

## “ Study of Certain Medicinal Plants in The Vadoda Forest Area of Jalgaon District (M.S) India.”

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### Abstract

The present research paper is the result of botanical exploration in a natural storehouse of a medicinal plants in a Vadoda forest area from Jalgaon district. It is the outcome of extensive and intensive surveys carried out during 2011 -2013. This area was visited in all seasons so as to observe plants in flowering and fruiting condition. The forest of Jalgaon district is a of tropical ,dry deciduous type, wherein the *Tectona grandis* ,*Boswellia serrata*, *Hardwickia binata* are predominant species .The present research article deals with study of seven medicinal plants, their botanical names ,local name, family, floristic description ,phenology , distribution and medicinal uses of plants.

**Key Words:** Exploration, Vadoda, floristic, phenology, distribution.

### ❖ Introduction:

Ayurveda is the most ancient of all medicinal traditions. It is probably older than traditional Chinese medicine and is considered to be the origin of systemized medicine. The principles of Ayurvedic medicine and medicinal uses of plants are contained in thousands of poetic hymns in Rig Veda .The first school to teach Ayurvedic medicine was at University of Banaras in 500 BC. ,Where the great Samhita that is encyclopedia of medicine was written . Another great encyclopedia was written 700 years later and those together form basis of Ayurveda (Chopra,2000)

Throughout the ages humans have dependent on nature for their basic needs for the production of food, shelter ,clothing, fertilizers, fragrance, medicine (Cragg &Newman,2005) Plants formed a basis of traditional medicine that is in existence for thousands of years and continue to provide mankind with new remedies .Although some of the therapeutic properties attributed to plants have proven to be useful. Medicinal plants therapy is based on the empirical findings of hundreds and probably thousands of years use. The first record written on clay tablets in cuneiform are from Mesopotamia and the date from about 2600BC (Heinrich et al 2004).

### ❖ Study area:

Jalgaon district includes varied topographical features and landscape. Yalwal, Mukatainagar are the administrative tahasil. Topography of Jalgaon district lies between 20° and 21° north latitude and 74° 55' and 76° 28' east longitudes. On its location in the upper Tapi basin forms a district topographical unit separated from neighboring Madhya

Pradesh state by Satpuda and from the south hilly ranges. From east to the river Tapi passes through the district with a deep cut up bed and black soil fertile plains along its bank. The forest of Jalgaon district is a of tropical ,dry deciduous type, wherein the *Tectona grandis* ,*Boswellia serrata*, *Hardwickia binata* are predominant species . The total forest area in the district is 72685.27 hectares. Present work is restricted vadoda forest area only. It is region of Mukatainagar from Jalgaon district of Maharashtra. Pawara tribal people are inhabitant of this area.

❖ **Materials and Method:**

Surveys of the area were conducted during 2011-2013. The ethno botanical information was gathered form the various tribal communities to the Vadoda region of Jalgaon district. The valuable data was also collected from the area explored.

The main methods used to collect data were,

1. Direct field observation, Photographs are taken and identification.( Patil D.A,2003.Kshirsagar S.R.PatilDA,2008))
2. Species specific information of plants in use was collected. Interviews were conducted of tribal people.
3. Plants are identified and recorded .( Cooke,1967,Patil D.A.2009 ).

➤ **Enumeration of plants :**

**Observations:**

**1. *Aegle marmelos* (Linn) Corr. Bail- Rutaceae**

Tall trees, armed with thorns. Bark grayish-white or grey brown. Young parts pubescent .Leaves pinnately compound 3 –oliolate. Leaflets ovate-lanceolate, acuminate, Flowers bisexual, greenish creamy white, Fragrant, in axillary panicles. Fruits ,globose, rind grey or yellowish when ripe, pubescent.Pulp thick orange coloured. Seeds obliquely lenticular or oblong, wrinkled, glabrous, pale brown.

**Fls. & Frts.:** April-Nov.

**Distribution:** Common in dry deciduous forest at Dolarkheda, VAP- 105

**Medicinal uses :** Commercial exploited for its medicinal value of fruits sold in market.

**2. *Barleria prionitis* L. Kate Koranti Acanthaceae**

Bushy shrubs. Branches glabrous .Leaves elliptic to oblong-elliptic, 9-15×4-6cm,acute and bristle-tipped. Flowers yellow to orange yellow, sessile solitary. Axillary, passing into short, terminal spikes. Capsules ovoid. Seeds orbicular, flat, hairy.

**Fls. & Frts.:** Sept.-March

**Distribution:** on slopes and near nallahs , Charthana, VAP-125.

**Medicinal uses:** Juice of leaves is applied to prevent cracking.

Leaves and flowering tops are considered as a diuretic and urinary infection.

**3 .*Buchanania lanzen*, Spreng. Charoli -Anacardiaceae**

Large sized tree. Bark rough, blackish -brown. Trunk straight .Leaves 9-30×3.5-11 cm,

glabrous above, silky- pubescent to villous beneath, elliptic-oblong. Flowers greenish-white or creamy-white in terminal and axillary, pubescent pyramidal panicles. Drupe obliquely lentiform, chestnut brown, smooth, glabrous, 1 seeded.

**Fls. and Frts.** – December-April.

**Distribution** – Rare in Dolarkheda, VAP-107.

**Medicinal uses:** Seeds are edible.

**4. *Helicteres isora* L. Murudseng - Sterculaceae**

Shrub, 2 m tall, stellately hairy. Bark smooth. Pale or dark brown. Leaves bifarious, 8-13×5-10 cm, broadly ovate- oblong or roundish. Irregularly crenate-serrate, coriaceous, scabrid. Flowers in axillary clusters- receptacles raised into gynandrophore. Follicles 5 twisted spirally, 3.5-5 cm long; woody at length, pale brown; nearly glabrous; seeds reddish brown, triangular glabrous minutely tuberculate.

**Fls. and Frts.** - Aug- Dec.

**Distribution**- Occasionally in hilly forest, Charthana, VAP-101.

**Medicinal uses:** Paste of dried fruits is given for stomachache and dysentery in children.

**5. *Thespesia lampas* , Dalz & Gibs Jangalibhenda- Malvaceae**

A shrub 7.5-10 cm. high. Leaves 7.5-15 cm long. Cordate or truncate at the base, 3 lobed; lobes triangular, acuminate, finely reticulately veined. Sometimes with black glandular dots on the lower surface, subglabrous on the upper; petioles 3.8-9 cm long. Peduncles 7.5-10 cm long, axillary 3 flowered; pedicels 6-12 cm long. Involucral bracts 5, small, subulate, fugacious. Calyx copular, truncate. Persistent; teeth subulate, 0.8-1.2 mm long. Corolla 7.5 cm in diam. yellow with crimson centre. Capsules 2.5 cm long ovoid, pointed 4-5 valved pilose. Seeds glabrous.

**Fls & Frts:** Almost throughout year.

**Distribution:** In open forest. Goraknath, VAP 106

**Medicinal uses:** The root & fruit are used in remedy in gonorrhoea & syphilis. Root extract is useful in acidity and stomach problems.

**6. *Drimys indica*, Roxb. Rankanda/Jangalikanda- Liliaceae**

Herb, bulbs 2-3.7×1.2-5 cm., globose ovoid tunicated. Leaves 3.5-30×1.2-4 cm. Flat strap shaped. Flowers few brownish purple in pedunculate racemes. Capsules oblong or ellipsoidal. truncate, 3-quetrous. Seeds flat, winged black.

**Fls. and Frts** - April- May.

**Distribution** – Occasional, Machindranath, VAP-111

**Medicinal uses :** Bulb juice is administered in bronchial complaints.

**7. *Hardwickia binata*, Roxb Anjan- Leguminosae**

A tree 50-60 ft high; branches numerous spreading. Leaves alternate, rachis tipped with a minute deciduous bristle; long, glabrous; stipules small, caduceous. Leaflets 1 pair, like those Bauhinia, sub sessile, obtuse, 3-6 nerved from the base, tinged with red when young, glabrous. Flowers in axillary and terminal panicles; pedicels filiform. long ;

Segments oblong, obtuse, membranous, veined, often dotted. Stamens usually 10; filaments very slender. Stigma peltate. Pods strap shaped, veined, glabrous, narrowed at both ends, thin, flexible, opening at the apex. Seed I, near the tip of pod. Pod turgid long, obvoid filled by the seed, sublignose rigid.

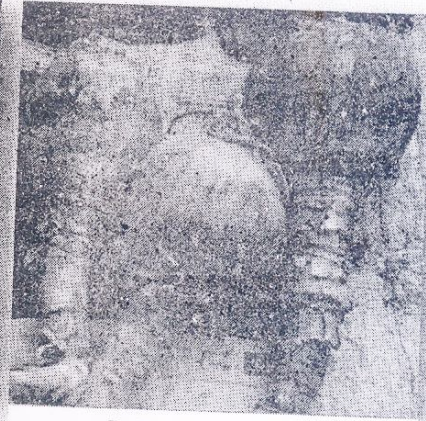
**Fls and Frts** - Oct-Jan.

**Distribution**-Occasional in the forest, VAP- 115. Dolarkheda.

**Medicinal uses:** Leaf paste applied on forehead in headache.  
Leaves are useful in lactation in cattle.



*Aegle marmelos* (Linn) Corr.



*Drimia indica*. Roxb.



*Thespesia lampas* Dalz & Gibs

#### ❖ **Conclusion:**

There is a great diversity in the flora of the Jalgaon district. The plant part used for the preparation of medicine are mostly root, stem, leaf flowers, fruit etc. The medicinal plants

are used as a diuretic and urinary infection, stomachache and dysentery in children in bronchial complaints, gonorrhoea & syphilis, forehead headache, lactation in cattle. These valuable species are under threat except *Hardwickia binata*, Roxb there is a urgent need to conserve the wealth of Jalgaon forest area by implementation of various conservation strategies. This region is rich in flora and fauna.

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