feet. Bhils apply the paste of fresh leaves on the eyes to cure
conjunctivitis and locally on pimples, boils and skin diseases. They also use
the decoction of plant orally to cure cough and vomiting. The tribals apply
warmed leaves on the swellings and tumors. The fruits have been thought to
stimulate the menstrual function. In powdered form, the leaves have been
utilized both internally and externally to treat various skin diseases, including
leprosy, fungal infections, acne and boils (Gond and Rajgonds).

The leaves are also used for dying hair and colouring palms of hands.
(Kirtikar and Basu, 1935; Warrier et al., 1995). Leaf powder used as hair dye
(Sharma, 1999). Leaves are used as an astringent or as a prophylactic against
skin diseases and the bark are useful in the treatment of jaundice, enlargement
of the spleen, calculus affection, and skin diseases (Anand et al., 1992).
Leaves are anti-inflammatory (Khan, 1996). This plant is used in tribal
medicine for cure of jaundice (Hemadri and Rao, 1984; Udupa et al, 1992;
Sen et al, 2000). Leaves in boils, burns (Dwivedi et al., 2008). Leaf in heel
crack, mud infection (Acharya and Pokhrel, 2006). Leaves, flower, bark in
spermatorrhoea, jaundice, gonorrhoea, leucorrhoea, ulcer, malaria,
menorrhagia, astringent (Kadiri et al., 2008). Leaf paste is applied to cure
wounds (Vijaya Bhasker Reddy, 2008).

Botanical Name: *Leonotis nepetifolia* (L.) R. Br. (SSCB-45/320)
(Plate-22, Fig.4)

Vernacular Name: Deepmal, Mathesul and Shendrya.

Family: Lamiaceae

Place of collection : Patur forest, Narnala forest.

Habitat : Frequent along banks of rivers and streams, also along roadside.
Description:


Ethnomedicinal uses:

Entire plant decoction is given against diarrhoea. It is also used as anti-inflammatory of external ulcers (Bhils). **Andh** Tribals crushed the roots and rubbed on the breast to release the milk when mammary glands swell due to excessive accumulation of milk. Extract of leaves is used in rheumatism. In **Banjara** freesh leaves rubbed on forehead to cure headache. The ash of flower head mixed with curd and applied to cure ring worm. Ashes of flower heads applied to burns and scalds. The **Korku** use to take decoction of leaves is taken internally as a tonic and febrifuge and for gastro-intestinal troubles.

Decoction of leaves as tonic (Chopra *et al.*, 1956). Tribals’ women prefer the steam bath after delivery (Jain, 1965). The plant parts burnt to ashes. Mixed with the mustard oil and applied on affected part due to paralysis (Tarafdar and Rai, 1981). Plant used in skin infection, ashes of flowers applied to scalds and burns. Leaves used against rheumatism. Seeds yield fatty oil similar to olive oil (Ramchandran *et al.*, 1986). The leaves are used in Brazil in the treatment of rheumatic infections (Caius, 1986).
Botanical Name: *Leucas aspera* (Willd.) Enum. (Plate-22, Fig.2) (SSCB-65/320)

**Vernacular Name:** Chotahakusa.

**Family:** Lamiaceae

**Place of collection:** Shahanur forest.

**Habitat:** Common weed of wet fields.

**Ethnomedical uses:**

The leaves decoction is very useful in chronic rheumatism. Application of leaf paste is a good remedy for psoriasis and skin eruptions (*Korku*).

Powder of flowers is mixed with sesame oil and applied on the forehead to get relief from headache. Leaf is pasted and applied on head in jaundice (*Gond*). In *Andh*; Root decoction is used in snake bite. Decoction of whole plant with equal amount of leaves of *Ocimum sanctum* is prescribed for asthma. *Bhils* take leaf juice (2-3 drops) dropped into nostrils to get relief from heavy cold.

Leaf juice is dropped in ear pain and pus discharge (Bhandary *et al.*, 1995). A bunch of leaves is boiled and the vapour is inhaled to cure headache and fever (Ignacimuthu *et al.*, 2006). Whole plants used against rabies, leaves juice with garlic are good in stomachache (Sikdar and Dutta, 2008). Leaf juice applied in psoriasis, skin eruptions till cure (Madhu and Suvartha, 2009).
Botanical name: *Leucas cephalotes* (Roxb. ex Roth) Spr.  

Vernacular Name: Dronapushpi, Tumba.

Family: Lamiaceae

Place of collection: Narnala forest, Katepurna.

Habitat: Occasional along stream beds.

Description:

Annual, hairy herbs, 30-60 cm tall. Leaves ovate or ovate-lanceolate, crenate serrate. Flowers white, in dense terminal whorl. Nutlets obovoid, oblong.

Ethnomedicinal uses:

The poultice of leaves applied on wounds and sores. Leaf juice is applied in scabies (*Bhils*). In Banjara: Plant decoction is prescribed for cough, cold and fever.

Leaves are used in cough (Dwivedi *et al.*, 2008).

Botanical Name: *Loranthus longiflorus* Desr.  

Vernacular Name: Bandal

Family: Loranthaceae

Habit: Tree

Part used: Stem bark

Place of collection: Patur Ghat area, Narnala forest.
Ethnomedicinal uses:

The stem bark is used by tribal women to counter menstrual problems.

The stem bark is made into powder and taken about 10 gm daily for 3 days.

**Botanical Name:** *Luffa echinata* L.  
(SSID-215/320)  
(Plate-18, Fig.1)

**Vernacular Name:** Turai

**Family:** Cucurbitaceae

**Habit:** Climbing herb

**Place of collection:** Apatapa road Akola, Medshi forest.

**Description:**

The plant is climber. Stem ribbed, greenish, delicate, glaucous. The leaves palmate like and lobed. The flowers in either terminal or axillary raceme.

Flowers large white.

**Ethnomedicinal uses:**

The plant is use to treat the dental problems and against hair loss (The details about the preparation of drug and administration was not shown by the vaidos).

**Botanical Name:** *Malachra capitata* L.  
(SSID-124/320)  
(Plate-19, Fig.3)

**Vernacular Name:** Boru

**Family:** Malvaceae

**Habit:** Herb

**Part used:** Stem bark
**Place of collection:** Patur Ghat area, Barshitaki.

**Description:**

The plant is erect, simple or branched, annual herb 0.5-2 m high, which is covered with hairs. The leaves are circular, 5-15 cm in diameter, obscurely and shallowly lobed, finely toothed, and somewhat heart-shaped at the base. The flowers are borne in axillary and terminal heads. The calyx-lobes are short, and slenderly pointed at the tip. The petals are yellow, imbricate, and about 1 cm long.

**Ethnomedicinal uses:**

The stem bark is used by tribal and local peoples for the preparation of ropes. The fresh leaf paste of the plant is used to treat headache.

**Botanical Name:** *Mallotus philippensis* (Lam)Muell. Arg.

(SSCB-202/320)  
(Plate-31, Fig.4)

**Vernacular name:** Kunku

**Family:** Euphorbiaceae

**Habit:** Small tree

**Part used:** Fruits

**Place of collection:** Narnala forest.

**Description:**

The plant is a small or medium sized tree, up to 25 metres tall and a trunk diameter of 40 cm. The trunk is fluted and irregular at the base. The grey bark is smooth, or with occasional wrinkles or corky bumps. Small branches are greyish brown in colour, with rusty covered small hairs towards the end. Leaf
scars evident. Leaves are opposite on the stem, ovate to oblong in shape. 4 to 12 cm long, 2 to 7 cm wide with a long pointed tip. The upper surface is green without hairs, the underside pale grey in colour. Racemes up to 6 cm long. Male and female flowers grow on separate trees.

**Ethnomedicinal uses:**

In the local tribal communities, the fruit powder of this plant is mixed with curd and given to patients to remove intestinal worms.

**Botanical Name:** *Malvastrum coromandelianum* L. (SSCB-131/320) (Plate-19, Fig.2)

**Family:** Malvaceae

**Habit:** Herb

**Part used:** Entire plant

**Place of collection:** Agriculture waste land weed

**Ethnomedicinal uses:**
The local tribes from Narnala use the plant decoction to cure ulcers in bladder and also the cough. The plant is also claimed for its anti-diabetic property.

**Botanical Name:** *Martynia annua* Glox. (SSCB-172/320)

**Vernacular Name:** Waghnakhi

**Family:** Plumbaginaceae

**Habit:** Annual Herb

**Part used:** Leaves, fruits.

**Place of collection:** Patur Ghat area, Narnala forest area.
Ethnomedicinal uses:

Applied on tubercular glands on the neck, to reduce chronics. Leaf juice is used to gargle sore throats. The fruit paste is applied on the affected place in case of scorpion sting.

Botanical Name: *Melia azedarach* L.  
(SSCB-42/320)

Vernacular Name: Chotalim, Limbara.

Family: Meliaceae

Place of collection: Vallabh Nagar, Barshi takali, Gandhigram.

Habitat: Common along roadsides & near villages.

Description:

Moderate trees. Leaves bipinnate; leaflets 5-9 on each pinnae, lanceolate, serrate, acuminated and oblique at base. Flowers white with purple tinge in axillary panicles, which are shorter than the leaves and glabrous. Drupes globose elliptic, green more or less dry, yellow, slightly muricate and wrinkled at maturity.

Ethnomedicinal uses:

About half teaspoon of seed powder is administered by Banjara medicine men with a glass of water in the morning daily to cure diabetes. A poultice of flowers is applied to kill lice and to cure eruption on the scalp. According to Bhils the root bark is highly effective against ringworm and other parasitic skin diseases. Seed powder with warm water is prescribed twice a day for a week to cure bleeding piles. In Andhs warmed poultice of leaves is tied on the abdomen and chest in bronchitis twice daily until cured. Seed oil is used externally in the treatment of rheumatism.
It has shown most beneficial effects for the circulatory, digestive, respiratory and urinary systems (Nair et al., 1996). Fresh leaf extract is applied in inflamed bleeding gums. Stem bark infusion is administered orally twice a day to cure gonorrhea (Khan, 2002). Used traditionally to treat arthritis and diabetes (Soe & Myo, 2004). Anthelmintic, antiseptic, blood purification, hair fall, headache, insecticidal, promote conception, rheumatism, gout, skin disease, vermifuge, wounds (Pant and Verma, 2008). The decoction obtained after crushing and squeezing the leaves is used in jaundice (Gul Jan et al., 2009). One cup of root juice is taken orally thrice a day for three and half days dog bite (Jagtap et al., 2009).

**Botanical Name:** *Merremia emarginata* Hallier. *(SSCB-199/320)*

**Vernacular name:** Undir kana

**Family:** Convolvulaceae

**Habit:** Herb

**Part used:** Leaves

**Place of collection:** Common, PDKV Akola.

**Description:**

This is a slender, prostates, creeping, smooth or somewhat hairy herb. The stems root at the nodes, and are 10 to 80 centimeters in length. The leaves are small, kidney-shaped to somewhat heart-shaped, 6 to 15 millimeters long, often wider than long, and irregularly toothed. One to three flowers occur on short stalks in the axils of the leaves. The sepals are rounded and about 4 millimeters long, with few to many white, weak hairs. The corolla is yellow,
and nearly twice as long as the calyx. The capsule is rounded and about 5 millimeters in diameter.

**Ethnomedicinal uses:**

The fresh leaf juice of this species is used by Korku tribes in the treatment of corns.

**Botanical Name:** *Mimosa pudica* L.  
**Vernacular Name:** Lajari  
**Family:** Mimosaceae  
**Habit:** Perennial herb.

**Part used:** Roots and Leaves  
**Place of collection:** PDKV campus, Akola.

**Ethnomedicinal uses:**

The local tribes and rurals are found to use the root of Lajari to counter the effect of snake bite. The leaves are used on Filaria. The root extract of lajari along with rice water is given immediate after snake bite to counter the impact. The leaf paste is applied on affected area to relieve the pain.

**Botanical Name:** *Momordica dioica* Roxb. ex Willd.  
**Vernacular Name:** Jangli Karela, Kartoli, Kanturla, Katwal.  
**Family:** Cucurbitaceae  
**Place of collection:** Sonala, Patur ghat and Barshitakali.

**Habitat:** Rarely occurs in a wild condition in the hilly tracts.
Description:

Perennial climber with tuberous roots. Stem slender branched, internodes long. Leaves membranous, alternate, triangular, multicostate. Flowers yellow, male flower solitary showing prominent bract at the top of pedicel. Calyx 5 lobed. Corolla 5 partite. Stamens 5 as filaments of two united seems to be 3. Female flowers solitary, bracts small below the peduncle. Ovary tricarpellary. Fruit ovoid densely echinate yellow at maturity. Seeds embeded in red pulp.

Ethnomedicinal uses:

Leaves are boiled and bound on the affected part for relief from swelling and inflammation. Leaves decoction is administered for stomach pain and dysentery in Andhs. In Banjara a piece of tuber is prescribed orally as anti-alcoholic addiction. Tuberous roots of this plant are used in snake bite and scorpion sting by the local tribes. It is also effective in bleeding piles. Bhil use unripe fruits as vegetable. Tuberous root is ground in hot water and 50ml of the juice is taken orally once a day on an empty stomach for 10 days to treat diabetes.

Gonds uses roasted root is used to stop bleeding from piles, also used in urinary complaints. Root ground to paste applied over the body as a sedative. A piece of tuber is recommended internally for liquor addiction.

Tuber is used in snake bite and scorpion sting (Chopra et al., 1986). Tubers used in stomachache, general debility, roots astringent, applied on bleeding piles, bowels, urinary disease, as sedative in fevers. Root paste in water in cough (Srivastava, 1989). Root of male plant is used for abortion. The root paste is also used as an antidote to scorpion stings (Painuli and
Maheshwari, 1996). Antibacterial activity is reported by Sadyojatha and Vaidya (1996). Tuber is used in diabetes, hair lengthening, (Choudhary et al., 2008). Tuber is used in spermatorhea and leucorrhea, (Raut et al., 2010).

**Botanical Name:** *Mucuna pruriens* (L.) DC. Prodr. (SSCB-278/320) (Plate-12, Fig.2)

**Vernacular Name:** Khaj-kuiri, Kawas.

**Family:** Fabaceae

**Locality** : Narnala at the entry gate of reserve forest.

**Habitat** : Commonly occurs as a twinner in forest and along streams.

**Description** :


**Ethnomedicinal uses** :

After boiling the seeds in milk for about 2-3 hours are shade dried and powdered. One spoonful powder with a glass of milk is given to increase sexual vigour and as a health tonic and also in impotency in male (Bhils). Seed powder with water is taken orally by the tribal ladies to cure leucorrhoea. Bristles of pods mixed with honey made into pills to kill stomach worms in babies (Andhs). Seeds given for improving retention of semen and night dreams. Roots are effective in dysentery. Seeds of this plant are used as nervine tonic (Korku). Leaf juice is given internally in headache and to cure
ulcers. Decoction of root twice a day is effective in renal infections and scorpion sting (*Gonds*).


**Botanical Name:** *Ocimum gratissimum L.*

**Vernacular Name:** Ram Tulsi

**Family:** Lamiaceae

**Habit:** Perrenial herb

**Place of collection:** Popathed, Bori.
Description:


Ethnomedicinal uses:

The leaf juice along with few drops of honey poured in ear to combat pus formation and earache by local tribe. Leaf juice is also effective on colic pain and worms in childrens. Seed powder is recommended in headache and dysentery.

Botanical name: *Oldenlandia corymbosa* L. (SSCB-256/320) (Plate-23, Fig.4)

Vernacular Name: Tarangi

Family: Rubiaceae

Habit: Herb

Place of collection: Katepurna.

Description:

It is a slender annual or perennial herbs; stems prostrate to weakly erect, 1-4 cm long, few-branched to many-branched, glabrous. Leaves narrowly oblong to linear, 15-20 mm long, 2-5 mm wide, apex acute, base cuneate, petioles ca. 1 mm long, stipules ca. 2.5 mm long, connate, margins with several glandular teeth of unequal length. Flowers 1-3, axillary, peduncles ca. 8-10 mm long; calyx 4-toothed, the teeth ca. 1 mm long; corolla lavender to white, thin, broadly tubular, 4-lobed, ca. 2 mm long, the
lobes 1-2 mm long. Fruit didymous, somewhat laterally compressed, thinly cartilaginous, ca. 1.5 mm long, and 2-2.5 mm wide. Seeds numerous per cell and angular.

**Ethnomedicinal uses:**

The fresh plant extract is given in jaundice and other liver complaints. The decoction is given in low fever with gastric problems.

**Botanical Name:** *Opuntia dillenii* How.  
**Vernacular Name:** Nagphani  
**Family:** Cactaceae  
**Habit:** Shrub  
**Place of collection:** Along roadside and hedges.  
**Ethnomedicinal uses:**

The plant extract is given in snake bite. The phylloclade extract is heated and applied on boils to normalize. **Gond** tribes use the fruit in gonorrhea. This plant is also have additional properties like refrigerant and purgative. Fruits are warmed and the juice given in 2 spoonfuls thrice a day for about 2 weeks in asthma.

**Botanical Name:** *Oxalis corniculata* L.  
**Vernacular Name:** Ambuti  
**Family:** Oxalidaceae  
**Habit:** Wild annual herb.
**Place of collection:** Shahanur, Bori, Katepurna, Akola (Cosmopolitan in distribution)

**Description:**

Wild herb with long creeping stem having pubiscent hairs. Leaves long trifoliate, petiolate, leaflets cuneate at the base, subsessile, stipulate. Flowers axillary subumbalate, bractiate, Sepals oblong, obtuse, Petals oblong round at the base. Stamens polyandrous, 10. Gynoecium pentacarpellary apocarpus, fruit capsular.

**Ethnomedicinal uses:**

This plant is used against skin diseases and fever by local tribes. Leaves and roots are used to treat dysentery and diarrheoa. Some local peoples also claim that this plant is also useful against cataract.

**Botanical Name:** *Pedilanthus tithymaloides* L.  
(SSCB-313/320)  
(Plate-20, Fig.4)

**Vernacular name:** Chirang dudhan

**Family:** Euphorbiaceae

**Habit:** Srub

**Place of collection:** Telhara

**Description:**

Succulent, xerophytic, green shrub. Leaves simple, alternate, fleshy, ovate. Inflorescence sleeper cyathium in dichotomous cyme. Flowers unisexual, male flowers with single stamen, female flowers with tricarpellary syncarpous gynoecium, placentation axile.
Ethnomedicinal uses:

The local tribals use the plant latex in Leucoderma and warts. Leaves are given to stimulate lactation in women after child birth.

Botanical Name: *Pergularia daemia* (Forssk.) Chov.  (SSCB-202/320)

_Vernacular Name:_ Utar-wel

_Family:_ Asclepiadaceae

_Habit:_ Climber

_Place of collection:_ Shahanur, common on hedges

Ethnomedicinal uses:

The leaves of this plant with leaves of *Plumbago zeylanica* are used in bone fracture (Gond). The leaves of *P. daemia* and *P. zeylanica* are ground into paste and paste applied in plaster till 2-3 months.

Botanical Name: *Peristrophe bicalyculata* Nees.  (SSCB- 93/320)

_Vernacular Name:_ Bhuineem

_Family:_ Acanthaceae

_Place of collection:_ Katepurna

_Habitat:_ Along hedges of forest and fields

Ethnomedicinal uses:

Entire plant is macerated and made into infusion with rice and used as antidote against poison (Korku). It is also said to have antibacterial properties.
**Botanical Name:** *Phyllanthus amarus Schum.*  
(SSCB-109/320)  
(Plate-20, Fig.2)

**Vernacular Name:** Amlki, Bhui-awla, Kadu-awla.

**Family:** Euphorbiaceae

**Place of collection:** Shahanur forest, Katepurna.

**Habitat:** Common weed in open field & on grassy hill slopes.

**Ethnomedicinal uses:**

One tea spoonful paste mixed with water is given for 7-10 days to treat menorrhagia and gonorrhea (Banjara).

Young leaves are good for dysentery. Root juice is used in urino-genital troubles and gonorrhea (Bhils). About 10g paste of whole plant is given thrice daily for one week for both plant in hepatitis and chronic liver problems associated with liver cirrhosis due to alcoholism (Gonds). The paste of whole plant along with rice washed water is taken twice daily in empty stomach for three-four days to cure menorrhea (Korku).

Leaves extract is taken to cure diarrhoea; roots extract is taken in fever (Albert and Gosai, 2006). Raw branchlets and leaves eaten for 7 days for curing jaundice (Ragupathy and Newmaster, 2009). The whole plant is used for jaundice (Gul Jan et al., 2009). Fresh leaves are ground and mixed with a cup of cow or goat's milk and taken internally to cure jaundice (Ignacimuthu et al., 2006).

It is a reputed medicine and general practice of local people to use this plant in jaundice.
Botanical Name: *Physalis minima* L. (SSCB-92/320) (Plate-11, Fig.2)

**Vernacular Name:** Fataka

**Family:** Solanaceae

**Habit:** Annual herb

**Place of collection:** A very common seasonal herb collected from the college campus.

**Ethnomedicinal uses:**

Local tribal people use the leaves of this plant to cure Asthma. Fruits used in gonorrhea.

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Botanical Name: *Plumaria rubra* L. (SSCB-227/320)

**Vernacular Name:** Chafa

**Family:** Apocynaceae

**Habit:** Shrub

**Part use:** Root

**Place of collection:** Narnala forest, Patur Ghat forest; also ornamentally grown in some gardens.

**Ethnomedicinal uses:**

The root extract is given in stomach pain. The root extract mixed with ghee and given once daily to cure stomach pain (*Gond* and *Korku* of Narnala).
Botanical Name: *Pithocellobium dulce* L. (SSCB-197/320) (Plate-15, Fig.2)

Vernacular Name: Chichbilayi/ Wilayati chinch

Family: Mimosaceae

Habit: Small tree

Part used: Fruits

Place of collection: Katepurna sanctuary, Narnala forest.

Ethnomedicinal uses:

The fruits are used to get rid of intestinal worms. The raw fruits are eaten to remove intestinal worms (Villagers nearby Akola).

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Botanical Name: *Plumbago zeylanica* Linn. (SSCB-55/320)

Vernacular Name: Chitrak, Chitramula, Hirva-chitrak.

Family: Plumbaginaceae

Place of collection: from agriculture waste land of PDKV, Akola.

Habitat : Wild within the area, straggling amongst bushes. Also found in waste places.

Description :

Ethnomedicinal uses:

Andh tribals give small dose of root-powder orally to the ladies at the time of delivery to delay the labour pains. Root extract applied on arthritis and rheumatism. Juice of 5-10 leaves is taken orally by the tribals as an antidote in snake-bite. The root powder is mixed with water and the paste is used in Banjara for the treatment of wounds and warts.

Root paste applied on the affected areas of rheumatism. Tribals apply the paste of roots on the piles. Root paste along with milk applied externally in leprosy and other skin diseases by the local Korku tribals. Root decoction (2 tea spoonful) with black pepper is given 20 -25 days in empty stomach to treat several venereal diseases and help in abortion up to 3-4 months of pregnancy (Gonds).

Milky juice applied on scabies and ulcers, pounded and applied on muscular pain (Kirtikar and Basu, 1975; Chopra et. al, 1992). Root with mustard oil applied on septic wounds (Gupta, 1981). Roots used in diarrhoea, dyspepsia, piles, anasarca, leprosy and skin diseases (Srivastava, 1989). Roots are used for indigestion, dysentery, skin diseases and piles. Root powder mixed with goat milk administered to arrest frequent urination (Ganesan S. et al., 2006). Root in leprosy, edema and piles (Vanila et al., 2008). Root juice internally and paste externally on boils and joint pains & sore throat (Venkat Ramana M. 2008). Root is used to cure diarrhoea (Raut et al., 2010).
Botanical Name: *Polygonum glabrum* Willd. (SSCB-156/320)

Vernacular Name: Gulabi

Family: Polygonaceae

Habit: Herb

Place of collection: Khatkali

Ethnomedicinal uses:

The tribals use this plant as effective wound healer. The entire plant is boiled and made into paste. This paste is applied on cuts and wounds for their healing.

Botanical Name: *Psoralea corylifolia* L. (SSCB-276/320)

Vernacular Name: Bawchi, Bawcha.

Family: Fabaceae

Place of collection: Narnala forest roads and waste land near Poptakhed.

Habitat: Occasional along roadsides.

Description:

Ethnomedicinal uses:

In Bhils, Seed powder one spoonful with a glass of milk is prescribed twice a day for a month in the treatment of impotency, premature ejaculation and to improve vitality.

Seed oil of *Psoralea corylifolia* L. in combination with Karanj and Castor oil is applied externally in psoriasis, leprosy and leucoderma (Korku). Decoction of seed is given internally in skin diseases, kidney disorders and hair loss (Andh).
Seed oil in leucoderma and leprosy (Mahajan, 2007). The plant has magical effect against several skin diseases like psoriasis, leucoderma and leprosy (Pramilla Sah, et al., 2006). Psoralen has been used for the treatment of hypo-pigmented lesions of the skin like leucoderma (Vaidya, 2006). It is also effective against various diseases such as asthama, diarrhoea, alopecia (Chun- Feng Qiao et al., 2007), impotence, menstruation disorder and uterine hemorrhage (Ruan 2007). Seeds are used to cure skin diseases and leucoderma (Pandey and Sharma, 2008).

**Botanical Name:** *Pterocarpus marsupium* Roxb. (SSCB-312/320)

**Vernacular Name:** Bija, Bijasal.

**Family:** Fabaceae

**Place of collection:** Khatkali.

**Habitat:** Rare, in the hilly region of the forest.

**Ethnomedicinal uses:**

Water is kept overnight in container made out of the stem and taken in the morning to treat diabetes. Stem powder with honey is given to induce fertility in females (Andhs). Stem bark is used to treat chronic diarrhoea and relieve the irritation caused by intestinal infection and colitis. Decoction of the heartwood is taken mixed with honey once early in the morning for three months for obesity and also given in blood purification (Banjara).

Water is kept overnight in a glass made out of the stem and taken in the morning to treat diabetes (Bhils).

Stem bark is used by ladies in fertility (Madhu V. and Suvartha C. 2009). *Pterocarpus marsupium* Roxb. is a popular ethno-medicinal plant for
the treatment of diabetes (Karanjit et al., 2008). Bark is given in blood dysentery (Rout and Thatoi, 2009). Bark is reported to cure dysentery (Raut et al., 2010).

**Botanical Name:** *Pongamia pinnata* (L.) Piers.

**Vernacular Name:** Karanj

**Family:** Fabaceae

**Habit:** Tree

**Place of collection:** Narnala

**Ethnomedicinal uses:**

The Karanj seeds are used on scabies. The seeds are ground to make paste and are applied externally. Fresh bark is used internally to cure bleeding piles. The flowers are said to be useful in diabetes

**Botanical name:** *Quisqualis indica* L.

**Family:** Combrataceae

**Habit:** Climber

**Place of collection:** Planted as ornamental in home gardens collected from Shri Shivaji College campus

**Description:**

The Rangoon Creeper is a ligneous vine that can reach from 2.5 meters to up to 8 meters. The leaves are elliptical with an acuminate tip and a rounded base. They grow from 7 to 15cm and their arrangement is opposite. The flowers are fragrant and tubular and their color varies from white to pink
to red. The 30 to 35 mm long fruit is ellipsoidal and has five prominent wings. The fruit tastes like almonds when mature.

**Ethnomedicinal uses:**

The plant is mainly used for traditional medicine by local tribals and villagers. Decoctions of the root, seed or fruit is used as antihelmintic to expel parasitic worms or for alleviating diarrhea. Fruit decoction can also be used for gargling. The fruits are also used to combat nephritis. Leaves can be used to relieve pain caused by fever. The roots are used to treat rheumatism.

**Botanical Name:** *Rauwolfia tetraphylla* L.  
*(SSCB-71/320)*  
*(Plate-31, Fig.3)*

**Vernacular name:** Chandrika

**Family:** Apocyanaceae

**Place of collection:** Narnala, Patur forest

**Ethnomedicinal uses:**

The local tribals use the roots to cure mouth pain, inflammation and stomach burning. Care must be taken as an overdose is poisonous.

**Botanical Name:** *Ruellia tuberosa* L.  
*(SSCB-272/320)*

**Family:** Acanthaceae

**Part use:** Tuber

**Place of collection:** Narnala forest ranges
**Ethnomedicinal uses:**

The tuber powder is given to women after delivery to counter abdominal pain. About 10 gm tuber powder is given with equal proportion of milk to treat the abdominal pain after delivery (Gond).

**Botanical Name:** *Rungia parviflora* Nees. (SSCB-252/320)

**Family:** Acanthaceae

**Habit:** Annual herb

**Part use:** Leaves

**Place of collection:** Common in Agriculture and forest waste lands

**Ethnomedicinal uses:**

It is febrifuge and use cure pain and diminish swellings. The local tribals also used its leaves as cooling agent and given to children in small pox.

**Botanical Name:** *Sapindus emarginatus* L. (SSCB-290/320)

**Vernacular name:** Ritha

**Family:** Sapindaceae

**Place of collection:** Patur ghat, Katepurna

**Description:**

A large shrube, well branched. The leaves are alternate, 15-40 cm., pinnate with 30-40 leaflets. The flowers form a large penicle. Flowers usually creamy or white and small. Fruits are small leathery sopy drupe.
Ethnomedicinal uses:

The local peoples use the fruits as emetic and contraceptive. They are also use the fruits on eczema and psoriasis.

**Botanical Name:** *Semicarpus anacardium* L.  
**Vernacular name:** Bibba/ Bhilwa  
**Family:** Anacardiaceae  
**Place of collection:** Patur, Katepurna, Narnala  
**Part used:** Fruit and Seed  
**Ethnomedicinal uses:**

The fruits and seeds are use to cure indigestion, cough, piles and boils. Gum is used to treat leprosy and nervous debility (Gond). The fruits of this species are eaten to relieve indigestion. They are also used in the treatment of coughs, piles and boils. The oil from the seed of this plant is anthelmintic, and it has been also reported to be good for the treatment of scabies (Korku and local non tribals).

**Botanical Name:** *Sida rhombifolia* L.  
**Vernacular Name:** Atibala, Bala.  
**Family:** Malvaceae  
**Place of collection:** Katepurna and Shahanur forest.  
**Habitat** : Common on the hills, also in the cultivated fields.
**Description:**

Much branched herbs. Leaves rhomboid-lanceolate or obovate, cuneate at the base, coarsely toothed. Flowers yellow, axillary, crowded at the ends of branches. Fruits triangular. Seeds smooth, black.

**Ethnomedicinal uses:**

In Banjara, Infusion of leaves is taken orally in the treatment of piles. Root paste is applied externally in rheumatism. In Bhils leaf paste applied externally on boils, wounds and joint pains. **Korku** vaidoos prescribe the decoction of root is given for diarrhoea and ate the raw root for indigestion and acidity.

Leaves show antinociceptive and anti-inflammatory activity (Venkatesh et al., 1999). Decoction of whole plant is given in rheumatic pains (Bhandary et al., 1995).

**Botanical Name:** *Shorea robusta* Gaertn. F. (SSCB- 258/320)

**Local Name:** Salai

**Family:** Dipterocarpaceae

**Habit:** Tree

**Part used:** Resin

**Place of collection:** Semadoh forest, Katepurna sanctuary.

**Description:**

Salai is moderate to slow growing, and can attain heights of 30 to 35 m and a trunk diameter of up to 2-2.5 m. The leaves are 10–25 cm long and 5–15 cm broad. In wetter areas, it is evergreen; in drier areas, it is dry-season deciduous, shedding most of the leaves.
**Ethnomedicinal uses:**

The plant resin is used in indigestion and diarrhea by the local peoples. The resin powder mixed with water and given to check diarrhea and indigestion problems.

**Botanical Name:** *Solanum nigrum* L.  
(SSCB-263/320)  
(Plate-11, Fig.1)

**Vernacular Name:** Ranwangi

**Family:** Solanaceae

**Habit:** Herb

**Place of collection:** Katepurna.

**Description:**

It is a fairly common herb or short-lived perennial shrub, found in many wooded areas, as well as disturbed habitats. It has a height of 30–120 cm, leaves 4-7.5 cm long and 2–5 cm wide; ovate to heart-shaped, with wavy or large-toothed edges; both surfaces hairy or hairless; petiole 1–3 cm long with a winged upper portion. The flowers have petals greenish to whitish, recurved when aged and surround prominent bright yellow anthers. The berry is mostly 6–8 mm diameter, dull black or purple-black.

**Ethnomedicinal uses**

The plant is used as cardiac tonic, sedative, expectorant. Plant decoction is given in dropsy, jaundice and liver complaints. The plant juice is given in piles and ulcers. The root bark is used in ear, eye & nose diseases; ulcers on neck, burning throat, inflammation of liver but not given to women (Gond).
Botanical Name: *Solanum virginianum* Wall. (SSCB-168/320)

Vernacular name: Bhui ringani

Family: Solanaceae

Habit: Herb

Place of collection: Katepurna

Ethnomedicinal uses:

The leaf extract s use to treat respiratory diseases and dropsy. A fresh leaf extract of this species is given in the case of respiratory diseases and dropsy. It has also been for the treatment of gonorrhea and snake bite (external application) by the local Korku and Andh tribes.

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Botanical Name: *Sonchus asper* L. (SSCB-66/320) (Plate-18, Fig.4)

Vernacular name: Mhatari

Family: Asteraceae

Habit: Annual herb

Place of collection: Agriculture waste land of Akola.

Description:

It is an annual plant with spiny leaves and yellow flowers resembling those of the dandelion. The leaves are bluish-green, simple, lanceolate, with wavy and sometimes lobed margins, covered in spines on both the margins and beneath. The base of the leaf surrounds the stem. The plant in general have the height of about 60 cm but can reach 180 cm (6 ft) in some cases. The leaves and stems emit a milky sap when cut. The flowers grow in clusters and the end of the stems. Inflorescence typical capitulum.
Ethnomedicinal uses:
The plant extract is administered 10 ml daily for 30 days to recover from Asthma (Korku). It is also diuretic and antiseptic.

Botanical Name: *Sphaeranthus indicus* L. (SSCB-127/320) (Plate-18, Fig.3)

Vernacular name: Gorakhmundi

Family: Asteraceae

Habit: Annual herb

Place of collection: Open waste land Katepurna.

Ethnomedicinal uses:
This plant is used by local tribals for gastric disorders. The plant extract (one tea cup) twice daily is given to cure gastric disorders.

Botanical Name: *Sterculia urens* Roxb. (SSCB-287/320) (Plate-26, Fig.1)

Vernacular Name: Kad, Kadai, Kar.

Family: Sterculiaceae

Place of collection: Katepurna.

Habitat: Rare and infrequent tree in deciduous forests.

Description:
Deciduous trees, 4-5 m tall. Leaves very large, 18-32 x 18-38 cm, palmately 5-lobed, glabrous, cordate at base; lobes deltoid-ovate. Flowers greenish-yellow, in panicked-racemes on naked branches, small, terminal. Follicles ovoid, 4-6 cm long, covered with stinging bristles.
Ethnomedicinal uses:

In Banjara community seed powder one teaspoonful is taken orally with milk as an aphrodisiac. Bark powder is taken orally with water in tuberculosis and rheumatism (Korku).

Botanical Name: Tamirandus indica L. (SSCB-140/320)
Local name: Chinch/ Emli
Family: Ceasalpiniaceae
Habit: Tree
Place of collection: Narnala
Ethnomedicinal uses:

The bark is used to treat gastric problems, fruits as tonic and to cure dandruff. It is also used against inflammation, blood disorder and acne. The dry, powdered bark of this species is given to relieve gastric pain. The fruits are used for tonic, and are reportedly good for the curing of dandruff. A paste made from the leaves of this tree is useful in the treatment of inflammation, blood disorders and acne.

Botanical Name: Tephrosia purpuria L. Pers. (SSCB-53/320) (Plate-12, Fig.3)
Vernacular Name: Unhali
Family: Fabaceae
Habit: Herb
Place of collection: PDKV campus Akola.
**Ethnomedicinal uses:**

The leaves of this plant are used to recover the post natal complications. Leaf decoction mixed with honey is given to women for about one month to get relief from post natal complications (Local vaidoo). It is also used in various disorders of spleen, liver, stomach and heart diseases.

**Botanical Name:** *Tinospora cordifolia* (Willd.) Miers ex Hook.

(SSCB-158/320)  
(Plate-26, Fig.3)

**Vernacular Name:** Gulvel.

**Family:** Menispermiaceae

**Place of collection:** Shahanur forest.

**Habitat:** Common on hedges, along road sides.

**Description:**

Large twining shrubs, glabrous. Leaves broadly ovate, 5-10 x 5-8.5 cm, cordate at base, acute or acuminate at apex, glabrous. Flowers greenish-yellow; males in fascicles; females solitary, in long racemes. Drupes 1-3, globose, orange-red, smooth.

**Ethnomedicinal uses:**

Shade dried leaves are ground into powder and mixed with hot water and the mixture is taken orally in the treatment of diabetes (*Korku*). Infusion of stem is taken daily in the treatment of leucorrhoea (Andh). Root extract is given to children to cure cough, malaria and diabetes (*Gond*). Stem powder with honey is prescribed for cancer. It is used in general debility and fever. Decoction of stem is given once daily for two weeks to cure jaundice (*Bhil*).
Leaf paste is applied topically to treat wounds (Ignacimuthu et al., 2006). Malaria root (Devarapalli, 2007). Stem in sexual impotency (Dwivedi et al., 2008). Stem powder is used to cure white discharge (Mohapatra and Sahoo, 2008). Stem and aerial roots ground into a fine powder and consumed with tea or milk. It is used to cure many ailments (Ragupathy and Newmaster, 2009). Stem leaf and bark is used to treat malaria, vomiting and cough (Raut et al., 2010).

The plant is used in Ayurvedic rasayanas to improve the immune system and the body's resistance to infections. It has long been known in Ayurvedic literature as a tonic, vitalizer and a remedy for diabetes and metabolic disorders.

**Botanical Name:** *Tribulus terrestris* L. (SSCB-130/320)

(Plate-26, Fig.4)

**Vernacular Name:** Gokhru, Gokshur, Chota Gokharu.

**Family:** Zygophylaceae

**Place of collection** : Popatkhed, Dhargarh, Khatkali.

**Habitat** : Common weed in waste places on gravelly soil along roadsides.

**Description:**

Prostrate herbs. Leaves abruptly pinnate; pinnae 3-6 pairs; leaflets elliptic or ovate-oblong, acute. Flowers yellow, solitary in leaf axil. Fruits consisting of 5, woody cocci each with 2 pairs of spines; upper pair longer than the lower; spines hard, sharp. Seeds several in each coccus.
**Ethnomedicinal uses:**

In **Andh** fruit powder is taken orally with milk to cure impotency and urinary disorders. In **Bhils** leaves extract given orally and paste as external application in scorpion-bite.

In **Korkus** plant powder is given in the treatment of kidney stones and heart troubles.

Plant extract in stone troubles (Mahajan, 2007). The fruit and root are used orally to prevent white discharge in women and to treat urinary troubles (Ignacimuthu *et al.*, 2006). Whole plant Cooling, diuretic, used in urinary and kidney disorder and heart diseases, (Hussain *et al.*, 2008). Its mucilaginous infusion boiled with milk is given to cure sexual impotency and weekness (Muhammad and Khan, 2008).

**Botanical Name:** *Trichosanthes cucumerina* L. (Plate-29, Fig.2) (SSCB-255/320)

**Vernacular Name:** Jangli Padavala, Patola.

**Family:** Cucurbitaceae

**Place of collection** : Katepurna, Patur ghat forest

**Habitat** : Common in hedges and along the fields.

**Description:**

Extensive climbers; stems herbaceous, slender. Leaves 7-10 x 8-12 cm, broadly ovate or orbicular-reniform, shallowly to deeply 5-7 lobed, margins denticulate. Flowers white; male and female flowers in same or different axils; male flowers 8-15-flowered in 3 cm long racemes; female solitary,

**Ethnomedicinal Uses:**

Tuber paste is applied locally in skin diseases. Tuber decoction is given in snake bite (*Andh*). The powder of tuber is taken internally and applied locally in snake bite. Decoction of tuber is given uterine complaints (*Bhils*). Ripe fruit contains a mucilaginous exudate, which is applied directly on forehead to treat headache (Ragupathy and Newmaster, 2009). Tuber is used as antidote (Choudhary *et al*., 2008). Tuber powder in colic, leaf decoction as an antidote to snake bite (Katewa *et al*., 2008).

**Botanical Name:** *Triumfetta rhomboidea* Jacq. Enum. (SSCB-295/320)

**Vernacular Name:** Chirchiri

**Family:** Tiliaceae

**Place of collection:** Katepurna and Shahanur forest.

**Habitat:** Common in plains & on hill slopes.

**Description:**

Shrubs or upper shrubs, 60-100cm tall. Lower leaves 3-5 lobed; the upper simple, hairy, rhomboid and slightly 3- lobed, generally 3-nerved. Flowers yellow in dense terminal and leaf opposed cymes. Fruits globose or ovoid with spiny hooks.

**Ethnomedicinal uses:**

Leaf paste is applied on the affected areas of scabies and eczema. Root decoction is prescribed for ulcers and tumors. Root paste is also applied externally to treat ulcerous wounds (*Andh*). Leaf juice is taken internally in
jaundice and urinary complaints. Leaf paste applied externally in bleeding piles (Korku). Root decoction is given to promote easy delivery. Root paste is taken orally as an antidote to snake bite (Banjara).

The leaves and stem are used as a poultice on tumors (Kirtikar and Basu, 1975). The plant shows anti-tumor and antioxidant activities Sivakumar P. et al., 2008. Roots show anti-ulcer activity (Pradhan D. et al., 2003).

**Botanical Name:** *Tylophora indica* (Burm. f.) Merr.  
**(SSCB-306/320)**

**Vernacular Name:** Antamul; Anthamul, Pitmari.

**Family:** Asclepiadaceae

**Place of collection:** Sonala, Khatkali, Bori forest.

**Habitat:** Occasional in deciduous forests at the foot hills.

**Description:**

Slender twiner; branches finely pubescent. Leaves ovate, elliptic oblong, acute or acuminate. Flowers reddish or pinkish, in corymbose or umbellate cymes. Follicles tapering to a fine point, glabrous. Seed broadly ovate.

**Ethnomedicinal uses:**

**Andh** uses root powder mixed in milk to cure asthma. Korku healers administered Fresh leaves (1-2 to cure asthma. Root decoction is given in snake bite.

The leaves of this species have been used extensively in Ayurvedic medicine for asthma and other respiratory disorders (Werbach & Murray,
Leaves are taken orally in asthmas are aphrodisiac and tonic, (Pandey and Sharma, 2008).

**Botanical Name:** *Ventilago denticulata* Willd.   
**(SSCB-257/320)**

**Vernacular Name:** Papdi

**Family:** Rhamnaceae

**Habit:** Woody climber

**Habitat:** Found in slopy forest.

**Place of collection:** Narnala

**Description:**

Perrenial woody climber, young branches pubiscent. Leaves simple, shortly petiolated, alternate, oblong, crenate, apex acute. Flowers small, numerous in green penicle.

**Ethnomedicinal uses:**

Tribal vaidoos use to administer juice of young shoots and bark to cure the body pain in malarial fever. Root bark is useful in stomach pain and skin diseases. **Gond** tribe use the soaked seeds of this plant as brain tonic.

**Botanical Name:** *Vicoa indica* (L) DC   
**(SSCB-98/320)**

**Family:** Asteraceae

**Habit:** Annual herb

**Place of collection:** Open waste land, Katepurna

**Ethnomedicinal uses:**

The leaves are use to cure Asthma. The fresh leaf juice (2 spoonful) administered twice daily for about 15 days (Korku).
Botanical Name: *Vitex negundo* L.  
(V SSCB-107/320)  
(Plate-23, Fig.3)

Vernacular Name: Nirgudi, Nirgunda, Nirgur.

Family: Lamiaceae

Place of collection: Patur forest, Narnala.

Habitat: Very common on hill slopes & river beds.

Description:

Large, much branched shrubs; branches with white tomentum. Leaves 3-5 foliate, lanceolate, acuminate, densely grey tomentose. Flowers small, bluish purple, in large terminal panicles Drupes black, globose. Seeds 4, obovate—oblong.

Ethnomedicinal uses:

Leaf extract is dropped in the eyes to cure conjunctivitis. They smoke the dry leaves to relieve headache. The tribals give root extract orally for enhancing fertility in women and to cure rheumatism (*Bhils*). Equal quantity of root powder of *Vitex negundo* and tuber powder of *Chlorophytum borivillianum* is prepared. One teaspoon of this powder is taken orally by the tribal men with milk to cure sexual debility and in general weakness and also in rheumatism leucorrhoea, gonorrhea (*Gonds* and *Rajgonds*). Leav is boiled and the vapour is inhaled to relieve cough, cold, muscular pain and headache (*Korku*).

Vitex flowers cardiac troubles and liver disease (Mahajan, 2007). Leaves are boiled in water and the vapour is inhaled twice a day to get relief from headache, fever, cold, and cough Ignacimuthu *et al.*, (2006). Leaf in
rheumatism (Dwivedi et al., 2008). Leaf is used in body pain, cold, fever, waist pain (Raut et al., 2010).

**Botanical Name:** Withania somnifera (L.) Dunal.  
**Vernacular Name:** Ashwagandha, Askand, Asganda.  
**Family:** Solanaceae  
**Locality:** Agriculture waste land around Akola.  
**Habitat:** Common in dry wastelands, preferably in fertile soil.  
**Description:**  
Hairy or tomentose undershrubs, 30-120 cm tall. Leaves subopposite or alternate, unequal, ovate, entire, subacufe. Flowers greenish yellow, 6-9 together in axillary fascicles. Berries red, smooth and enclosed in inflated calyx.  
**Ethnomedicinal Uses:**

Root powder with warm milk is given twice a day to cure leucorrhoea and menstrual troubles in ladies and in impotency of males. One teaspoon full of root powder is given with milk twice a day in rheumatism (Andhs). A mixture of equal quantity of roots of *Withania somnifera*, tubers of *Chlorophytum borivillianum* and *Asperagus recemosus* is prepared. One teaspoon of this mixture is taken orally by the tribal men with a glass of milk for a month to cure infertility (Bhil). Root paste is applied externally for inflammatory conditions ulcers and scabies. Leaves paste is applied to tumors and to tuberculosis glands (Korku).
Root is used in rheumatism, vaginal uterine prolapse, diabetes and dysentery (Choudhary et al., 2008). Leaf extract one cup thrice a daily to stop blood flow from uterus after delivery. Its root powder is used to give power to body and lumber, overdose abortifacient. Roots in sexual potency and fertility, leucorrhoea, menorrhagia (Muhammad and Khan, 2008). Roots in sexual impotency (Dwivedi et al., 2008). Decoction of flower is taken with honey once a day in empty stomach for one month for the treatment of spermatorrhea (Rout and Thatoi, 2009). Root are useful in piles, cough and fever (Raut et al., 2010).

**Botanical Name:** *Woodfordia fruticosa* (L.) Kurz.  
(Plate-30, Fig.4)  
(SSCB-266/320)

**Vernacular Name:** Dhayti, Dhati, dhoyti.

**Family:** Lythraceae

**Place of collection**: Patur ghats, Narnala forest.

**Habitat**: Frequent along dried forest streams and on hill slopes.

**Description:**

Straggling shrubs, 3-4 m tall. Leaves ovate-lanceolate. Flowers red in axillary racemes. Capsules ellipsoid, enclosed by the persistent calyx-tube.

**Ethnomedicinal uses:**

Powder of flowers 10 gm. is mixed with honey is given to women, once a day continuously for one month for treatment of leucorrhoea, and menorrhagia (Korku).

Flowers are used to treat ulcer, wounds, cough and small pox. Leaf juice is good remedy for treating dysentery. The powder of flower is prescribed as a
safe stimulant of pregnancy (Bhils). Juice of fresh flowers is taken orally with water to cure diarrhoea and also used as plant decoction preservative (Andhs).

The powder of flower is useful to cure white discharge and menorrhoea (Mohapatra and Sahoo, 2008). Ellagic acid use for gastro-duodenal disorders has been patented (Rajagopalan & Khambe, 1998). It is also effective in uterine disorders (Oudhia, 2003) and for rheumatism (Paper et al., 2005). Juice from small buds, twigs and leaves is helpful in stomach troubles (IUCN, 2004). The flowers and bark are anthelmintic and used in diarrhoea, dysentery, leprosy, skin diseases and diabetes. It is considered as a safe stimulant in pregnancy (Baral & Kurmi, 2006). It also has promising anti-tumor and anti-inflammatory activity (Das et al., 2007). Tender leaves juice is good for treating dysentery (Rout and Thatoi, 2009).

**Botanical Name:** *Xanthium strumarium* L. (SSCB-261/320)

(Plate-21, Fig.4)

**Vernacular Name:** Agara; Chhota Gokhru; Kutardu.

**Family:** Asteraceae

**Place of collection:** Katepurna, Purna river bank near Balapur.

**Habitat:** Common weed along roadsides & nearby villages.

**Description:**

Stout herbs or undershrubs, 90-120 cms. tall. Leaves alternate, triangular, cordate or ovate or 3 lobed, irregularly toothed. Heads monoecious, in terminal and axillary racemes. Achenes obovoid, thick, enclosed in hardened involucral cells. Fruiting involucre clothed with hooked prickies.
Ethnomedicinal uses:

Juice of plant is applied on forehead to cure hemicrania by tribals. Leaf juice is administered in cure of piles. Roots decoction or or leaf is given against malarial fever and urinary trouble (Bhil). Leaf juice is applied externally to cure cancerous wounds. They also apply leaf-paste to cure leucoderma (Gond). The leaf extract is used to cure tooth ache. Leaf juice is applied locally to cure herpes (Korku).

Leaf is used in eczema (Acharya and Pokhrel, 2006). Leaves diuretic, diaphoretic (Dwivedi et al., 2008). Root is used in earache, fruit used in small-pox, (Hussain et al., 2008). Roots, leaves useful against long standing malarial fever, urinary trouble (Sikdar and Dutta, 2008).

Botanical Name: Ziziphus mauritiana Lamk. (SSCB-95/320)

(Plate-30, Fig.2)

Vernacular Name: Ber, Bor.

Family: Rhamnaceae

Place of collection : Katepurna, Narnala.

Habitat : Common in the plains & around forest villages.

Description:

Armed shrubs or small trees with drooping branches; young branches rusty pubescent. Leaves broadly-elliptic or orbicular, acute or obtuse, entire or
serrulate, densely tomentose beneath. Flowers greenish-white, in short axillary fascicles. Drupes green when young, brown or red when ripe; stones 2 celled.

**Ethnomedicinal uses:**

Paste of stem bark mixed with water is given twice a day for two weeks as a cure of abdominal pain during pregnancy. The twigs are used as tooth-brush in bleeding gums (*Bhils*). Triblas take orally the stem-bark powder with honey as a blood purifier and with milk to cure diarrhoea and to improve digestion. The bark paste or leaf-paste is applied on the boils (*Gond*). Decoction of the root bark is used in the treatment of diarrhoea and dysentery. Leaf juice is given in liver disorder (Andh).

Root and fruit are used for thirst, bronchial asthma, diarrhoea and as an aphrodisiac, emetic, carminative and digestive (Bajracharya 1979; Dash & Gupta, 1994; Joshi, 2006). The fruit are used for as a tonic and aphrodisiac (Joshi & Joshi, 2001). They are used in fever and digestion (Manandhar, 2002). Fruit edible, powdered bark is applied to old wounds (Ragupathy and Newmaster, 2009). The juice of fresh leaves is given in jaundice (Gul Jan *et al*., 2009). Root paste is used for diarrhoea, dysentery and vomiting. The fruit are used for fever and digestion (Kunwar *et al*., 2009).
Fig. 1. Graphical presentation of comparative data of plant collected of different families from study area.
<table>
<thead>
<tr>
<th>Name of diseases</th>
<th>Botanical Name of plant</th>
<th>Vernacular name</th>
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</thead>
<tbody>
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<td>Fever, Malaria</td>
<td><em>Alysicarpus vaginalis</em></td>
<td>Shewara</td>
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<td><em>Aristolochya bractiolata</em></td>
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<td><em>Launaea nudicaulis</em></td>
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<td><em>Peristrophe bicalyculata</em></td>
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<td>Kutri</td>
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<td><em>Cleome viscosa</em></td>
<td>Piwali Tilwan</td>
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<td><em>Anisomeles indicus</em></td>
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<td><em>Datura stramarium</em></td>
<td>Dhotra</td>
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<td>Earache</td>
<td><em>Cardiospermum helicacabum</em></td>
<td>Kapal phodi</td>
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<td><em>Datura metal</em></td>
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<td><em>Blepharis repens</em></td>
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<td><em>Heliotropium eichwaldi</em></td>
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<td><em>Crinum asiatica</em></td>
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<td><em>Cleome viscose</em></td>
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<td><em>Cleome gynandra</em></td>
<td>Pandhari Tilwan</td>
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<td>Headache</td>
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<td>Eye Infection</td>
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<td><em>Clerodendrum serrarum</em></td>
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<td><strong>Liver disorders &amp; Jaundice</strong></td>
<td><strong>Cold, cough, Asthma</strong></td>
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<td><em>Eclipta prostate</em></td>
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<td><em>Boerrhavia diffusa</em></td>
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<td><em>Phyllanthus amarus</em></td>
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Liver disorders & Jaundice:

- *Eclipta prostate* - Maka
- *Curculago orchioides* - Kali musali
- *Boerrhavia diffusa* - Punarnava
- *Phyllanthus amarus* - Bhui Awla
- *Acalypha indica* - --
- *Baliospermum* - Danti, Jamalghota

Cold, cough, Asthma:

- *Clematis triloba* - Murhari
- *Pergularia daemia* - Utarani
- *Hygrophilla auriculata* - Talimkhana
- *Adanthoda zeylanica* - Adursa
- *Barleria vahlii* - Jamar
- *Boswellia serrata* - Salai
- *Calotropis procera* - Rui
- *Lagescea mollis* - Fuli
- *Argemone maxicana* - Piwla dhotra
- *Capparis tomentosa* - --
- *Clitoria ternata* - Gokarna
- *Leucas cephalotus* - Dronapushpi
- *Opuntia dillenii* - Nagphani
- *Physalis minima* - Fataka
- *Solanum virginianum* - Bhuiringani
- *Semicarpus anacardium* - Biba
- *Sonhus asper* - Mhatari
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<td><strong>Abutilon indicum</strong></td>
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<td>Shorea robusta</td>
<td>Salai</td>
</tr>
<tr>
<td>Sphaerathus indicus</td>
<td>Gorakhmundi</td>
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</tbody>
</table>

**Rheumatic pain**

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Common Name</th>
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</thead>
<tbody>
<tr>
<td>Bombax ceiba</td>
<td>Katesaur</td>
</tr>
<tr>
<td>Boswellia serrata</td>
<td>Salai</td>
</tr>
<tr>
<td><strong>Skin diseases, cuts, wounds etc.</strong></td>
<td><strong>Plant Name</strong></td>
</tr>
<tr>
<td>----------------------------------</td>
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</tr>
<tr>
<td><strong>Cadaba fruiticosa</strong></td>
<td>Tankal</td>
</tr>
<tr>
<td><strong>Canna indica</strong></td>
<td>Suneri</td>
</tr>
<tr>
<td><strong>Cardiospermum helicacabum</strong></td>
<td>Kapalphodi</td>
</tr>
<tr>
<td><strong>Leucas aspera</strong></td>
<td>Chota sakura</td>
</tr>
<tr>
<td><strong>Vitex negundo</strong></td>
<td>Nirgudi</td>
</tr>
<tr>
<td><strong>Plumbago zeylanica</strong></td>
<td>Chitrak</td>
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<tr>
<td><strong>Achyranthus aspera</strong></td>
<td>Kutri</td>
</tr>
<tr>
<td><strong>Aristolochia bracteata</strong></td>
<td>Gandhyan</td>
</tr>
<tr>
<td><strong>Eclipta prostata</strong></td>
<td>Maka</td>
</tr>
<tr>
<td><strong>Bacopa monneri</strong></td>
<td>Brahmi</td>
</tr>
<tr>
<td><strong>Abrus precatorius</strong></td>
<td>Gunja</td>
</tr>
<tr>
<td><strong>Acanthospermum hispidum</strong></td>
<td>Gokhru</td>
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<tr>
<td><strong>Aloe vera</strong></td>
<td>Korphad</td>
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<tr>
<td><strong>Cleome viscosa</strong></td>
<td>Piwali Tilwan</td>
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<tr>
<td><strong>Convolvulus arvensis</strong></td>
<td>Kup vel</td>
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<tr>
<td><strong>Dioscoria bulbifera</strong></td>
<td>Jatasankar</td>
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<tr>
<td><strong>Echinops echinatus</strong></td>
<td>Ulati</td>
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<tr>
<td><strong>Combratum roxburghii</strong></td>
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<tr>
<td><strong>Oxalis corniculata</strong></td>
<td>Ambuti</td>
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<tr>
<td><strong>Polygonum glabrum</strong></td>
<td>Gulabi</td>
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<tr>
<td><strong>Psoralia corylifolia</strong></td>
<td>Bawachi</td>
</tr>
<tr>
<td><strong>Pongamia pinnata</strong></td>
<td>Karanji</td>
</tr>
<tr>
<td><strong>Trichosanthus cucumerina</strong></td>
<td>Patola</td>
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<table>
<thead>
<tr>
<th><strong>Hair problems and</strong></th>
<th><strong>Plant Name</strong></th>
<th><strong>Common Name</strong></th>
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<tbody>
<tr>
<td><strong>Bauhinia purpuria</strong></td>
<td>Kachnar</td>
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<tr>
<td>Care</td>
<td>Colocasia esculenta</td>
<td>Kochai</td>
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<tr>
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<tr>
<td></td>
<td>Lausonia inermis</td>
<td>Mehandi</td>
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<tr>
<td>Hypertension, heart problem</td>
<td>Coccinia indica</td>
<td>Kundru</td>
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<tr>
<td>Leprosy</td>
<td>Commelina benghalensis</td>
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<tr>
<td></td>
<td>Coix lacryma-jobi</td>
<td>Kasai bija</td>
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<tr>
<td></td>
<td>Psoralia corylifolia</td>
<td>Bawachi</td>
</tr>
<tr>
<td>Urinogenital, menstrual &amp; venereal diseases etc.</td>
<td>Bacopa monneri</td>
<td>Brahmi</td>
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<tr>
<td></td>
<td>Aerva lanata</td>
<td>Chaya</td>
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<td></td>
<td>Abelmoschus ficuleneus</td>
<td>Ran Bhendi</td>
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<tr>
<td></td>
<td>Blumea lacera</td>
<td>Bhamurda</td>
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<td></td>
<td>Butea monosperma</td>
<td>Palas</td>
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<tr>
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<td>Tankal</td>
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<td>Calatropis gigantia</td>
<td>Mandar</td>
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<td>Celosia argentia</td>
<td>Kombda</td>
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<td>Coleus barbatus</td>
<td>Sadamas</td>
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<tr>
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<td>Costus speciosus</td>
<td>Jangli Adrak</td>
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<td>Digera muricata</td>
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<tr>
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<td>Gloriosa superba</td>
<td>Kalihari</td>
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<td>Grangea madradpatensis</td>
<td>Mutkari</td>
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<td>Dagadphodi</td>
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<td>Bandal</td>
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<td>Chotalim</td>
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<td>Pterocarpus marsupiym</td>
<td>Bija</td>
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<td>Sida rhomboida</td>
<td>Bala</td>
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<tr>
<td></td>
<td>Tephrosia purpura</td>
<td>Unhali</td>
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<tr>
<td>Plant Name</td>
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<tr>
<td><em>Withania somnifera</em></td>
<td>Ashwagandha</td>
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<td><em>Woodfordia fruticosa</em></td>
<td>Dhayati</td>
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<tr>
<td><em>Xanthium strumarium</em></td>
<td>Agara</td>
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<tr>
<td><strong>Snake bite &amp; Scorpion sting</strong></td>
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<td><em>Alternenthera sessalis</em></td>
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<td><em>Andrographis paculata</em></td>
<td>Kalmegh</td>
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<td><em>Hemidesmus indicus</em></td>
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<td>Waghnakhi</td>
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<td><em>Mimosa pudica</em></td>
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<td><em>Peristrophe bicalyculata</em></td>
<td>Bhuineem</td>
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<tr>
<td><em>Triumfetta rhomboidea</em></td>
<td>Chirchiri</td>
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