

An Ethnobotanical, Assessment, Inventory Survey and Traditional Practices of Folkloric Populaces in and around Parvathamalai Hills, Thiruvannamalai District, Tamil Nadu, India

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ABSTRACT This paper explores and documents the ethnobotanical knowledge of medicinal plants, emphasising its pivotal role in public healthcare and pharmaceutical development. This study was conducted in the Parvathamalai hills of the Eastern Ghats in Tamil Nadu and focuses on the relationship between plants and traditional ethnic communities in the field of ethnobotany. The experimental design included interviews with around 200 individuals to gather evidence of current ethnobotanical knowledge, recording local names, botanical names, family classifications and ethnomedicinal uses for each plant. The study identified traditional uses for 125 plant species across 65 families, providing a rich resource for traditional medical practitioners and researchers. The collected data aids in formulating plans for future conservation efforts. The paper recommends further pharmacological studies on the identified plant species to assess their efficacy, safety and potential standardisation in medicinal activity, contributing valuable insights for public healthcare strategies, pharmaceutical development and conservation initiatives in the specified region.

INTRODUCTION

Traditional medicine is defined as ethnic medicine utilised to preserve well-being and prevent, analyse, and treat physical and mental ailments, contrasting with allopathic treatment based on principles, doctrines, and practices (Cordero Cecilia et al. 2023; Jenipher and Ayyanar 2024). The documentation of ethnic knowledge through ethnobotanical studies is crucial for the conservation and application of natural resources. Recording local names, systematic classifications, and cultural uses of plants not only preserves indigenous information but also aids imminent research on the safety and efficacy of remedial flora in managing various infirmities (Linthiya et al. 2023).

Within this framework, the documentation of local names, systematic classifications, and cultural uses of plants serves a dual purpose. Firstly, it safeguards indigenous information, ensuring the continuity of traditional practices. Secondly, it provides a valuable foundation for fu-

ture research, particularly concerning the safety and efficacy of medicinal plants in managing various health conditions.

The Parvathamalai Hills, situated in the Eastern Ghats of Tamil Nadu, offer distinctive ecological and cultural characteristics shaping the traditional medicinal knowledge held by its indigenous communities (Silambarasan et al. 2023). By collating and documenting this information, the study not only contributes to the preservation of traditional wisdom but also lays the groundwork for future research endeavours.

Objective

The primary objective of the present research is to shed light on the utilisation of traditional herbal remedies in the distinctive ecosystem of the Parvathamalai Hills. This endeavour aims to document and archive the wealth of traditional healing plant knowledge held by the local inhabitants of Parvathamalai Hills. Through a systematic exploration of the ethnobotanical landscape, this study seeks to contribute to the broader understanding of traditional healing practices in the region.

In essence, this research endeavours to bridge the gap between traditional and modern medicinal approaches by capturing the rich tapestry of eth-

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nobotanical knowledge in the Parvathamalai Hills. It not only provides insights into the utilisation of conventional herbal remedies but also serves as a foundation for future studies exploring the safety, efficacy, and potential standardisation of these remedies. By acknowledging and documenting the wealth of traditional knowledge, this study becomes a stepping stone in fostering a holistic approach to healthcare that integrates the wisdom of traditional practices with contemporary medical advancements.

MATERIAL AND METHODS

Description of Study Area

Parvathamalai is a part of the Javadhu Hills of the Eastern Ghats and spans around 5500 acres. The sheer perpendicular rock cliff is 1219 m (4000 feet) tall from sea level and lies between 12°26'11"N latitude and 78°58'19"E longitude. Parvathamalai is also known by many other names like Thenkailayam, Kanthamalai, Mallikarjunamalai, Tri-sulagiri, Naviramalai, Parvathagiri and Sanjeevigiri.

Period of Study

From July 2022 to December 2022, frequent field surveys were conducted to collect all medicinal floras in the Parvathamalai Range, Tiruvannamalai forest division, Western Ghats.

Ethnobotanical Data Collection

The accomplices entailed 205 (64 men and 72 women, ages 35-83), chosen based on their knowledge of healing therapy. The personal examination was used throughout the interview to gather information about the regional names and potential therapeutic uses of the flora. The participants were questioned about plant remedies in their mother tongue Tamil, which was translated into English.

Climatology

The District Forest Office in Tiruvannamalai Circle provided the climatic information for the research areas, including temperature, precipitation, drizzling days, gale speed, pressure, relative dampness, haze cover, sun hours and sunshiny days.

Taxonomic Identification and Herbarium Preparation

The plant species were gathered, preserved, and identified during the survey; the processed specimens and images were stored in the herbarium of the Pharmacognosy department at Crescent School of Pharmacy for impending use.

Ethnobotanical Indices

Use Value (UV)

The significance of a medicinal plant was examined by Use Value (UV) with the following formula: $UV = U_i / N_i$. Where, U_i is the number of use reports cited by each informant for a given plant species I , and N_i is the total number of informants interviewed for a given plant species I . A plant's usage value is high when there are numerous reports on its use, and low when there are just a few such reports.

Citation Frequency (CF)

Citation Frequency was calculated as follows: $CF = (\text{Number of citations of a particular species mentioned} / \text{Total number of citations of all species mentioned}) \times 100$. The CF is high when a species is mentioned as a medicine by a large number of informants, and low when fewer of them reproduce.

Relative Importance (RI)

The formula used to compute Relative Importance (RI) is as follows: $(RCF + RNU) / 2$. Where RCF stands for relative citation frequency, it is calculated by dividing the total number of citations for all species by the number of citations for one species ($RCF = CF / \text{max CF}$). RNU, or the relative number of use categories, is calculated by dividing a specie's uses by the total number of benefits that may be obtained from all of the species combined ($RNU = NU / \text{max NU}$). Theoretically, the RI index ranges from 0, where no plant application was acknowledged, to 1, where the plant's use as medicine was most commonly stated.

Cultural Values

The usage category was included into this index and computed using the formula shown be-

low. CVs are calculated as follows: $CVs = UCs + ICs / IUCs$, where UCs is the product of the number of used reports by the total number of use categories for each species. IUCs is the number of informants who report using each species divided by the total number of informants, whereas 'ICs' is the number of informants who mention each plant as effective.

Fidelity Level (FI %)

The fidelity level (FI%) can be used to identify the most preferred species used in the treatment of a specific ailment because many plant species may be used in the same category. The formula for fidelity level is $(FI) = Ip / Iu \times 100\%$, where Ip represents the proportion of informants who recommended using a species for a certain serious illness and Iu represents the total number of informants who cited the species for any usage.

RESULTS AND DISCUSSION

Ethnobotany plays a crucial role in enhancing local awareness regarding the value of medicinal plants, emphasising the necessity for their conservation. It serves as a vital tool in bringing forth the benefits of medicinal plants to support local healthcare systems and livelihoods, fostering community well-being and sustainable practices (Yoganandam et al. 2023; Shrinitha and Aruna 2023). In the ethnobotanical study of Parvathamalai Hills, it was observed that local inhabitants of the area use many plants as ethnomedicinal herbs and as food medicines (Silambarasan et al. 2023). The data collected provides insights into the diverse array of plant species present in the region, with particular emphasis on their traditional uses and medicinal properties.

The medicinal plants identified through the survey were arranged in alphabetical order based on its botanical names along with family name, vernacular name in Tamil, habitat, parts used, ethnobotanical value, active principle, use value, citation frequency, relative importance, cultural values and fidelity level (Table 1).

About 125 plant species are recorded, which belong to 65 families with Fabaceae 7.2 percent, Apocynaceae 6.4 percent, Euphorbiaceae 6.4 percent, Lamiaceae 4.8 percent and Malvaceae 4 percent. Among the surveyed families used to treat

various diseases, the most frequent plant parts were recorded and their traditional ethnobotanical knowledge and medicinal properties were documented, as quoted by informants. Some of the recorded uses are common and already documented in scientific literature and others are original. Exotic species and other supposed healthy plants were not considered, and only native plants of the area are documented in this report. The most interesting uses and aspects of collected data are discussed. In addition to human applications, numerous plant species were employed in animal husbandry as the primary healthcare source.

CONCLUSION

This ethnobotanical study identifies and utilises 125 plant species for diverse medicinal purposes in Parvathamalai Hills. The findings safeguard local medicinal plant practices, highlighting unique species with potential for future research and novel drug development.

RECOMMENDATIONS

The study suggests pharmacological studies on identified plants, education programs for local awareness, collaboration with traditional practitioners, and conservation plans to ensure sustainability. A comprehensive database is essential for future research and conservation efforts in medicinal plant usage.

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HIGHLIGHTS

- ◆ The ethnobotanical survey of the Parvathamalai Hills allowed the researchers to document the persistence of a variety of traditional medical practices, the majority of which are distinctive and novel and may be useful as the foundation for future research projects.
- ◆ A total of 125 plant species from 115 genera in 65 families have been reported for the treatment of various health conditions. Legumes predominated, accounting for 7.2 percent of the documented plant species.

Table 1: list of surveyed medicinal plants

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
1	<i>Abelmoschus moschatus</i> Medik <i>Abrus precatorius</i> Linn	Malvaceae	Mushkdana	Herb	Seed	Aphrodisiac, antispasmodic acid	Farnesol, ambrettollic	0.62	2.1	0.01	19	65	Pawar et al. 2017
2	<i>Abrus precatorius</i> Linn	Fabaceae	Kundumani	Climber	All parts	Expectorant, laxative,	Abrine, Trigonelline	0.93	4.8	0.06	39	69	Qian et al. 2022
3	<i>Abutilon indicum</i> Linn	Malvaceae	Thuthi	Shrub	Leaves	aphrodisiac demulcent, diuretic, laxative	Abutilon a, luteolin, alantolatonone	1.1	4.2	0.04	26	73	Bondhare et al. 2022
4	<i>Acacia nilotica</i> Linn	Mimosaceae	Karuvelai	Tree	Leaves	Aphrodisiac, anti-inflam-matory, expectorant	Kaempferol, quercetin, catechin,	0.41	1.9	0.01	12	80	Manzo et al. 2019
5	<i>Acalypha indica</i> Linn	Euphorbiaceae	Kuppamani	Herb	Leaves	Anti-ulcer, wound healing, anti-asthma	Acalyphamide, 1.2	5.3	0.08	21	69	Chekuri et al. 2020	
6	<i>Acalypha paniculata</i> Linn	Euphorbiaceae	Kuppamani	Herb	Leaves	Anthelmintic, anti-arthritis, anti-ulcer	Acalyphamide, 0.2	3.3	0.04	11	56	Bhavadharamiparkavi and Abirami 2022	
7	<i>Achyranthes aspera</i> Linn	Amaranthaceae	Nayuruvi	Herb	Whole parts	Anti-hypertensive, antidiabetic, antiarthritis	Achyranthine and betaine alkaloids, eupatorin, β-sitosterol and spinasterol	0.9	4.6	0.05	16	72	Raju et al. 2022
8	<i>Acorus calamus</i> Linn	Acoraceae	Vashambu	Herb	Root	Anti-arthritis, anti-ulcer, anti-cancer	Asarone, acoradin, galangin	1.0	5.1	0.06	19.3	82	Dukkupati 2023
9	<i>Aerva lanata</i> Linn	Amaranthaceae	Koolappoo	Shrub	Flower	Anti-diuretic, antiasthma, anthelmintic	Ervine, methylervine, ervoside, ervolanine and aervolanine	0.3	3.5	0.01	11.6	54	Goyal et al. 2020
10	<i>Ageratum conyzoides</i> Linn	Asteraceae	Appakodi	Shrub	Leaves	Anti-arthritic, anti-ulcer, anthelmintic, wound healing	Precoce, β-caryo-phyllene	0.2	2.3	0.01	9.1	68	Sivakrishnan and Kavitha 2017

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
11	<i>Alpinia galanga</i> Linn	Zingiberaceae	Perarathai	Shrub	Rhizome	Anti-pyreitic, anti-arthritic, wound healing, anti-cancer	Galangin, bergamotene	0.3	3.2	0.02	11.3	59	Patwekar et al. 2022
12	<i>Alostonia scholaris</i> R.Br	Apocynaceae	Yezhilapaalai	Tree	Leaves	Anti-pyreitic, aphrodisiac, anti-diabetic	Scholaricine, vallesamine, picrinine	0.1	2.4	0.01	9.6	64	Chaudhary 2022
13	<i>Alternanthera sessilis</i> Linn	Amaranthaceae	Ponnanganni	Shrub	Leaves	Wound healing, anti-diarrhea, diuretic, anti-ulcer	Phaeophytin a, pheophytin, oleanoic acid, beta-sitosterol	0.2	1.6	0.01	8.2	59	Hwong et al. 2022
14	<i>Andrographis paniculata</i> Burm	Acanthaceae	Nilavembu	Herb	Leaves	Jaundice, antipyretic, anti-diarrhea, anti-inflam-matory	Androgra-pholide, stigmasterol	0.9	5.4	0.08	19.5	71	Intharuksa et al. 2022
15	<i>Anisomales malabarica</i> Linn	Lamiaceae	Perumthumbai	Herb	Leaves	Anti-spasmodic, anti-hyper-tensive,	Anisomelic acid, anisomelolide, 2-Acetoxy-malabaric acid, betulinic acid,	0.3	2.4	0.02	15.7	62	Annappoorani 2019
16	<i>Argemone mexicana</i> Linn	Papaveraceae	Brammathandu	Herb	Leaves	Jaundice, anti-inflammatory, allocry-anti-arthritis, antihelmintic	Berberine, protopine,	0.6	1.9	0.08	19.1	87	Alam and Khan 2020
17	<i>Aristolochia bracteolata</i> Lam	Aristolochiaceae	Aaduthendapaalai	Herb	Leaves	Anti-arthritis, antihelmintic	Aristolochic acids,	0.2	2.1	0.03	18.1	71	Mathew et al. 2020
18	<i>Asparagus racemosus</i> Wild	Asparagaceae	Thanneer-vittan	Herb	Root	wound healing, antihelmintic	Shatavarin, LIV	1.1	4.3	0.08	21.6	91	Dahiya et al. 2022
19	<i>Azadirachta indica</i> Linn	Meliaceae	Veppai	Tree	Leaves	anti-spasmo-dine, antidote	Nimbin, nimbidin, anti-ulcer, anti-inflam-matory, limonoids	1.4	6.1	0.09	23.8	99	Asghar et al. 2022

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
20	<i>Barleria prionitis</i> Linn	Acanthaceae	Manjakana-kambaram	Shrub	Leaves	Antidote, antipyretic, anti-asthmatic, anti-diabetic	Barlerinonide, shanzhiside, phenylethanoid glycosides, lignans, flavonoids	1.1	5.2	0.06	19.6	71	Namdeo 2021
21	<i>Bauhinia variegata</i> Linn	Fabaceae	Mantharai	Tree	Aerial parts	Analgesic, anti-ulcer, anti-diabetic, anti-diarrhea	Flavones, flavonol, glycoside, triterpene, phenanthraquinone	0.9	5.4	0.07	21.2	86	Thakur et al. 2022
22	<i>Bixa orellana</i> Linn	Bixaceae	Varugamanjal	Tree	Leaves	Aphrodisiac, anti-pyretic, anti-diabetic, anti-diarrhea	Bixin, bixol, crocetin, isobixin, beta-carotene, cryptoxanthin	0.7	3.1	0.09	19.6	79	Hirko and Getu 2022
23	<i>Brassica napus</i> Linn	Brassicaceae	Vellaikadugu	Shrub	Seeds	Anti-arthritis, anti-inflammatory, diuretic, demlcent	Polyphenols, phenolic flavonoids, carotenoids, zeaxanthin, lutein, β -carotene, Flavonoids,	0.1	1.2	0.01	12.3	61	Ayadi et al. 2022
24	<i>Bryophyllum pinnatum</i> Lam	Crassulaceae	Ranakalli	Herb	Leaves	Woundhealing, astringent, anti-asthma, anti-diarrhea	Flavonoids, phenolics, alkaloids, glycosides, tannins	0.8	2.4	0.03	9.1	59	Selvakumar 2022
25	<i>Caesalpinia pulcherrima</i> Linn	Caesalpinaceae	Mayilkondrai	Tree	Aerial parts	Anti-cancer, antipyretic, anti-inflammatory, anti-ulcer, anticancer	Caryophyllene oxide, Epi- α -muurobol, A cadinol, A copatene	1.2	1.9	0.02	8.4	67	Pournaghi et al. 2020

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
26	<i>Calendula officinalis</i> Linn	Asteraceae	Paanaichamandhi	Shrub	Aerial parts	Anti-cancer, anti-ulcer, anti-inflammatory, antipyretic	Cadinol, copaene, cadinenes, lupeol	1.2	2.6	0.09	11.2	91	Patil et al. 2022
27	<i>Calotropis procera</i> Linn	Apocynaceae	Vellai erukkan	Shrub	Leaves	Anti-asthma, anti-arthritis, antidote, analgesic	Cardenolides, anthocyanins, β -amyrin, β -myrrin, lupeol, β -sitosterol,	0.9	2.1	0.08	12.1	87	Wadhvani et al. 2019
28	<i>Canthium dicoccum</i> Gaertn	Rubiaceae	Karai alambamaram	Tree	Leaves	Anti-cancer, astringent, hepatoprotective, anti-asthma	Canthiacid, Sitosterol, quinoic acid, acetylquinoic acid and scopoletin	0.1	0.9	0.01	4.2	66	Kirammai and Rani 2018
29	<i>Capparis zeylanica</i> Linn	Capparidaceae	Aathondai	Shrub	Leaves	Wound healing, antelmintic, anti-inflammatory, antidote	E-octadec-7-en-5-ynoic acid, p-hydroxybenzoic, syringic, vanillic, ferulic acid	0.2	1.4	0.07	9.5	71	Amit et al. 2010
30	<i>Cardiospermum halicacabum</i> Linn	Sapindaceae	Mudakathan	Shrub	Leaves	Antidote, diuretic, anti-arthritis, anti-diarrhea	Pentadecanoic acid, apigenin, protocatechuic acid, hentrinacanthanol, calycosin	1.1	2.3	2.4	18.7	91	Vedhachalam et al. 2022
31	<i>Carissa congesta</i> Linn	Apocynaceae	Kalakaai	Shrub	Fruits	Anti-malarial, anti-pyretic, anti-diabetic, anti-diarrhea	Ursolic acid, Cholest-5-en-3 β -ol, B-sitosterol, lupeol, oleanolic acid	0.9	1.9	2.1	14.8	79	Bhosale et al. 2020
32	<i>Catharanthus roseus</i> Linn	Apocynaceae	Nithyakalyani	Shrub	Leaves	Anti-cancer, anti-diabetic, wound healing, anti-spasmodic	Vincristine	1.4	5.9	0.09	23.9	97	Patil and Dusane 2022

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
33	<i>Centella asiatica</i> Linn	Apiaceae	Vallarai	Herb	Leaves	Aphrodisiac, astringent, anti-ulcer, wound healing	Asiaticosides, madecassoside, madecassic acid	1.1	5.6	0.09	21.8	98	Samuel et al. 2022
34	<i>Chlorophytum borivillanum</i> Linn	Asparagaceae	Vellai Musli	Herb	Roots	Aphrodisiac, anti-inflam-matory, anti-arthritis, acids and flavonoids	Alkaloids, saponins, phenolic flavonoids	0.8	5.4	0.07	21.6	92	Rzhepakovsky et al. 2022
35	<i>Chrysopogon zizanioides</i> Linn	Poaceae	Vetiver	Shrub	Roots	Anthelmintic, anti-diabetic, wound healing, anti-ulcer	Khusimol, khusimone, khosifone, vetiverol, vetivone	1.3	5.6	0.08	23.6	95	Grover et al. 2021
36	<i>Cissampelos pareira</i> Linn	Menispermaceae	Ponmusutai	Shrub	Leaves	Anti-diarrhea, antiarthritis, anti-inflam-matory, antipyretic	Hayatine, cissampareine, L-curine, D-iso-chron-droedrine	0.6	4.8	0.05	16.1	71	Kumari et al. 2021
37	<i>Cissus quadrangularis</i> Linn	Vitaceae	Pirandai	Shrub	Leaves	Anti-asthma, anti-malaria, anti-arthritis, anti-diabetic	Iridoid picroside, quadrangularin A, pallidol	1.3	5.6	0.09	23.9	96	Zaki et al. 2020
38	<i>Clitoria ternatea</i> Linn	Fabaceae	Sangupoo	Herb	Leaves	Anxiolytic, analgesic, anti-inflam-matory, anti-diarrhea	Flavonol glycosides, delphinidin, Glycosides, taraxerol viii and taxaxerone	1.3	5.2	0.07	21.9	91	Quazi and Yogekar 2020
39	<i>Corallocarpus epigaeus</i> Rottler C.B.Clarke	Cucurbitaceae	Agayaganu dankilangu	Climber	Tuber	Antidote, analgesic, anti-inflam-matory, anti-arthritis	Tannin, saponin gluanol acetate, -sitosterol, leucoantho-cyanidin	1.1	4.9	0.08	21.9	93	Deepika et al. 2022
40	<i>Curculigo orchitoides</i> Gaertn	Hypoxidaceae	Nilappa-naikilangu	Herb	Root	Aphrodisiac, diuretic, anti-arthritis, anti-diarrhea	Orcinol glucoside, anacardoside, curculigoside, glucosyringic acid	0.8	2.8	0.02	16.7	68	Bhangi et al. 2020

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
41	<i>Curcuma longa</i> Linn	Zingiberaceae	Manjal	Shrub	Rhizome	Anti-inflammatory, anti-ulcer, anti-pyretic, jaundice	Curcumin, demethoxy-curcumin and Bisdemethoxy-curcumin	1.4	6.1	0.09	23.9	96	Shivkanya et al. 2022
42	<i>Datura stramonium</i> Linn	Solanaceae	Umathai	Herb	Aerial Parts	Anti-inflammatory, anti-ulcer, wound healing	Tigloidin, curcumin aposcopolamine, apoatropin, hyoscyamine N-oxide and scopolamine N-oxide	1.2	5.9	0.07	19.6	91	Sharma et al. 2021
43	<i>Dendrophthoe falcate</i> L.F Ettiingsh	Loranthaceae	Pulliruvi	Herb	Aerial Parts	Anti-ulcer, anti-asthma, wound healing, anti-arthritis	Quercetin, tannins, β -sitosterol, β -amyrin, oleanolic acid	0.5	3.8	0.04	12.7	86	Subhashini et al. 2019
44	<i>Dodonaea angustifolia</i> Linn	Sapindaceae	Viraali	Shrub	Leaves	Anti-ulcer, anti-diabetic, anti-cancer	Anti-malairal, Clerodane diterpenoids, steroids, phenolics, saponins, tannins, Sugar, alcohols, phenols, steroids, essential oils, alkaloids, tannins, flavonoids, saponins	0.8	3.7	0.03	12.5	71	Revathi and Dhanaraj 2019
45	<i>Dolichos lablab</i> Linn	Fabaceae	Kaattu Mochai	Climber	Aerial Parts	Anti-inflammatory, analgesic, anti-inflammatory, anti-ulcer	Sugar, alcohols, phenols, steroids, essential oils, alkaloids, tannins, flavonoids, saponins	1.4	5.9	0.09	23.7	97	Nanthakumar et al. 2021
46	<i>Eclipta prostrata</i> Linn	Asteraceae	Karisilaanganni	Herb	Aerial Parts	Anti-asthma, anti-ulcer, jaundice, hepatoprotective	Ecalbatin, echinocystic acid, flavones, coumestans,	0.8	4.9	0.07	21.9	92	Timalsina and Devkota 2021

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
47	<i>Elephantopus scaber</i> Linn	Asteraceae	Yanaichuvadi	Herb	Aerial Parts	Astringent, anti-pyretic, diuretic, anti-arthritis	Elephantopin, deoxyelephantopin, isodeoxyelephantopin, lupeol, lupeol acetate, stigmasterol	0.4	3.5	0.05	16.9	78	Hiradeve and 2014
48	<i>Encostemma littorale</i> Blume	Gentianaceae	Vellarngu	Herb	Aerial Parts	Antidote, antipyretic, anti-ulcer, anti-arthritis	Alkaloids, catechins, saponins, sterols, triterpenoids, phenolic acids, flavonoids and xanthones	0.7	4.1	0.07	14.2	64	Sanmugarajah 2017
49	<i>Eucalyptus globulus</i> Linn	Myrtaceae	Taila Maram	Tree	Leaves	Anti-pyretic, anti-inflammatory, anti-asthma, anti-arthritis	Eucalyptol, p-cymene, β -pinene, β -myrcene, β -terpinene, citronellal	1.4	5.9	0.08	23.6	99	Sharma et al. 2021
50	<i>Euphorbia hirta</i> Linn	Euphorbiaceae	Amman Pacharisi	Shrub	Aerial Parts	Anthelmintic, anti-asthma, anti-diarrhea, jaundice	Lignans, diterpene, taraxerol, pinoresinol, scopoletin, quercetin, kaempferol, luteolin	1.3	4.8	0.07	19.8	82	Tripathi et al. 2022
51	<i>Euphorbia tirucalli</i> Linn	Euphorbiaceae	Kombukalli	Shrub	Aerial Parts	Anthelmintic, woundhealing, anti-asthma, anti-malaria	Campesterol, β -amyryn acetate, euphol, tirucalol	0.9	5.3	0.07	20.7	79	Mali et al. 2017
52	<i>Ferula foetida</i> Regel	Apiaceae	Perungayachedi	Herb	Latex	Laxative, anti-spasmodic, anti-cancer	sesquiterpenes, Eremophilene.	1.4	6.2	0.09	24.8	98	Javaid et al. 2020
53	<i>Ficus exasperate</i> Vahl	Moraceae	Maramthinniathi	Tree	Leaves	Wound healing, anti-arthritis, diuretic,	Flavonoids, tannins, saponin, alkaloids, and glycosides	1.3	5.4	0.08	21.4	89	Olaoluwa et al. 2022
54	<i>Garcinia indica</i> Choisy	Guttiferae	Murugal	Tree	Fruits	Analgesic Anti-ulcer, anti-inflammatory, anti-diabetic, anti-diarrhea	Hydroxycitric acid HCA, Anthocyanins, phenolic acids, and flavonoids	1.4	5.4	0.07	23.8	91	Singh et al. 2022

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
55	<i>Gloriosa superba</i> Linn	Colchicaceae	Kalappaikkai-zhangu	Climber	Aerial parts	Aphrodisiac, laxative, anti-arthritis, antidote	Gloriosine, colchicine, colchicoside, β -sitosterol	1.1	5.2	0.06	21.4	96	Kavithamani et al. 2013
56	<i>Glycyrrhiza glabra</i> Linn	Leguminosae	Athimathuram	Shrub	Root	Anti-ulcer, anti-arthritis, jaundice, anti-spasmodic	Glycyrrhizin, glycyrrhetic acid, isoliquiritin, isoflavones, Indicine, echimidine, wound healing, supinine, helourine, heliotrine, lasiocarpine, eupopine	1.4	5.9	0.08	22.7	98	Wahab et al. 2021
57	<i>Heliotropium indicum</i> Linn	Boraginaceae	Thekkoduki	Herb	Aerial parts	Anti-arthritis, antidote, wound healing, anti-ulcer	Indicine, echimidine, supinine, helourine, heliotrine, lasiocarpine, eupopine	1.1	4.8	0.07	18.5	76	Sarkar et al. 2021
58	<i>Hemidesmus indicus</i> R. Br.	Apocynaceae	Nannari	Herb	Root	Immunomodulatory, anti-pyretic, wound healing, anti-arthritis	Nerolidol, borneol, linalyl acetate, dihydrocarvyl acetate, salicylaldehyde, isocaryophyllene	1.4	5.9	0.08	24.8	98	Thakur et al. 2021
59	<i>Hibiscus sabdariffa</i> Linn	Malvaceae	Sivapu pulichai	Shrub	Leaves	Laxative, diuretic, anti-hypertensive, anti-inflammatory	Anthocyanin, delphinidin-3-sambubioside, cyanidin-3-sambubioside	1.3	5.1	0.07	21.9	91	Owoade et al. 2019
60	<i>Holarrhena pubescens</i> Linn	Apocynaceae	Kudasapalai	Shrub	Aerial parts	Anthelmintic, analgesic, anti-diarrhea, anti-inflammatory	Upeol, betulinolaldehyde, and betulinic acid	1.1	4.8	0.05	19.7	78	Gopinath et al. 2020
61	<i>Huberantha senjiana</i> R.Mural, Naras. and N.Balach	Annonaceae	Kothukalaa	Shrub	Aerial parts	Anti-arthritis, hepatoprotective, diuretic, jaundice	Flavonoids, tannins, saponins, alkaloids, and glycosides.	0.8	3.1	0.01	8.7	76	Pandiyan and Ilango 2022

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
62	<i>Indigofera aspalathoides</i> Vahl ex DC	Fabaceae	Shivanar Vembu	Shrub	Aerial parts	Astringent, hepatoprotective, anticancer, anthelmintic	Saponins, tannins, steroidal, alkaloids, flavonoids	0.9	4.2	0.06	16.8	78	Panchacharam and Deepa 2022
63	<i>Ionidium suffruticosum</i> Ging	Violaceae	Orilaitthamarai	Herb	Aerial parts	Anti-ulcer, anti-diabetic, jaundice	Methyl-2-benzimidazole carbamate	1.2	4.9	0.07	21.4	89	Sonappanavar et al. 2010
64	<i>Ipomoea batatas</i> Linn	Convolvulaceae	Sarkarakizhangu	Herb	Tuber	Analgesic, anti-diabetic, anti-inflammatory, anticancer	Carbolines, Chlorogenic Acid, citrulline,	0.8	3.7	0.04	16.5	76	Giri and Sakthale 2022
65	<i>Ipomoea asarifolia</i> Desr. Roem. and Schult	Convolvulaceae	Adumbu	Herb	Climber	Anti-malarial, anti-inflammatory, wound healing, hexadecyl analgesic	4-Hydroxycinnamic acid, ester, hexadecyl ester, 4-hydroxycinnamic acid, eicosyl ester,	0.1	1.3	0.02	8.1	80	Meira et al. 2022
66	<i>Jatropha curcas</i> Linn	Euphorbiaceae	Kaattu Amanaku	Shrub	Aerial Parts	Jaundice, antidote, anti-diarrhea, anti-cancer	Δ -cadinene, pulegone, α -cadinol, apigenin, vitexin and isovitexin	1.4	6.1	0.08	22.8	96	Laxane et al. 2022
67	<i>Justicia adhatoda</i> Linn	Acanthaceae	Vasaka	Shrub	Aerial Parts	Anti-tussive, hepatoprotective, anti-inflammatory, anti-asthma	Vascoline, vasicolmonone, vasicinone, vasicine, adhatodine and anisotone	1.4	5.9	0.08	23.7	98	Roy and Joseph 2022
68	<i>Justicia gendarussa</i> Burm. f.	Acanthaceae	Neer Nochi	Herb	Leaves	Jaundice, anti-inflammatory, mmatory, anti-asthma	Alkaloid, steroid, flavonoid, phenol, carbohydrate, saponin and quinone	0.9	3.1	0.04	16.8	77	Swamabala et al. 2023

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
69	<i>Kaempferia galangal</i> Linn	Zingiberaceae	Kacholam	Herb	Rhizome	Anti-arthritic, anti-hypertensive, antispasmodic, ethyl diuretic	Ethyl-p-methoxy-cinnamate, cinnamate, 1,8-cineole, borneol, camphene	1.3	5.9	23.5	24.7	98	Wang et al. 2021
70	<i>Lantana camara</i> Linn	Verbenaceae	Unnichedi	Shrub	Aerial Parts	Anti-pyretic, anti-ulcer, anti-arthritic, isocaryo-anti-cancer	Bicyclogermacrene, Bicyclogermacrene, valencene and germacrene	1.4	5.7	0.07	21.7	95	Annadurai 2019
71	<i>Lawsonia inermis</i> Linn	Lythraceae	Marudani	Tree	Leaves	Hepatoprotective, anti-inflammatory, wound healing, terpenoids, anti-diarrhea	Lawsonone, saponins, proteins, alkaloids, terpenoids, quinones, coumarins, xanthones.	1.5	6.4	0.08	24.8	99	Al-Snafi 2019
72	<i>Leucas aspera</i> Linn	Lamiaceae	Lamiaceae	Shrub	Aerial Parts	Anti-inflammatory, anticancer, anti-diarrhea	Triterpenoids, oleonic acid, ursolic acid and b-sitosterol,	1.4	6.2	0.08	24.1	98	Hiremath et al. 2022
73	<i>Limonia acidissima</i> Linn	Rutaceae	Vilampazam	Tree	Aerial Parts	Anti-ulcer, anti-diabetic, anti-cancer, anti-diarrhea	Coumarins, lignans, flavonoids, phenolic acids, quinones, alkaloids, triterpenoids, sterols, and volatile oils	1.4	6.2	0.09	23.5	99	Bhavsar et al. 2022
74	<i>Macaranga peltata</i> Roxb. Müll.Arg	Euphorbiaceae	Vattahamarai	Tree	Aerial Parts	Hepatoprotective, anti-pyretic, anti-inflammatory, anti-cancer	Tanarifuranone, C and tanariflavanone	1.0	4.2	0.05	16.7	79	Magadula 2014

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
75	<i>Madhuca longifolia</i> Linn	Sapotaceae	Iluppai	Tree	Aerial Parts	spasmodic laxative, hepatoprotective, wound healing, jaundice	Sitosterol, quercetin, 3-O-Lrhamnoside, stigmasterol, n-hexacosanol, n-octacosanol, carotene, myricitin, erthrodio	0.8	5.9	0.07	21.9	92	Dalvi et al. 2022
76	<i>Melia dubia</i> Linn	Meliaceae	Malai vembu	Tree	Aerial Parts	Astringent, anti-malarial, anti-spasmodic, vilasinin, anthelmintic	Meliastatin, 1,7-ditiglyl	1.4	6.2	0.09	24.1	97	Goswami et al. 2020
77	<i>Melothria maderaspatana</i> L. Roem	Cucurbitaceae	Musu musu keerat	Climber	Aerial Parts	Anti-ulcer, Anti-ulcer, inflammatory, flavonoids, anti-spasmodic, alkaloids	Phenolic, tannins, saponins	1.1	4.9	0.07	19.7	86	Paramasivam et al. 2017
78	<i>Mentha aquatica</i> Linn	Lamiaceae	Milagukeerai	Herb	Aerial Parts	Immunomodulatory, anti-spasmodic, analgesic, anti-pyretic	Menthofuran, limonene, trans- β -ocimene, ledol, β -caryophyllene	0.9	5.8	0.07	21.5	89	Truong et al. 2022
79	<i>Mentha arvensis</i> Linn	Lamiaceae	Kumarakamuli	Herb	Aerial Parts	Analgescic, anti-hypertensive, anti-ulcer, anti-spasmodic, α -pinene	Menthone, menthyl acetate, α -terpineol	1.3	5.9	0.08	23.9	93	Asghar et al. 2022
80	<i>Mesua ferrea</i> Linn	Calophyllaceae	Karungu	Tree	Aerial Parts	Laxative, anti-asthma, anti-arthritis, anti-diarrhea	1,5-dihydroxyxanthone, euxanthone 7-methyl ether, β -sitos-terol, α -selinene	1.1	4.9	0.07	21.8	82	Sruthikrishna 2021
81	<i>Michelia champaca</i> Linn	Magnoliaceae	Senbagapomaram	Tree	Aerial Parts	Diuretic, anti-arthritis, anti-hypertensive, anti-diarrhea	Champacaine, A, lirioidenine, thalifoline, scopolletin, stigmasta-4,22-dien-3-one	1.2	5.7	0.06	19.7	82	Al-Sagheer 2021

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
82	<i>Mimosa pudica</i> Linn	Fabaceae	Thottasinungi	Herb	Aerial parts	Anticancer, anti-diarrhea, anti-arthritis, wound healing	Crocetin dimethyl ester, alkaloids, terpenoids, steroids and saponins	1.2	5.1	0.07	24.1	85	Yemireddy et al. 2019
83	<i>Morinda coreia</i> Buch.-Ham	Rubiaceae	Nuna	Tree	All Parts	Laxative, hepatoprotective, anti-ulcer, anti-diarrhea	Indoids, anthraquinones, quinones, terpenes, lignans	1.2	5.8	0.08	22.9	91	Singh et al. 2020
84	<i>Morus alba</i> Linn	Moraceae	Kamblichedi	Tree	Aerial parts	Anti-pyretic, anti-hypertensive, anti-diabetic, immunomodulatory	Moracin, rutin, Mulberoside, isomoracin	0.9	4.8	0.05	17.2	86	Devi Bandna et al. 2022
85	<i>Neolamarckia cadamba</i> Linn	Rubiaceae	Kathambu	Tree	Aerial parts	Wound healing, anti-inflammatory, hepatoprotective, anti-malarial	Narigenin, apigenin, β -sitosterol, sakuranetin, prunetin	0.8	4.9	0.07	22.3	91	Sakthivel et al. 2022
86	<i>Nyctanthes arborescens</i> Linn	Oleaceae	Pavizhamalli	Tree	Leaves	Anthelmintic, laxative, anti-pyretic, anti-arthritis	Astragaline, Nicotiflorin, Oleanolic acid, Nycanthic acid	1.2	5.9	0.06	21.1	89	Daund et al. 2022
87	<i>Ocimum basilicum</i> Linn	Lamiaceae	Thiruneetru pachchilai	Herb	Leaves	Anti-spasmodic, anti-diarrhea, anti-inflammatory, analgesic	Eugenol, Farnesene, Ocimene, α -cubebene,	1.4	5.9	0.08	24.6	98	Brandao et al. 2022
88	<i>Opuntia monacantha</i> Linn	Cactaceae	Sappattukkalli	Shrub	Aerial parts	Anti-arthritis, wound healing, anti-diabetic, anti-diarrhea	Genticic acid, diosmetin, chlorogenic acid, N-methyltyramide, and hordenine	0.9	4.6	0.05	21.8	87	Bari et al. 2012

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
89	<i>Phoenix sylvesteris</i> Linn	Arecaceae	Kattueecham	Tree	Fruits	Anti-pyretic, anti-ulcer, immunostimulant, anti-spasmodic	Carbohydrate, phenols, amino acids, flavonoids, tannins, alkaloids, terpenoids	1.4	6.4	0.09	24.4	99	Nirmala and Sandhiya 2021
90	<i>Phyllanthus emblica</i> Linn	Euphorbiaceae	Amla	Tree	Fruits	Laxative, anti-pyretic, diuretic, anti-ulcer	Triacotanonic acid, Betulonic acid, Daucosterol, Lupeol acetate, β -Amyrin-3-palmitate, Gallic acid, Betulinic acid	1.5	6.5	0.09	24.5	100	Ahmad et al. 2021
91	<i>Phyllanthus niruri</i> Linn	Phyllanthaceae	Kizhanelli	Herb	Leaves	Diuretic, anti-hypertensive, anti-malarial, jaundice	Ellagic acid, gallic acid, ellagitannin, hexahydroxy Idiphenol	1.3	5.9	0.07	23.8	96	Danladi et al. 2018
92	<i>Phyllanthus reticulatus</i> Linn	Phyllanthaceae	Karunelli	Shrub	Leaves	Astringent, diuretic, anti-hypertensive, anti-diabetic	A-Sitosterol-3-O- β -glucoside, Stigmasterol-3-O- β -glucoside, ellagic acid, Corilagin	1.4	6.2	0.09	24.7	98	Saleh-E-In et al. 2022
93	<i>Physalis minima</i> Linn	Solanaceae	Sodakku thakkaali	Herb	Aerial parts	Anti-diabetic, anti-cancer, anti-pyretic, anti-inflammatory	Ellagic acid, Catechol, Gallic acid	1.4	6.3	0.09	24.7	99	Novita et al. 2020
94	<i>Pisonia grandis</i> Linn	Nyctaginaceae	Sandikeerai	Tree	Leaves	Anti-arthritis, anti-diabetic, anti-inflammatory, anti-pyretic	Pinnatol, Allantoin, β -sitosterol, β -Spinasterol, β -Sitosterol Glucoside, Octocosanal,	1.3	5.7	0.06	22.9	91	Elumalai 2012

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
95	<i>Polygonatum cirrhifolium</i> Wall. Royle	Liliaceae	Mahameda	Herb	Rhizome	Demulscant, analgesic, hepatoprotective, antihypertensive	Dulcitol Α-bulnesene, linalyl acetate, eicosadienoic, pentacosane, piperitone, docasane, diosgenin, santonin and calarene	0.9	3.9	0.05	16.7	79	Luo et al. 2022
96	<i>Pongamia pinnata</i> Linn	Leguminosae	Pungaimaram	Tree	Aerial parts	Anthelmintic, anti-pyretic, anti-ulcer, anti-cancer	Pongamiosides A-D,	1.4	6.2	0.09	24.2	98	Fugare et al. 2021
97	<i>Portulaca oleracea</i> Linn	Portulacaceae	Kozhikeerai	Herb	Leaves	Laxative, diuretic, anti-inflammatory, fatty acids, anti-spasmodic	Flavonoids, alkaloids, inflammatory, fatty acids, anti-spasmodic	0.9	4.2	0.05	16.7	86	Kumar et al. 2022
98	<i>Quercus infectoria</i> G. Olivier	Fagaceae	Maasikai	Shrub	Fruits	Anti-ulcer, wound healing, anti-spasmodic, anti-diarrhea	Polysaccharides, vitamins, sterols	1.1	4.7	0.06	16.8	79	Elham et al. 2021
99	<i>Rauwolfia Serpentina</i> Linn	Apocynaceae	Chevana-malpodai	Shrub	Roots	Anti-hypertensive, anti-diabetic, astringent, and hepatoprotective	P-Hydroxy-Ajmaline, ajmalicine, reserpine, gallic acid	1.4	5.9	0.08	23.4	95	Walia and Pandey 2022
100	<i>Rhus parviflora</i> Roxb	Anacardiaceae	Karkadasingi	Tree	Aerial parts	Anti-ulcer, anti-diarrhea, antiarthritic, hepatoprotective	Galic acid, myricetin, quercetin, kampferol	0.9	3.8	0.05	19.5	79	Opiyo et al. 2021
101	<i>Rhynchosia rufescens</i> Linn	Fabaceae	Malaitkollu	Shrub	Seeds	Demulscant, anti-infertility, anti-arthritis, anti-cancer	Flavonoids and prenylated isoflavonoids	1.4	5.9	0.08	23.9	94	Rammohan et al. 2021

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
102	<i>Ricinus communis</i> Linn	Euphorbiaceae	Amanaku	Tree	Seeds	Laxative, analgesic, anti-inflammatory, wound healing	Ricine, ricinolein, tricinolein	1.4	6.1	0.09	24.5	99	Abdul et al. 2018
103	<i>Santalum album</i> Linn	Santalaceae	Sandalwood	Tree	Stem	Analgesic, anti-inflammatory, ulcer, anti-diabetic	Alpha- and beta-santalol, cedrol, esters, aldehydes, phytosterols,	1.5	6.4	0.09	24.5	100	Kumar et al. 2015
104	<i>Scleria lithosperma</i> Linn	Cyperaceae	Katinappul	Shrub	Aerial parts	Demulcent, antipyretic, anti-ulcer, wound healing	Alkaloids, flavonoids, glycosides, terpenoids.	0.2	2.6	0.05	16.2	79	Chiduruppa et al. 2017
105	<i>Semecarpus anacardium</i> Linn	Anacardiaceae	Temparai	Tree	Seeds	Aphrodisiac, anti-inflammatory, diabetic, anti-cancer	Biflavonoids, phenolic compounds, bilawanols, minerals, vitamins and amino acids	1.4	6.4	0.09	24.1	99	Nikam 2022
106	<i>Sesbania grandiflora</i> Linn	Fabaceae	Agathi	Tree	Aerial parts	Anti-pyretic, anthelmintic, anti-arthritis, anti-diarrhea	Isovestitol, medicarpin, sativan, betulinic acid	1.4	5.2	0.07	19.5	95	Dange et al. 2022
107	<i>Sida ovata</i> Forssk	Malvaceae	Ponmusuttai	Herb	Aerial parts	Wound healing, anti-asthma, antidote, aphrodisiac	Flavonoids, alkaloids, fatty acids, terpenoids	0.9	4.8	0.05	13.5	76	Parveen et al. 2022
108	<i>Solanum nigrum</i> Linn	Solanaceae	Manathakkali	Shrub	Aerial parts	Anti-ulcer, anti-tussive, wound healing, anti-inflammatory	Gentisic acid, luteolin, apigenin, kaempferol, and m-coumaric acid.	1.4	5.9	0.08	23.1	97	Chen et al. 2022
109	<i>Solanum trilobatum</i> Linn	Solanaceae	Tuduvai	Shrub	Leaves	Anti-malarial, anti-asthma, hepatoprotective, analgesic	Sobatum, β -solanarine, solasodine, solaine, glycoalkaloid	1.4	6.4	0.08	23.9	99	Balakrishnan et al. 2015
110	<i>Stachytarpheta jamaicensis</i> Linn	Verbenaceae	Ezhuthani-pooundu	Herb	Leaves	Anthelmintic, analgesic, diuretic, anti-inflammatory	and diosgenin Verbasoside, 6 β -hydroxy-ipolamide	1.1	4.9	0.06	19.8	81	Liew and Yong 2016

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
111	<i>Strychnos nuxvomica</i> Linn	Loganiaceae	Yettimaram	Tree	Seeds	Aphrodisiac, analgesic, anti-arthritis, anti-diabetic	Strychnine, loganin, brucine, loganic acid	1.4	5.9	0.07	23.9	92	Guo et al. 2018
112	<i>Syzygium cumini</i> Linn	Myrtaceae	Navalmaram	Tree	Fruits	Anthelmintic, anti-ulcer, anti-asthma, anti-diarrhea	Anthocyanins, glucoside, ellagic acid, isoquercetin, kaemferol and myrecetin	1.4	6.4	0.09	24.4	99	Kumar et al. 2022
113	<i>Thespesia populnea</i> Linn	Malvaceae	Poovarasu	Tree	Aerial parts	Anti-inflammatory, anti-diarrhea, hepatoprotective, anti-infertility	Flavonoids, sesquiterpenoids, tannin, saponins, alkanes, essential oil, sugars, fatty acids	1.2	5.9	0.08	24.9	97	Suvarna et al. 2018
114	<i>Tinospora cordifolia</i> Linn	Menispermaceae	Seenthilkodi	Shrub	Aerial parts	Anti-pyretic, diuretic, jaundice, antidote	Steroids, phenolics, aliphatic compounds, alkaloids and steroids	1.4	6.1	0.08	21.8	89	Monica 2022
115	<i>Tinospora crispa</i> Linn	Menispermaceae	Periya seenthilkodi	Shrub parts	Aerial	Antihypertensive, wound healing, anti-diabetic, jaundice	Aporphine alkaloids, oliverine, oliveridine and polyalthine, N-formylsimilobine	1.2	4.8	0.06	19.5	87	Ahmad et al. 2016
116	<i>Tinospora sinensis</i> Linn	Menispermaceae	Pottu seenthilkodi	Shrub	Aerial parts	Anti-ulcer, immunomodulatory, anti-pyretic, anti-diabetic	2-O-β-D-glucopyranoside Methyl-4,5-dimethoxybenzoic acid, vanillic acid, p-hydroxyl phenethanol, tachostide	1.3	4.9	0.07	22.1	90	Hegde and Jayaraj 2016
117	<i>Toddalia asiatica</i> Linn	Rutaceae	Kindumullu	Shrub	Whole plant	Analgesic, anti-inflammatory, anti-arthritis, anti-cancer	Quinic acid, fumaric acid, chlorogenic acid, Coumarins, alkaloids,	1.3	5.9	0.08	23.8	92	Zeng et al. 2021

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FI	Reference
118	<i>Tribulus terrestris</i> Linn	Zygophyllaceae	Nerunji	Herb	Leaves	Aphrodisiac, hepatoprotective, diuretic, anti-inflammatory	terpenoids, flavonoids Saponins, diosgenin, gitogenin, chlorogenin, ruscogenin, 2-5 D-spirosta-3-5-diene and kaempferol	1.1	4.7	0.07	16.7	89	Sultan and Rubab 2017
119	<i>Tricodesma indicum</i> Linn	Boraginaceae	Kalluthai-thumbi	Herb	Aerial parts	Anti-pyretic, anti-inflammatory, anti-arthritis, anti-diarrhea	Lenoleic acid, Oleic acid, palmitic acid, hexaconase, Ethylhexacosanoate, Ethyl ester and Hexacosadinoic acid	0.9	5.9	0.06	21.9	82	Rathi et al. 2019
120	<i>Trigonella foenum</i> Linn	Fabaceae	Vendayam	Herb	Seeds	Antidiabetic, anti-diarrhea, anti-spasmodic, trigocoumarin, anti-ulcer	Graecumins, trigonella, nicotinic acid, trimethyl coumarin	1.4	6.4	0.08	24.1	99	Ruwali et al. 2022
121	<i>Tylophora indica</i> Burm. f. Merr	Apocynaceae	Nangilaippratti	Shrub	Leaves	Hepatoprotective, anti-asthma, anti-arthritis, anti-diarrhea	Tylophorine, tylophorinine and tylophrinidine	0.9	4.2	0.07	19.6	91	Fuloria et al. 2020
122	<i>Vitex negundo</i> Linn	Lamiaceae	Karunochi	Shrub	Leaves	Anti-inflammatory, anti-diabetic, anti-cancer	Viridiflorol, â-caryophyllene, caryophyllene oxide, globulol, and sabinene	1.1	5.9	0.08	22.7	85	Kamal et al. 2022
123	<i>Withania somnifera</i> Linn	Solanaceae	Amugra kizhangu	Shrub	Roots	Aphrodisiac, hepatoprotective, anti-inflammatory, and saponins	Withanolides, Withaferins	1.4	5.9	0.08	22.8	98	Mathur et al. 2021

Table 1: Contd..

S.No	Botanical name	Family name	Vernacular name Tamil	Habitat	Parts	Ethno-botanical value	Active principle	UV	CF	RI	CV	FJ	Reference
124	<i>Ziziphus jujuba</i> Mill	Rhamnaceae	Ilanthaipazham	Tree	Fruits	anti-asthma Diuretic, anti-ulcer, anti-asthma, anti-spasmodic Astringent, anti-inflam- matory, anti- diarrhea, anti-spasmodic	Jujuphenoside, vitamin C, phenolics and flavonoids, Gallic acid, caffeic acid, ellagic acid, catechin	1.5	6.4	0.09	24.1	99	Ensiye Aafi et al. 2022
125	<i>Ziziphus oenoplia</i> Linn	Rhamnaceae	Sooraipazham	Tree	Fruits			1.2	5.1	0.06	19.8	85	Nahrin et al. 2022

- ◆ Descriptive statistics using botanical indices like Use Value, Citation Frequency Relative Importance, Cultural Values and Fidelity level were used. These indices are also used to choose prospective plant species for additional pharmacological research and advice in pharmaceutical development.

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