



MEDICINAL IMPORTANCE OF SOME WEED FLORA OF B.R.PROJECT AREA, KARNATAKA

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Abstract:

The present paper deals with ethno-botanical values of 33 weed plants occurring in B.R.Project area of Karnataka. The survey was conducted for a period of six months from January to June 2007. The botanical name, family and plant parts used for each weed species is given along with its medicinal uses. Out of 21 families Euphorbiaceae appeared to be dominant with 6 species and Amaranthaceae by 3 species and 2 species each in Asteraceae, Apocynaceae, Convolvulaceae, Solanaceae and Malvaceae respectively. The results of the survey depicts that characterization of medicinal plants, active principle, standardization of their cultivation and formulation of new drugs would be useful for curing many dreaded diseases.

Key Words: Weed Flora, B. R. Project Area & Medicinal Value

Introduction:

The species which grow on their own, without human efforts can be termed as weeds. They are in general harmful to the crops and can dominate the vegetation if not cared for. The weeds are of no use as they are harmful to crop. They are generally controlled from crop fields and destroyed. Many of the weeds are found to be medicinally important (Gambhire and Biradar, 2016). In India weed plants are recognized for their medicinal values and being used in various traditional systems of medicines. Most of the medicinal weeds growing in this region remains undocumented, although, their use is locally in vogue.

The distribution of Indian medicinal plants has been studied by Chopra *et al.* (1956), Ahuja (1965), Dastur (1966), Bhargava (1982) and Atal and Kapur (1989). The ethno-medicinal studies have been carried out by Jain (1991), Das *et al.* (2003) and Richa and Bhargava (2005). Since then, no sincere effort has been made to explore the medicinal weed plants of B.R.Project area pertaining to specific disease. Hence, an effort has been made to list the herbal plants of the above-mentioned area used as pharmacological drugs.

Materials and Methods:

Study Area:

The Bhadra Project area is located at latitude 13°42' N and longitude 75°38'20" E and situated in Malnad region of Karnataka.

Collection of Data:

The present investigation was conducted during January to June 2007 by adopting the methodology of Jain (1989). A general survey of the weeds was made and tried to observe different plants like herbs, shrubs and trees. The works of Chopra *et al.* (1956), Kaushik and Dhiman (2000) and Sarma (2002) were referred to taxonomic identification. Frequency percentage of the each species were calculated by following the method given by Mishra (1968).

Results and Discussion:

A total of 33 medicinal weed plants belonging to 21 families have been reported in this article. Among 21 families Euphorbiaceae found to be dominant with 6 species followed by Amaranthaceae with 3 species and 2 species each in Asteraceae, Apocynaceae, Convolvulaceae, Solanaceae and Malvaceae respectively (Figure 1). The information regarding medicinal uses of plants reported are scrutinized with published literatures. However, the medicinal properties and active principles of these plants should be standardized significantly and tested for safe use.

Though, there is a wide range of weed flora traditionally being available in B.R.Project area, Karnataka which have the ability to cure different kinds of diseases. These plants as whole or their parts are used either in the form of decoction, grinded powder or mixed with milk / honey. A list of medicinal weed plants with their family, botanical name, frequency and parts used is presented in Table-1.

It has been realized that medicinal weed flora play an important role in future in ayurvedic medicinal system. These weed floras are used in the preparation of many medicines to cure various diseases. Now the people move to ayurvedic medicine system, which has no side effect and easily provide with minimum rate by vaidhya or medical practitioner.

Conclusion:

Weed plants are in general harmful to the crops and can dominate the vegetation if not cared for. Many of the weeds are useful for medicinal purposes. About 33 weed species of B.R.Project area of

Bhadravathi taluk as source of medicine. There is need for further investigation on these weeds for active principle and to test their safety and efficacy so that it can be further utilized in health care needs.

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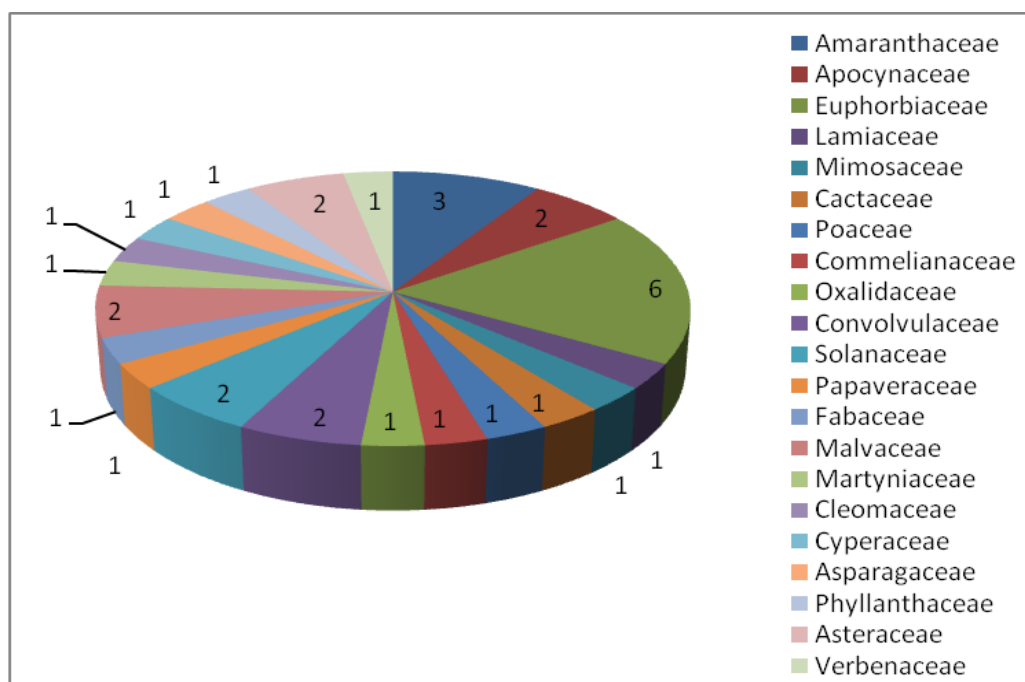


Figure 1: Number of Medicinal weed flora in each family

Table 1: Medicinal weed plants and their uses in B.R.Project area

S.No	Botanical Name	Family	Frequency %	Medicinal Uses
1	<i>Achyranthes aspera</i>	Amaranthaceae	20	Leaf paste is used against snakebite, skin diseases and piles.
2	<i>Calotropis gigantea</i>	Apocynaceae	10	Decoction of dried flowers and rot bark is given to cure cough and dysentery
3	<i>Euphorbia hirta</i>	Euphorbiaceae	10	Hot water extract of whole plant is given to cure cough, asthma, bronchitis and dysentery.
4	<i>Euphorbia tirucalli</i>	Euphorbiaceae	5	Heated milky fluid is used for ear ache and tooth ache.

5	<i>Jatropha curcas</i>	Euphorbiaceae	40	Leaf paste is applied on wounds, swelling and skin diseases.
6	<i>Leucas aspera</i>	Lamiaceae	15	Fumes from leaf are used as insect repellent. Paste of whole plant is used to cure erysipelas.
7	<i>Mimosa pudica</i>	Mimosaceae	80	Leaves, stems and roots are roasted in castor oil and applied externally to cure piles.
8	<i>Opuntia dillenii</i>	Cactaceae	5	Fruit is taken to cure whooping cough. whole plant extract is used against snakebite.
9	<i>Calotropis procera</i>	Apocynaceae	15	Flowers with goat milk are crushed and given orally to remove kidney stones.
10	<i>Ricinus communis</i>	Euphorbiaceae	10	Root bark pounded and mix with honey are given orally for relief of cough.
11	<i>Tridax procumbens</i>	Asteraceae	8	Leaf juice is used to check haemorrhage from cuts and wounds.
12	<i>Cynodon dactylon</i>	Poaceae	90	Plant juice is used for the treatment of piles and nasal bleeding.
13	<i>Alternanthera sp.</i>	Amaranthaceae	20	The juice of the whole plant is mixed with small amount of garlic and given for the treatment of pneumonia.
14	<i>Commelina benghalensis</i>	Commelinaceae	8	The latex from stem is widely used as a remedy for eye acne.
15	<i>Oxalis corniculata</i>	Oxalidaceae	5	Its infusion is given for dysentery. fever and scurvy.
16	<i>Ipomea fistulosa</i>	Convolvulaceae	10	The plant is used as abscess
17	<i>Datura metel</i>	Solanaceae	5	Leaf juice is used to cure asthma
18	<i>Argemone mexicana</i>	Papaveraceae	10	Whole plant extract is used in burns, cuts and wounds
19	<i>Senna tora</i>	Fabaceae	15	Pods, fruit pulp used in the treatment of eczema, dysentery and diarrhoea.
20	<i>Sida cordata</i>	Malvaceae	5	Whole plant extract is used to cure dysentery and diarrhoea
21	<i>Solanum nigrum</i>	Solanaceae	10	Plant juice is used to cure jaundice and liver disorders.
22	<i>Helicteris isora</i>	Malvaceae	5	The fruit used against gastric disorders.
23	<i>Martynia annua</i>	Martyniaceae	10	Leaf juice is used in epilepsy and sour throat
24	<i>Cleome viscosa</i>	Cleomaceae	5	Leaf and seeds given to cure ear pain and antihelminthic
25	<i>Kirganelia reticulata</i>	Euphorbiaceae	10	Whole plant extract is given for rheumatism and gout
26	<i>Cyperus rotundus</i>	Cyperaceae	2	Thirst, stomach disorders
27	<i>Asparagus racemosus</i>	Asparagaceae	5	Increasing milk of feeding mothers, diarrhoea
28	<i>Phyllanthus niruri</i>	Phyllanthaceae	5	Jaundice, psoriasis dyspepsia
29	<i>Amaranthus spinosus</i>	Amaranthaceae	10	Leprosy, bronchitis and piles
30	<i>Euphorbia geniculata</i>	Euphorbiaceae	5	Given orally for diarrhoea and dysentery. Leaves and latex applied against skin diseases and syphilis; milky juice applied to treat wounds, pimples, vitiligo, skin diseases.
31	<i>Chromolaena odorata</i>	Asteraceae	10	The plant is used for the treatment of wounds, rashes, diabetes, and as insect repellent. It has antifungal and antibacterial properties

32	<i>Lantana camara</i>	Verbenaceae	20	It is used in the treatment of cancer, skin itches, leprosy, rabies, chicken pox, measles, asthma and ulcers
33	<i>Ipomea carnea</i>	Convolvulaceae	60	A glycosidic saponin has also been purified from this plant with anticarcinogenic and oxytoxic properties.