

ABSTRACT OF PLUMERIA IS USED AS MEDICINES FOR DIEURETIC, ANTITUMOR AND ANTIPSYCHOTIC IN SANTHAL PARGANA, JHARKHAND, INDIA

KUMAR SOURAV

Professor & Head, Department of Chemistry, St. Xavier's College, Maharo, Dumka, Jharkhand, India

S.K.M University, Dumka, Jharkhand, India

ABSTRACT

Chemical investigation of the stem bark of *Plumeria dichotoma* afforded α -amyrin, lupeol acetate, plumericin, isoplumericin, allmandin, plumeridich acid (13-dehydroxy-15-O-demethyl allamandicin), plumerone (13-dehydroxy-15-deoxy allamandicin) and plumieride. Characterization of all these compounds was done on the basis of spectral studies.

KEYWORDS: A Number of Active Principles are Reported from Genus *Plumeria*. Various Terpenes, Iridoids, Steroids, Flavonoids etc. were Isolated and Characterized. The Genus is Reported to Exhibit Antifungal, Antiflammatory, Antileukemic, Antimicrobial, Anti-HIV, Anticancer, Algicidal, Antidermatophytic, Antifertility Activities in Male Rats and Cytotoxic Activity against Madison Lung Carcinoma. Terpenes are Found to Possess Important Antitumor Properties

INTRODUCTION

Plumeria dichotoma, belongs to family Apocynaceae and commonly known as "Naag Champa" in Santhal Pargana, India. *Plumeria* is grown as an ornamental plant in India, Indonesia, Philippines and South Africa. Various species of this plant are used as medicine for the cure of many diseases such as antipsychotic, diuretic and antitumor agent. Some species of this plant are used for the cure of rheumatism, diarrhea and venereal disease.

Plumeria is generally a small tree growing to about 30-40 ft. high, broad, usually have round-headed canopy. The leaves may be blunt-tipped (*P. bicolor* and *P. obtuse*) or pointed (*P. rubra* and *P. dichotoma*) and ranges from 2 to 4 inches wide and 8 to 12 inches long. The flowers are tubular, expanding into a "pinwheel" of five petals that averages 2-3 inches in diameter and may be white, red, yellow, pink or multiple colours.

Plumeria dichotoma is an ornamental plant in India, specially in Santhal Pargana. The persons of this area called it as "Naag Champa". In this area it is a wild species.

The author experimented and observed on different abstracts of this plant and conducted that it is an important medicines for dieuretic, antitumor and antipshycotic.

Following chemicals are recognized from the abstract of *plumeria* which acts as follows:-

- From leaves of *plumeria acuminata* different compounds of lupeol which is used by the persons as antifertility substances.
- From stem bark and root bark the author extracted plumeric acid, β -sitosterol, plumericin and fulvoplumerine, which is used by the persons as antitumor agent.
- From the root bark and gum of *plumeria alba* following chemicals are extracted. These are:- plumeride, α -amyrin, and prolin which is used as antiphshyphilitic.

- The other species *plumeria lancifolia* bears Glycosyl, plumeride, uline, and demethoxyaspidospermine, which is also useful as antipsyphilitic and purgative.
- The leaves, stem bark and root bark of *plumeria obtuse* bears many compounds but the common are: – ursolic acid, obtusin, obtusilic acid. Plumeride which are used as antibiotic and purgative.
- The shoot of *plumeria rubra* bears different compounds such as allamcin, allamandin, isoplumericin etc. which are used as antifertility, rheumatism, diarrhea and venereal disease.

CONCLUSIONS

The author observes those upper written chemicals are useful to the drug industry which can be collected and extracted, by the collection of these plants from this area. i.e. Santhal Pargana.

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