

# SURVEY OF SOME OF THE MEMBERS OF FAMILY “*APOCYNACEAE*” FROM SCP CAMPUS AND SURROUNDING AREA

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**Abstract:** *Apocynaceae* family is popularly called as dogben family as most of the members are used as dog poison from ancient time. Most of the members are cultivated as garden plants as well as medicine source in ayurvedic medicine by hakims and vaidyas. There are about 300 genera and 1400 species found all around world. The survey was made during Acd.Yr .2018-2019 from different areas Scp campus and surrounding area of Parbhani District includes *Allamanda cathartica* Linn. *Adenium obesum*(Frossk)Roem & Schult *Alstoniascholaris*(L), *Cathranthusroseus*(L), *Nerium oleander* Linn., *Plumeria alba* Linn *Tabernemontana divaricacata* Linn.*Thevetia peruviana*(Pers)K Schum *Wrightia tinctoria* (Roxb)R.Br were collected and identified by using various floras and their medicinal importance is confirmed by literature from various books. Plants were collected during survey were deposited in the departmental herbarium as a voucher specimen for ready reference. For each species Common name in Marathi , Botanical name and medicinal importance have been mentioned in the current paper.

**IndexTerms** - *Apocynaceae*, *Alstonia scholaris*, survey , medicinal uses.

## Introduction:

Shri Shivaji College Parbhani is one of the oldest college in Parbhani spreaded in 20 acre land . The greenery in campus is maintained by cultivating various 115 species of plants in college garden and surrounding belonging to 42 different Families(1) of which for the current research papers focus is on *Apocynaceae* Family. *Apocynaceae* family of Angiosperms includes Annual,Perennial Herbs ,Shrubs Linans and Trees distributed in tropical and sub temperate regions of the world. This family includes 300 genera and 1400 species. Plants usually have milky juice, Simple exstipulate leaves, Gamopetalous corolla, Epipetalous sagitate stamens , Ovary superior or half inferior, Connet or distinct 1 to 2 locular,Fruit a capsule or follicle.Seeds with or without coma. The importance of studing local floristic diversity and medicinal uses has been carried out by Naik et.al 1998(2). The main purpose of present survey is to Identify and study Medicinal importance of members of *Apocynaceae*.

## Material And Methods :

The present study is based on the frequent survey of scp campus during acd.yr 2018-19. A total of 09 species belonging to 09 genera were collected and identified with different floras (3,4,5),and the information regarding medicinal uses of plants was collected by interviewing hakims and vaidya using these plants as drug source from this area and confirmed by using books on medicinal plants (6,7,8). The specimens were deposited in Departmental Harberium of Department of Botany Shri Shivaji College Parbhani for ready reference.

The plant studied are as follows :-

### 1) **Allamanda**

Botanical name : *Allamanda cathartica* L.

Large slender shrub with milky latex . Leaves in whorls of 3-4. Flowers showy, in lax , few flowered recemes at the ends of the branches . calyx 1-2 cm long ,deeply parted outer sepal often larger and without glands at base within.corolla campanulate – funnel shaped . Stamens inserted at the mouth of corolla tube,ovary 1 celled .

Medicinal uses: Entire plant is used as a purgative and to induce vomiting in low doses. Leaves and bark of the plant is given in jaundice and malaria.Milky sap is antibacterial used on treating wounds.

### 2) **ADENIUM (Desert Rose)**

Botanical name : *Adenium obesum*(Frosk.)Roem.&Schult

It is an evergreen succulent shrub with pachycaul stem and a stout swollen basal caudex. The leaves are spirally arranged,clustered towards the tips of the shoots. The flowers are shoey , tubular with five oval shaped,salver form lobes , red to pink colour with whitish throat.

**Medicinal uses:** Latex is applied on decaying teeth and septic wounds. Latex is rubbed on head against lice.Bark extract is used to treat skin diseases.The whole plant is used to treat veneral diseases. 3 ) SAPTAPARNI

Botanical name : *Alstonia scholaris*[L.] R.Br

A medium sized evere green tree with white latex , branches whorled. Leaves obovate to oblanceolate ,whorled, 10-20 cm long , narrow at base entire, rounded at apex shining above pale beneath. Flowers in compact umbellately branched, paniced cymes ,bracts leafy, bracteoles minute calyx long pubescent ciliate. Corolla greenish-white pubescent outside, lobes ovate- obtuse , spreading ovaries distinct, follicles slender, terete 20-50cm long,pendulous.

Medicinal uses: the powder of plant is used for relieving the problem of intermittent fever. the infusion of bark is known to relieve malarial fever. The extract from the tree is helpful in relieving acne ,ringworm and eczema. The plant increases lactation in new mothers. The twigs of the trees are used as tooth brush as they have bactericidal properties. The Plant is helpful in chronic dysentery and diarrhoea.

**4) SADAPHULI**

Botanical Name : *Cathranthus roseus*(L.)G.Don.

Glabrous, bushy, perennial herbs, 30-90cm tall branches terete, spreading leaves. Entire 3-7cm long, glaucous, ovate or oblong. Flowers solitary or in pairs, axillary on short pedicels. Corolla rose pink with dark red centre. Follicles linear, 2-3 cm long.

Medicinal uses: The extract of plant is a remedy for diabetes. Root decoction is used as antibacterial agent used for washing wounds. Leaves infusion is given in treating piles. Alkaloid extracted from the plant possesses anticancerous properties mainly vincristine and vinblastine are effective on leucemia. They also cause relaxation of pain muscles and depression of central nervous system.

**5) KANER**

Botanical Name : *Nerium indicum* Mill.Gard.

A large erect evergreen shrub, branches many whorled, angular. Leaves whorled 10-15 cm long, linear-lanceolate, entire shining above, pale beneath. Flowers 4-5 pink in terminal polychasial cymes. Corolla with fimbriate scales near the mouth. Follicles 10-20 long.

**Medicinal Uses:** All the plant parts are poisonous. Leaf decoction has been applied externally on scabies and worms and to reduce swellings. The oil extracted from bark is used in treatment of leprosy.

**6) CHAFA**

Botanical name : *Plumaria alba* L.

Small trees with ample milky latex; branches often angular. Leaves alternate oblanceolate, 20-30cm long. Flowers fragrant in terminal peduncled corymbs. Calyx small, deeply divided, sepals, suborbicular. Corolla with narrow short tube; lobes oblanceolate, long. Anthers free, inserted near base of corolla tube, ovaries distinct.

**Medicinal Uses :** root bark is used in treatment of herpes and syphilis. The root bark is externally applied on ulcers. The latex from stem is used for treating ulcers, skin diseases and scabies.

**7) TAGAR**

Botanical name : *Tabernaemontana divaricata* (L.)R.Br. in Roem.& Schult.

Large, glabrous shrub, branches terete, spreading. Leaves opposite long, shining. Flowers in bunching, terminal cymes, calyx lobed to about the middle. Corolla white, tube about 2-3 cm long. Carpels two, stigma distinct.

**Medicinal uses :** The root is chewed to relieve toothache. Latex possesses anti-inflammatory properties applied to reduce inflammation of wound.

**8) PIWLI KANER**

Botanical name: *Thevetia peruviana*(pers.)K.Schum.

Evergreen trees 3-6m tall branches terete. Leaves linear 8-12cm long, narrow at both the ends, shining green above pale beneath. Flowers 5-6cm long in subterminal cymes. Calyx long, deeply divided. Corolla yellow long narrow part of the tube greenish yellow lobes obliquely obovate with scales near the throat. Fruit broadly obovate in longitudinal section, 3-4 cm long, mesocarp hard.

Medicinal uses : Leaf decoction is effective to cure intermittent fever. The dried bark is used to treat skin infection.

**9) KALA KUDA**

Botanical name : *Wrightia tinctoria* R.Br.

Small deciduous tree 5-8 tall. Leaves elliptic, oblong, 5-20 cm long. Tomentose on both surfaces. Flowers fragrant, in lax terminal cymes. Calyx pubescent outside, glandular within. Corolla white, long. Corona of numerous scales. Anthers connate around and adhering to the stigma, exerted. Ovaries distinct. Follicles linear, long, cylindrical.

Medicinal uses : crushed leaves mixed with coconut oil applied to cure psoriasis. Decoction of bark and leaves used to cure fever, diarrhoea, abdominal pain, kidney stone. The leaves, seeds and bark are used for skin glowing, dandruff, acne, diabetes, wounds.

**RESULT AND DISCUSSION:**

In the present survey of the members of Apocynaceae from SCP Campus and Surrounding area a total of 10 species belonging to 10 genera were recorded. For each species local name in Marathi, botanical name, the detailed morphological description and traditional medicinal uses have been provided based on the information gathered during the survey.

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