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Angiosperms weed diversity of Puliyanakulam, Kovilpatti, Thoothukudi district, Tamil Nadu, India

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Abstract

Survey on the weed plant diversity is an important activity to assess the existing flora. A total of 139 weed species belonging to 108 genera of 36 angiosperm families have been documented. 52% of Angiosperm weed species of them are herbaceous. The present study was enumerated 23 weed species documented in the family Euphorbiaceae and Fabaceae, followed by Asteraceae with 21 weed species, Acanthaceae with 20 species and Amaranthaceae with 18 species are observed as the dominant families. In this article, family, botanical name, habit, vernacular name and various applications of the recorded plants are enumerated systematically.

Keywords: Angiosperms, weed species diversity, medicinal plants, puliyankulam

Introduction

Understanding composition of weed species within the landscape of an agro-ecosystem is an important goal of weed science. The study of weed population is helpful in determining how population changes overtime in response to selective pressures applied by our agronomic practices and changing climate conditions. Weeds are important component of biodiversity in agriculture fields (Van Elsen 2000) [16]. Moreover, they are crucial trophic resources for many guilds (Marshall *et al.* 2003 and Petit *et al.* 2011) [6, 11]. During recent years, there is reduction in weed species diversity in agriculture lands because of intensification of farming practices like use of highly effective herbicides, crop rotation and high dose of fertilization (Aebischer 1991, Robinson and William 2002, Potts *et al.* 2010) [1, 13, 12]. Present work has recorded and documented the several weed plants Puliyanakulam, Kovilpatti taluk, Thoothukudi district of Tamil Nadu. It gives the list of medicinal plants used for various diseases and their management strategies. A total of 139 weed plants were observed and documented. Botanical Name, family, local name and medicinal uses were analyzed and documented.

Materials and Methods

Study Area

Puliyanakulam village is located in Kovilpatti taluk in Thoothukudi District of Tamil Nadu, India. It is located 8 KM away from sub-district headquarter and 60 km away from the district headquarter Thoothukudi. The total geographical area of village is 1025.95 hectares. Puliyanakulam village has a total population of 1802 (male 913 and 889 female respectively) peoples. There are about 536 houses in Puliyanakulam village.

Methods

An extensive floristic survey was conducted during the period of October, 2020 to March, 2021. A total of 139 weed plants were collected and documented. The collected specimens were identified taxonomically with the help of available monographs, taxonomic revisions and floras (Hooker 1872, 1984; Gamble and Fischer 1915- 1936; Henry and Nair 1983 - 1989; Mohanan and Henry 1994; Santapau and Henry 1994; Kabeer and Nair 2009) [3, 2, 4, 10, 14] and by using the field keys devised by Subramanyam (1962) [15].

Many weed varieties are being found throughout the entire village especially over the fields. The weed plants were collected from different plantations and roadside vegetation.

Descriptions were prepared for all the collected specimens from the materials themselves. Common features were included under description while variants were noted for diagnosis.

The species description was prepared by extracting all the common features of the species. Information on nomenclature was taken from Gamble and Fischer (1915 -1936)^[2], Mathew (1981 – 1988)^[7].

Vernacular (Tamil) names noted during the field work were evaluated and they were either precise or vague. However, some of them showed that they had real taxonomic value at various levels (family, genus and species). The following sources of reference were also used to check Tamil names: Mayuranathan (1929)^[9] and Lushington (1915).

During the course of present study, field trips were carried out to the area. Standard methodology was used to elicit the ethnomedicinal knowledge of weed plants from the local people. The enumerated 59 medicinal plants are arranged based on their medicinal value, Botanical names followed by family, local name and part(s) used. Information on the use of these medicinal plants was gathered from a literature review and interviews with traditional healers. Mostly, local herbalists and other experienced people were taken to the field for identification of medicinal plants used in folklore. All the relevant information, in particular, the method of use of each medicinal plant species was recorded. To bring an element of accuracy, the information was cross checked with elderly people.

Results and Discussion

The Angiospermic flora of the weeds has a total of 139 species (Table 2). They belong to 108 genera and 36 families (Table 1). 119 are Dicot and belong to 90 genera and 32 families; 20 are monocot and belong to 18 genera and 4 families depict the number of families, genera and species of Dicotyledons and Monocotyledons recorded in the area of study. Among the dicots, 45 species are Polypetalae and family Fabaceae is the most dominant with 10 genera and 11 species. In Gamopetalae 38 genera covering 49 species are recorded and Asteraceae is the most dominant family with 15 genera and 15 species. In Monochlamydeae 25 species covering 17 genera are recorded and Amaranthaceae is the most dominant family with 8 genera and 13 species. In Monocot 20 species covers 18 genera representing 4 families. In the dicots 81 species are herbs, 24 shrubs, 13 climbers and only 1 tree species. Monocots have 20 species of herbs only documented. In the present study in monocot family Poaceae was represented with maximum number of species followed by Cyperaceae. The species *Chloris barbata*, *Cynodon dactylon*, *Oryza sativa*, *Panicum repens*, *Dactyloctenium aegyptium*, *Perotis indica* and *Aristida adscensionis* served as fodder grasses. These species are collected in the growing season, and also grazed by cattles. *Saccharum spontaneum* are grasses which reduce the pressure of flood, and prevent soil erosion.

During the field survey, ethno botanical data of 59 species of weed plants belonging to 32 families have been collected

(Table 3). Among the documented useful species, the family Fabaceae is most frequently represented with a total of 6 species, followed by Amaranthaceae 5 species, Ceasalpiniaceae, Convolvulaceae, Euphorbiaceae and Malvaceae 4 species, Aizoaceae, Asteraceae, Capparaceae, Lamiaceae, Pedaliaceae and Solanaceae 2 species and other with only 1 species. The data also indicated that 59 species were used to treat various diseases. The data on the medicinally important plants indicate that the observed species were used to treat throat disorders, fever, cough, diabetes, headache, respiratory ailments, dermatological illnesses, urinogenital complaints, piles, asthma, cuts and wounds, cardiovascular complaints, skin diseases and other diseases.

Table 1: List of weed species in familywise identified from the study area

Family	No. of species	Percentage (%)
Acanthaceae	3	2.15
Aizoaceae	4	2.87
Amaranthaceae	13	9.35
Apiaceae	1	0.71
Aristolochiaceae	1	0.71
Asclepiadaceae	1	0.71
Asteraceae	15	10.7
Boraginaceae	1	0.71
Caesalpiniaceae	4	2.87
Capparaceae	2	1.43
Commelinaceae	1	0.71
Convolvulaceae	11	7.91
Cucurbitaceae	1	0.71
Cyperaceae	4	2.87
Elatinaceae	1	0.71
Euphorbiaceae	10	7.19
Fabaceae	11	7.91
Lamiaceae	6	4.31
Lythraceae	1	0.71
Malvaceae	8	5.75
Mimosaceae	2	1.43
Nyctaginaceae	1	0.71
Oxalidaceae	2	1.43
Pappavaraceae	1	0.71
Passifloraceae	1	0.71
Pedaliaceae	2	1.43
Poaceae	14	10.1
Polygalaceae	1	0.71
Portulacaceae	2	1.43
Rubiaceae	2	1.43
Scorpiariaceae	2	1.43
Solanaceae	4	2.87
Tiliaceae	2	1.43
Typhaceae	1	0.71
Verbenaceae	2	1.43
Zygophyllaceae	1	0.71

Table 2: Habitual diversity of weed species identified from the Study Area

Botanical Name	Family Name	Life Form
<i>Abrus precatorius</i> L.	Fabaceae	Climber
<i>Abutilon indicum</i> (L.) Sweet	Malvaceae	Herb
<i>Acalypha indica</i> L.	Euphorbiaceae	Herb
<i>Achyranthes aspera</i> L.	Amaranthaceae	Herb
<i>Aerva javanica</i> (Burm.f.) Juss. ex. Schult.	Amaranthaceae	Herb
<i>Aerva lanata</i> (L.) Juss.	Amaranthaceae	Herb
<i>Aeschynomene indica</i> L.	Fabaceae	Herb
<i>Ageratum conyzoides</i> L.	Asteraceae	Herb
<i>Allmania nodiflora</i> (L.)R.Br.	Amaranthaceae	Herb
<i>Alternanthera pungens</i> Kunth	Amaranthaceae	Herb

<i>Alternanthera sessilis</i> (L.) R.Br.	Amaranthaceae	Herb
<i>Alysicarpus monilifer</i> (L.) DC.	Fabaceae	Herb
<i>Amaranthus spinosus</i> L.	Amaranthaceae	Herb
<i>Amaranthus viridis</i> L.	Amaranthaceae	Herb
<i>Ammannia baccifera</i> L.	Lythraceae	Herb
<i>Anisomeles indica</i> (L.)	Lamiaceae	Herb
<i>Anisomeles malabarica</i> (L.) R.Br.	Lamiaceae	Shrub
<i>Apulda mutica</i> L.	Poaceae	Herb
<i>Argemone mexicana</i> L.	Papavaraceae	Herb
<i>Aristida adscensionis</i> L.	Poaceae	Herb
<i>Aristolochia bracteolata</i> Lam.	Aristolochiaceae	Herb
<i>Arundo donax</i> L.	Poaceae	Herb
<i>Asystasia gangetica</i> (L.) T.Anderson	Acanthaceae	Herb
<i>Bergia capensis</i> L.	Elatinaceae	Herb
<i>Bidens pilosa</i> L.	Asteraceae	Herb
<i>Biophytum sensitivum</i> L.	Oxalidaceae	Herb
<i>Blainvillea acmella</i> (L.)	Asteraceae	Herb
<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Herb
<i>Calotropis gigantea</i> (L.)R.Br	Asclepiadaceae	Shrub
<i>Celosia argentea</i> L.	Amaranthaceae	Herb
<i>Celosia polygonoides</i> Retz.	Amaranthaceae	Herb
1. <i>Centella asiatica</i> (L.) Urban	Apiaceae	Herb
<i>Chloris barbata</i> Sw.	Poaceae	Herb
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	Asteraceae	Shrub
<i>Chrozophora rottleri</i> (Geiseler) A. Juss.	Euphorbiaceae	Herb
<i>Cleome gynandra</i> L.	Capparaceae	Herb
<i>Cleome viscosa</i> L.	Capparaceae	Herb
<i>Clitoria ternatea</i> L.	Fabaceae	Climber
<i>Coccinia grandis</i> (L.) Voigt.	Cucurbitaceae	Climber
<i>Commelina benghalensis</i> L.	Commelinaceae	Herb
<i>Corchorus trilocularis</i> L.	Tiliaceae	Shrub
<i>Crotalaria paniculata</i> Willd.	Fabaceae	Shrub
<i>Crotalaria verrucosa</i> L.	Fabaceae	Herb
<i>Croton bonplandianus</i> Baillon.	Euphorbiaceae	Shrub
<i>Cuscuta reflexa</i> Roxb.	Convolvulaceae	Herb
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Herb
<i>Cyperus haspan</i> L.	Cyperaceae	Herb
<i>Cyperus iria</i> L.	Cyperaceae	Herb
<i>Cyperus rotundus</i> L.	Cyperaceae	Herb
<i>Dactyloctenium aegyptium</i> (L.) Willd.	Poaceae	Herb
<i>Datura innoxia</i> Mill.	Solanaceae	Shrub
<i>Datura metal</i> L.	Solanaceae	Shrub
<i>Desmodium triflorum</i> (L.) DC.	Fabaceae	Herb
<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	Herb
<i>Dipteracanthus prostratus</i> (Poir.) Nees	Acanthaceae	Herb
<i>Echinochola colona</i> (L.) Link	Poaceae	Herb
<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Herb
<i>Eragrostis minor</i> Host	Poaceae	Herb
<i>Euphorbia heterophylla</i> L.	Euphorbiaceae	Herb
<i>Euphorbia prostrata</i> Aiton	Euphorbiaceae	Herb
<i>Euphorbia hirta</i> L.	Euphorbiaceae	Herb
<i>Evolvulus alsinoides</i> (Linn.) Linn.	Convolvulaceae	Herb
<i>Fimbristylis miliacea</i> (L.) Vahl	Cyperaceae	Herb
<i>Glinus oppositifolius</i> (L.) A.DC.	Aizoaceae	Herb
<i>Gomphrena globosa</i> L.	Amaranthaceae	Herb
<i>Gomphrena celosioides</i> Mart.	Amaranthaceae	Herb
<i>Heteropogon contortus</i> (L.) P.Beauv. ex Roem. & Schult.	Poaceae	Herb
<i>Hibiscus lobatus</i> (Murray) Kuntz.	Malvaceae	Herb
<i>Hibiscus vitifolius</i> L.	Malvaceae	Shrub
<i>Hyptis suaveolens</i> (L.) Poit.	Lamiaceae	Shrub
<i>Indigofera linnaei</i> Ali	Fabaceae	Herb
<i>Ipomoea aquatica</i> Forssk.	Convolvulaceae	Climber
<i>Ipomoea carnea</i> Jacq.	Convolvulaceae	Shrub
<i>Ipomoea hederifolia</i> L.	Convolvulaceae	Climber
<i>Ipomoea obscura</i> (L.) Ker Gawl.	Convolvulaceae	Climber
<i>Ipomoea pes-tigridis</i> L.	Convolvulaceae	Herb
<i>Ipomoea sepiaria</i> Koen. ex Roxb.	Convolvulaceae	Climber
<i>Jatropha glandulifera</i> Roxb.	Euphorbiaceae	Shrub
<i>Jatropha gossypifolia</i> L.	Euphorbiaceae	Shrub

<i>Lantana camara</i> L.	Verbenaceae	Shrub
<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae	Herb
<i>Martynia annua</i> L.	Pedaliaceae	Shrub
<i>Merremia gangetica</i> (L.) Cufod	Convolvulaceae	Herb
<i>Merremia aegyptia</i> T. Cooke	Convolvulaceae	Climber
<i>Merremia hederacea</i> (N. L. Burman) H. Hallier f.	Convolvulaceae	Climber
<i>Mimosa pudica</i> L.	Mimosaceae	Shrub
<i>Mollugo nudicaulis</i> Lam.	Aizoaceae	Herb
<i>Mollugo pentaphyla</i> L.	Aizoaceae	Herb
<i>Ocimum americanum</i> L.	Lamiaceae	Herb
<i>Ocimum filamentosum</i> Forssk.	Lamiaceae	Herb
<i>Oldenlandia corymbosa</i> L.	Rubiaceae	Herb
<i>Oldenlandia umbellata</i> L.	Rubiaceae	Herb
<i>Oryza sativa</i> L.	Poaceae	Herb
<i>Oxalis corniculata</i> L.	Oxalidaceae	Herb
<i>Pacciflora foetida</i> L.	Passifloraceae	Climber
<i>Panicum repens</i> L.	Poaceae	Herb
<i>Parthenium hysterophorus</i> L.	Asteraceae	Shrub
<i>Pavonia odorata</i> Willd.	Malvaceae	Shrub
<i>Pedaliium murex</i> L.	Pedaliaceae	Herb
<i>Perotis indica</i> Ait.	Poaceae	Herb
<i>Phyla nodiflora</i> (L.) Greene	Verbenaceae	Herb
<i>Phyllanthus maderaspatensis</i> L.	Euphorbiaceae	Herb
<i>Physalis minima</i> L.	Solanaceae	Herb
<i>Polygala chinensis</i> L.	Polygalaceae	Herb
<i>Portulaca oleracea</i> L.	Portulacaceae	Herb
<i>Portulaca quadrifida</i> L.	Portulacaceae	Herb
<i>Prosopis chilensis</i> (Molina) Stuntz.	Mimosaceae	Tree
<i>Rhynchosia minima</i> (L.) DC.	Fabaceae	Climber
<i>Rungia repens</i> (L.) Nees	Acanthaceae	Herb
<i>Saccharum spontaneum</i> L.	Poaceae	Herb
<i>Scoparia dulcis</i> L.	Scorpiariaceae	Herb
<i>Senna auriculata</i> (L.) Roxb.	Caesalpiniaceae	Shrub
<i>Senna hirsuta</i> (L.) H.S. Irwin & Barenby	Caesalpiniaceae	Herb
<i>Senna occidentalis</i> (L.) Link	Caesalpiniaceae	Shrub
<i>Senna tora</i> (L.) Roxb.	Caesalpiniaceae	Herb
<i>Sida acuta</i> Burm.f.	Malvaceae	Shrub
<i>Sida cardifolia</i> L.	Malvaceae	Herb
<i>Sida cordata</i> L.	Malvaceae	Climber
<i>Solanum americanum</i> Mill.	Solanaceae	Herb
<i>Sphaeranthus indicus</i> L.	Asteraceae	Herb
<i>Sphagneticola trilobata</i> (L.) Pruski	Asteraceae	Herb
<i>Spilanthes acmella</i> Murr.	Asteraceae	Herb
<i>Striga angustifolia</i> (D. Don) C.J. Saldanha	Scorpiariaceae	Herb
<i>Synedrella nodiflora</i> (L.)	Asteraceae	Herb
<i>Tephrosia purpurea</i> L.	Fabaceae	Shrub
<i>Themeda triandra</i> Forskal	Poaceae	Herb
<i>Tragia involucrata</i> L.	Euphorbiaceae	Climber
<i>Trianthema portulacastrum</i> L.	Aizoaceae	Herb
<i>Tribulus terrestris</i> L.	Zygophyllaceae	Herb
<i>Trichodesma indicum</i> (L.) R. Br	Boraginaceae	Herb
<i>Tridax procumbens</i> L.	Asteraceae	Herb
<i>Triumfetta rhomboidea</i> Jacq.	Tiliaceae	Shrub
<i>Typha angustata</i> Bory & Chaub.	Typhaceae	Herb
<i>Urena lobata</i> L.	Malvaceae	Shrub
<i>Vernonea cinerea</i> (L.) Less.	Asteraceae	Shrub
<i>Vicoa indica</i> (L.) DC	Asteraceae	Herb
<i>Wedelia chinensis</i> (Osbeck) Merr.	Asteraceae	Herb
<i>Xanthium indicum</i> Koen.	Asteraceae	Shrub
<i>Zornia diphylla</i> (L.) Pers.	Fabaceae	Herb

Table 3: List of medicinal plants (weed) from the study area

Botanical name	Local name	Family	Parts used / uses
<i>Abrus precatorius</i> L.	Kuntrimani	Fabaceae	Roots diuretic, tonic, seed paste used in affections of nervous system
<i>Abutilon indicum</i> L.	Thuthi	Malvaceae	Root and leaf decoction used in cough, cold. Seeds poisonous.
<i>Acalypha indica</i> L.	Kuppaimeni	Euphorbiaceae	Bark – Astringent. Pods in urinary diseases. Twigs used as tooth brush.
<i>Achyranthes aspera</i> L.	Nayuruvi	Amaranthaceae	Whole plant – used in kidney stone. Root in dental care.
<i>Aerva lanata</i> (L.) Juss. ex Schult.	Poolaipoo	Amaranthaceae	Flowers useful in kidney stone. Root extract useful in head-ache
<i>Aeschynomene indica</i> L.	Nettithakkai	Fabaceae	Leaf in leprosy

<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.	Ponnanganni keerai	Amaranthaceae	Leaves boiled and eaten. Stem and leaves used in eye troubles.
<i>Amaranthus spinosus</i> L.	Mullukeerai	Amaranthaceae	Whole plant – suitable food for patients suffering from fever. Leaves used as enema and to cure piles and leprosy.
<i>Ammannia baccifera</i> L.	Neermel neruppu	Lythraceae	Whole plant – extract used against ring worm.
<i>Anisomeles malabarica</i> (L.) R.Br.	Perunthumbai	Lamiaceae	Plant – extract used in rheumatism.
<i>Argemone mexicana</i> L.	Piramathandu	Pappavariaceae	Sap – used in eye diseases. Yellow milky sap is used to treat scabies.
<i>Aristolochia bracteolata</i> Lam.	Aaduthendapalai	Aristolochiaceae	Roots – purgative, anthelmintic.
<i>Bergia capensis</i> L.	Punnai	Elatinaceae	Whole plant – wounds, cuts and boils.
<i>Biophytum sensitivum</i> (L.) DC.	Nilaccurunki	Oxalidaceae	Whole plant – tonic in skin complaints, decoction of leaves in diabetes.
<i>Blepharis maderaspatensis</i> (L.) Heyne ex Roth.	Nethirappoondur	Acanthaceae	Leaf paste applied to forehead for curing head-ache.
<i>Boerhavia diffusa</i> L.	Vattacharanai	Nyctaginaceae	Roots and leaves – diuretic and anti – inflammatory.
<i>Calotropis gigantea</i> (L.) R.Br.	Erukku	Asclepiadaceae	Milky juice applied locally in thorn pricks. Flowers – in asthma.
<i>Cassia absus</i> L.	Kattu kollu	Caesalpinioideae	Leaves used in cough. Seeds in skin troubles and ring worms.
<i>Cassia auriculata</i> L.	Avaram	Caesalpinioideae	Roots used in skin diseases. Leaves and fruits anthelmintic. Seeds in ophthalmic, diabetes and chylous urine.
<i>Cassia occidentalis</i> L.	Peithagarai	Caesalpinioideae	Leaves and seeds in skin diseases.
<i>Cassia tora</i> (L.) Roxb.	Oosithagarai	Caesalpinioideae	Leaves and seeds are used for ringworm.
<i>Celosia argentea</i> L.	Kopurakontrai	Amaranthaceae	Seeds used in diarrhoea, mouth sore and eye – troubles.
2. <i>Centella asiatica</i> (L.) Urban.	Vallarai	Apiaceae	Whole plant – diuretic and tonic. Leaf extract as tonic for improving the memory and used in cardiac diseases.
<i>Cleome gynandra</i> L.	Thai vezhai	Capparaceae	Leaf extract – used in head-ache, rheumatism. Seeds anthelmintic.
<i>Cleome viscosa</i> L.	Naikkadugu	Capparaceae	Leaf juice – digestive. Seeds anthelmintic.
<i>Clitoria ternatea</i> L.	Sangupushpam	Fabaceae	Root, leaf and seeds used to cure head-ache & fever.
<i>Coccinia grandis</i> (L.) Voigh.	Kovai	Cucurbitaceae	Root, leaf and seeds used in diabetes and skin diseases. Fruits edible.
<i>Commelina benghalensis</i> L.	Kanavazhai	Commelinaceae	Whole plant – laxative.
<i>Cuscuta reflexa</i> Roxb.	Akasvalli	Cuscutaceae	Whole plant – flatulence, purgative, itching, wounds, liver complaints, jaundice, expectorant.
<i>Cynodon dactylon</i> (L.) Pers.	Arugampullu	Poaceae	Plant extract – used to reduce the blood sugar level – also used in urinary troubles, diuretic.
<i>Cyperus rotundus</i> L.	Korai	Cyperaceae	Rhizome – diuretic, aromatic.
<i>Datura innoxia</i> Mill.	Oomathai	Solanaceae	Leaves and fruits – used for asthma and also in skin diseases.
<i>Desmodium triflorum</i> (L.) DC.	Sirupulladi	Fabaceae	Leaves – used in dysentery and diarrhoea
<i>Eclipta prostrata</i> (L.) L. Mant.	Karisalai	Asteraceae	Whole plant used in chronic fever, antiseptic and as hair tonic and in jaundice.
<i>Euphorbia hirta</i> L.	Amman pacharisi	Euphorbiaceae	Whole plant – used in cough and asthma. The latex is applied to warts.
<i>Evolvulus alsinoides</i> (L.) Linn.	Vishnukirandhi	Convolvulaceae	Whole plant – as tonic and febrifuge also as vermifuge. Dried leaves used in asthma.
<i>Indigofera limmaei</i> L.	Seppu nerunji	Fabaceae	Leaf – decoction given in ellipsy and insanity.
<i>Ipomoea obscura</i> (L.) Ker Gawl.	Siruthali	Convolvulaceae	Leaves – used in aphthous affections
<i>Ipomoea pes-tigridis</i> L.	Pulisuvadi	Convolvulaceae	Leaves – used in the form of poultice to boils, sores, pimples. Roots purgative.
<i>Jatropha glandulifera</i> Roxb.	Vella adhalai	Euphorbiaceae	Plant juice and leaves used in warts and tumours. Seed oil – purgative and used in rheumatism.
<i>Jatropha gossypifolia</i> L.	Chevvathalai	Euphorbiaceae	Decoction of leaves used as purgative and stomechic. Latex in ulcers.
<i>Leucas aspera</i> (Willd.) Link.	Thumbai	Lamiaceae	Juice of leaves applied in chronic skin eruptions and swellings.
<i>Martynia annua</i> L.	Pulinagam	Pedaliaceae	Leaves used in epilepsy. Juice in throat disorders.
<i>Merremia tridentata</i> (L.) Hall. f.	Ammayar koonthal	Convolvulaceae	Plant – used in rheumatism, piles and urinary disorders. Root – decoction used in tooth – ache.
<i>Mimosa pudica</i> L.	Thottarsinungi	Mimosaceae	Root – decoction used in urinary troubles. Leaf paste – applied to hydrocele.
<i>Mollugo nudicaulis</i> Lam.	Parpadagam	Aizoaceae	Leaves – applied to boils to remove pus. Plant – pectoral – used in whooping cough.
<i>Mollugo pentaphyla</i> L.	Seeragapoondur	Aizoaceae	Plant – stomachic, antiseptic used in poultices for sore legs.
<i>Passiflora foetida</i> L.	Mosukkattan	Passifloraceae	Decoction of leaves used in asthma. Fruits emetic.
<i>Pavonia odorata</i> Willd.	Peramutti	Malvaceae	Whole plant – in rheumatic fever.
<i>Pedaliium murex</i> L.	Yanai nerungi	Pedaliaceae	Whole plant used in urinary disorders.
<i>Phyla nodiflora</i> (L.) Greene.	Poduthalai	Verbenaceae	Herb – diuretic and febrifuge. Paste of fresh plant applied to boils, swollen, cervical glands.
<i>Physalis minima</i> L.	Sudakkuthakkali	Solanaceae	Fruits and leaves used as tonic, diuretic and tonic.
<i>Sida acuta</i> Burm.f.	Arvalmanai poondur	Malvaceae	Decoction of root – used for rheumatic affections.
<i>Sida cardifolia</i> L.	Vellakurunthotti	Malvaceae	Whole plant – used in piles and abscess. Root – nerve tonic.
<i>Tephrosia purpurea</i> (L.) Pers.	Kattukozhinji	Fabaceae	Root – used to bowel complaints.
<i>Tribulus terrestris</i> L.	Nerunjil	Zygophyllaceae	Herb – diuretic.
<i>Trichodesma indicum</i> (L.) R. Br.	Kasithumbai	Boraginaceae	Whole plant – emollient, diuretic. Roots – used in dysentery, pounded and applied to swellings of joints.
<i>Tridax procumbens</i> L.	Kinathuppoondur	Asteraceae	Leaf – juice – used to check the bleeding of wounds.
<i>Triumfetta rotundifolia</i> Lam		Tiliaceae	Root – ulcers, parturition, diarrhoea, tonic. Stem bark and leaf – diarrhoea. Flower leprosy, demulcent, astringent.

Conclusion

Biological diversity is an asset of vital significance to human beings, as it provides food, medicine and industrial raw materials along with an immense potential for accruing many unknown benefits to future generations. As we know weeds play a key role in the ecosystem which the gardener seeks to manage. This study may be useful for agriculturists as well as taxonomists and other scientists involved in the management of weeds. Thus overall study indicates identification and reporting about weeds will be helpful for studying biological and ecological adaptations of weeds, their magnitude of harmful effects on field and Horticultural crops.

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