



A Pharmacognostic Review on Ethno-medicinal Plants in Maharashtra Used as Analgesic and Anti-inflammatory Agents

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Abstract

Aim: To accumulate the ethno medicinal flora used in Maharashtra as analgesic and anti-inflammatory agents. **Data sources:** A systematic review was done by using various data sources like Elsevier, Science direct, Pub Med, Google, Medicinal Aromatic Plant Abstract, Books and reputed journals **Study Selection:** Since human civilization, humans had been depending on nature for his or her each day needs, and mainly on flora as a supply of medicine. This reliance result in the improvement of an exceptional machine of understanding recognized as ethnobotany, which includes the connection among flora and their use for diverse sicknesses and disorders by the experimental and mistake method. **Results:** The cutting-edge assessment examine is a try to accumulate the ethno medicinal flora used in Maharashtra as analgesic and anti-inflammatory agents. Plants from families like *Acanthaceae*, *Asteraceae*, *Caesalpinaceae*, *Cucurbitaceae*, *Euphorbiaceae*, *Fabaceae*, *Lamiaceae*, *Liliaceae*, *Malvaceae*, and *Poaceae* had been maximum often applied in Maharashtra. **Conclusion:** This evaluation will assist the latest and destiny researchers in extra studies paintings on those precious natural plant lives.

Key Words: Ethno-botany, Ethno-medicine, Maharashtra, Traditional Medicinal Plants

Introduction

The inflammatory method can be described as a chain of activities that arise in reaction to noxious stimuli, contamination or trauma².

The symptoms and symptoms of irritation are nearby redness, swelling, pain, warmth and lack of function. The activities of irritation that underline those manifestations are brought on and controlled via way of means

of a big wide variety of chemical mediators, inclusive of kinins, eicosanoids, supplement proteins, histamine and monokines³NSAIDs are the maximum typically used tablets worldwide. They are prescribed for orthopedic conditions which include osteoarthritis, gentle tissue accidents and fracture etc. NSAIDs are one in every of the

best training of drug to save you and deal with postoperative pain ⁴. The use of NSAIDs is related to many aspect outcomes; however, their undesirable outcomes on the gastrointestinal tract, kidney and cardiovascular gadget are taken into consideration as fundamental issues with the use of those tablets ⁵. The best downside in

currently to be had amazing artificial tablets in their toxicity and reappearance of signs after discontinuation. Therefore, the screening and improvement of drug for his or her anti-inflammatory hobby is the want of hour and there are many efforts for locating anti-inflammatory tablets from indigenous medicinal plants ⁶.

Table No. 1:Table of brief review of plants with their Pharmacognostic view and references

Sr. No.	Local Name	Biological source	Family	Part used	Chemical Constituents	Category	Ref. No
1.	Gunj	<i>Abrus precatorious</i> L	Fabaceae	Leaves	abrasine, abrol, precol	Anti-inflammatory	7
2.	Khair	<i>Acacia chundra</i> Willd	Mimosaceae	Stem, Leaves	catechin, epecatechin, epigallocatechin, epicatechin gallate, phloroglucin	Anti-inflammatory	8
3.	Bel	<i>Aegle marmelos</i> (Linn) Correa	Rutaceae	Fruit, Root, Leaves	coumarin, xanthotoxol, imperatorin, aegeline, and marmeline	Anti-migraine	9
4.	Maharaki, Maharukh	<i>Ailanthus excelsa</i> Roxb	Simaroubaceae	Bark, Leaves, Fruit	β -sitosterol, Quassinoids and Ailantic acid	Anti-migraine	10
5.	Kanda	<i>Allium cepa</i> L.	Liliaceae	Bulb, Leaves	allicin, quercetin, fisetin	Analgesic	11
6.	Lahsun	<i>Allium sataivum</i> L	Liliaceae	Bulb	alliin, allicin, ajoenes, vinylidithiins	Analgesic, Anti-inflammatory	12

7.	Korphad	<i>Aloe vera</i> (Linn.) Burm	Liliaceae	Leaves	Anthraquinone s, including aloe emodin, aloetic acid, aloin, anthracene, anthranon, barbaloin	Anti- inflammatory	13
8.	Korda-ganja	<i>Alternanthera tenella</i> Coll	Amaranthaceae	Inflorescence	Benzopyran, ionone, anthraquinone, hydroxycinnamic acids	Analgesic	14
9.	Kadechirayat Kalmegh, Bhuineem	<i>Andrographis paniculata</i> Wall	Acanthaceae	Whole plant, Leaf	diterpenoid lactones, paniculides, farnesols, and flavonoids	Anti- inflammatory	15
10.	Talimkhana	<i>Asteracantha longifolia</i> (L)	Acanthaceae	Leaves, Seeds	lupeol, stigmasterol, butelin	Analgesic	16
11.	Neem, Kadulimb	<i>Azadirachta indica</i> A. Juss	Meliaceae	Whole Plant	Oleic acid, hexadecanoic acid octadecanoic acid 4-octylphenol and 4-methoxy medecanal	Anti- inflammatory	17
12.	Bamboo	<i>Bambusa arundinacea</i> (Retz) Wild	Poaceae	Stem, Seed	silica, Cholin, betain, cynogenetic glycosides, albuminoids	Anti- inflammatory	18
13.	-	<i>Basella rubra</i> L	Chenopodiaceae	Whole plant	Rutin, Quercetin, Scopoletin, Coumarin, β - xanthin and β - cyanin pigments and Caffeic, Homo- protocatechuic- , Chlorogenic-	Anti-migraine	19

					trans-and cis-p-coumaric-, p-hydroxy-benzoic-, phloretic-, trans-and cis-sinapic-, cinnamic-acids		
14.	Apataa	<i>Bauhinia racemose</i> L	Caesalpinaceae	Leaves, Flowers, Bark, Root	methyl gallate, gallic acid, kaempferol, quercetin, quercetin 3-O- α -rhamnoside, kaempferol 3-O- β -glucoside, myricetin 3-O- β -glucoside and quercetin 3-O-rutinoside.	Anti-inflammatory	20
15.	Daru Haridra	<i>Berberis aristata</i> (L.) DC	Berberidaceae	Root bark	Berberine, oxyberberine, berbamine, aromoline, a protoberberine alkaloid karachine, palmatine, oxycanthine and taxilamine and tannins, sugar, starch	Anti-inflammatory	21
16.	Sabarkand & Mohari	<i>Brassica juncea</i> L.	Brassicaceae	Seed oil	Allyl isothiocyanate, diallyl trisulfide, 3-butenyl isothiocyanate	Analgesic	22
17.	Rui /Madar	<i>Calatropic sprocera</i> R.Br.	Asclepiadaceae	Root bark, Leaves, Whole	cardenolides, steroids, tannins, glycosides,	Anti-migraine	

				plant, Seed	phenols, terpenoids, sugars, flavonoids, alkaloids and saponins		23
18.	Yelyaharan, Velitlaram	<i>Capparis decidua</i> (Forssk.) Edgew.	Capparidaceae	Bark	capparisinine, capparisine, stachydrine, isocodonocarpi ne	Anti-migraine	24
19.	Mirchi	<i>Capsicum annuum</i> L.	Solanaceae	Leaves	capsanthin, capsorubin, beta-carotene, cryptoxanthin, lutein, phytofluene, and xanthophyll	Anti-migraine	25
20.	Chambhar- awali, Chamrawali	<i>Cassia auriculata</i> L	Caesalpiaceae	Leaf, Fruit, Flowers	3-O- Methyl- dglucose, α - Tocopherol- β - D- mannoside, Res orcinol, n- Hexadecanoic acid, 1, 2, 3, 4- Tetrahydroisoq uinolin-6-ol-1- carboxylic acid	Anti- inflammatory	26
21.	Bahava, Amaltas	<i>Cassia fistula</i> L.	Caesalpiaceae	Fruit, Leaf, Seeds	Oxalic Acids, Tannins, Oxyanthra- quinones, Anthraquinone s, Rhein Glycosides Fistulic Acids, Sennosides A B, Anthraquinone s, and Flavanoid-3-ol- derivatives	Anti- inflammatory	27

22.	Tarota	<i>Cassia obtusifolia</i> L.	Caesalpiniaceae	Leaves	anthraquinones, xanthenes, polyketide, steroids, triterpenoids, and fatty esters	Anti-migraine	28
23.	Bailmal, Galgala	<i>Cayratia trifolia</i> (L) Domin	Vitaceae	Root	kaempferol, myricetin, quercetin, triterpenes and epifriedelanol.	Analgesic	29
24.	Paralatumbadi	<i>Ceropegia tuberosa</i> Rorb.	Asclepiadaceae	Tuber	alkaloids, tannins, sterols, glycosides, saponins, proteins, lipids	Anti-inflammatory	30
25.	Gokarna	<i>Clitoria ternatea</i> L.	Papilionaceae	Leaves	tannins, phlobatannin, carbohydrates, saponins, triterpenoids, phenols, flavanoids, flavonol glycosides, proteins, alkaloids, anthraquinone, anthocyanins, cardiac glycosides, Stigmast-4-ene-3,6-dione, volatile oils and steroids	Anti-inflammatory	31
26.	Kena, Mothideni	<i>Commelina benghalensis</i> L.	Commelinaceae	Whole plant, Root	phlobatannins, carbohydrates, tannins, glycosides, volatile oils, resins, balsams, flavonoids and saponins	Anti-inflammatory	32
27.	Lavhala/ Nagarmotha	<i>Cyperus rotundus</i> L.	Cyperaceae	Rhizome, Root	patchoulone, isopatchoulone	Anti-inflammatory	33

					ne, sugeonyl acetate, sugetriol triacetate and sugebiol, kaempferol, luteolin and quercetin		
28.	Datura	<i>Datura metal L.</i>	Solanaceae	Leaves	pterodontriol B, disciferitriol, scopolamine, adenosine, thymidine, nilekudin oside C and dioscoroside D	Anti-inflammatory	34
29.	Sansada	<i>Delonixel ata (L) Gamble</i>	Caesalpinaceae	Leaves	saponin, alkaloid, terpenoids, flavonoids, steroids, phenols, cardio glycosides, quinine coumarins and Tannins	Analgesic	35
30.	Bambu, Vahana	<i>Dendrocal amus strictus Nees</i>	Poaceae	Young shoots, Culms		Analgesic	36
31.	Medshingi, Medh-shingi, Medsinhi menhigi	<i>Dolichand rone falcata (Wall. Ex DC.) Seem</i>	Bignoniaceae	Leaf, Fruit		Analgesic	37

Conclusion

Plants are one of the maximum vital reassets of medicines. So, a ways ago, medicinal plant life were used to deal with unique illnesses because of their accessibility, availability, inherited practice, monetary feasibility, and perceived efficacy. Large group of natural

plant life are used as conventional medicine that have capacity to cure diverse illnesses. This evaluation will assist the latest and destiny researchers in extra studies paintings on those precious natural plant lives.

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