

Folk Medicinal Value of Some Weeds around Hyderabad

Krishna CM^{1*}, Gupta V¹, Bansal P¹, Kumar S¹, Kumar SP², Kumar TP³, Sharma S⁴

¹National Institute of Ayurvedic Pharmaceutical Research (NIAPR), Patiala, Punjab, India

²Indian Institute of History of Medicine, Osmania Medical College, Hyderabad, India

³J. S. S. Ayurveda Medical College, Myorse-15, Karnataka, India

⁴Regional Research Institute, Nagpur, India

ABSTRACT

There are many weeds seen which are uprooted to protect the cultivated plants. Some of these plants have good medicinal and economic value. Weeds commonly seen in the cultivated lands in and around Hyderabad were collected and identified using the standard literature. The medicinal values of these plants have been identified by the folk lore claims and the standard literature of the Indian systems of medicine (Ayurveda and Siddha). Most of these weed plants identified are being used in the Indian systems of medicine and public domain since many centuries, which have much clinical importance. Hence the local people and farmers must be educated regarding the medicinal uses of these weed plants for health care and for the generation of revenue through the collection of weeds.

Keywords: Weed plant, Folk lore, Ayurvedic use, Hyderabad.

INTRODUCTION

Plants have been, and still are, a rich source of many natural products in major part of India and other countries, most of which have been extensively used for traditional human health care systems. The vast majority of people in the world takes care of themselves and uses healing plants that have been used for hundreds of generations. [1-4] India is a country of vast biodiversity and traditional knowledge of using herbal medicines to cure many ailments. It has nearly 20,000 species of plants of medicinal and economic importance. Indian System of Medicine, which includes Ayurveda and Siddha systems of medicine, depends on the medicinal herbs for the treatment of various ailments. Estimate of 250,000 flowering plants in the world [5], more than 8000 species are weeds. [6] The weeds grow along with the crop plants (agro-ecosystems) and are regarded as nuisance for crops. It involves lot of money and labour to get rid of these unwanted plants by using weedicides and manual eradication. Most of the world is ignorant about the positive side of these weeds and this unseen part is their medicinal value. Some of weeds are the raw materials to the pharmaceutical industries as they yield chemicals used in formulation of various drugs, for preparing herbal formulations and an important source of medicines for indigenous peoples. [7-8] There are a number of reasons that the rural communities use weeds as medicine found in nearby areas. [9]

***Corresponding author: Mr. Krishna CM,**

National Institute of Ayurvedic Pharmaceutical Research (NIAPR), Patiala, Punjab, India

E-mail: vikas_4308@rediffmail.com

The study of medicinally important weeds has not been realized as fully as other traditional communities elsewhere such as wild plants in forest ecosystems which often exclude weed species [10-13] In view of the rapid loss of diversity of plants, natural habitats, traditional community life, cultural diversity and knowledge of medicinal plants, documentation of medicinally important weeds is an urgent matter. Secondly, search for new medicines with low cost, more potential and without adverse side effect is needed to solve the major health problems. [14]

Hyderabad, the capital city of central Andhra Pradesh, is located in Deccan Plateau. It extends on both the banks of Musi River up to an area of 250 square km and lies around 500 meters above the sea level and at 17.366° N latitude & 78.476° E longitude. It has a forest area of around 5 % and around 650 varieties of the plants. Rice, Jowar, Bajra, Sesame, Castor, Cotton and other pulses are the important plants of cultivation. These plants have a tough competition with the weeds and get destroyed. Hence these weed plants are removed timely during cultivation. Some of these weed plants also have good economic and medicinal value and are also used in the tribal medicine for the treatment of various ailments. So a folklore survey was taken up to identify the weeds of medicinal importance available around Hyderabad district of Andhra Pradesh, India.

A Field survey was conducted in cultivation lands in and around Hyderabad and discussion with the agriculturists and farmers and information regarding the weeds was recorded. The information procured was validated by comparing the information given by two or three people. The collected weeds were identified by the morphological features using

Table 1: LIST OF MEDICINALLY USEFUL WEEDS

S. No	Botanical name/ Vernacular Name (Family)	Folklore uses		Useful parts
		Ayurveda	Siddha	
1.	<i>Abutilon indicum</i> / Tuttiri benda (Malvaceae)	Demulcent, aphrodisiac, laxative, diuretic, sedative	Demulcent, tonic, laxative, diuretic and sedative	Leaves, bark, root, seeds
2.	<i>Acalypha indica</i> / Kuppichettu Kuppinta (Euphorbiaceae)	Anthelmintic, scabies, arthritis, asthma, bronchitis, headache	Worm infestation, gingivitis, burns, cough, constipation, skin eruptions, urinary disorders, purgative, emetic	Root, leaf, whole plant
3.	<i>Argemone mexicana</i> / Brahmamandi chettu (Papaveraceae)	Diuretic, anodyne, hypnotic, laxative, emetic, expectorant, narcotic, sedative	Leprosy, eczema, cough, leucorrhoea, dental diseases	Root, seed, whole plant, latex
4.	<i>Aristolochia bracteolata</i> / Gadide gadapa (Aristolochiaceae)	Purgative, emmenagogue, alterative, antiperiodic and anthelmintic.	Intermittent fever, worm infestations, skin diseases, eczema, urticaria, leprosy, gonorrhoea	Leaf, seed, root, whole plant
5.	<i>Boerhavia diffusa</i> / Atukamamidi (Nyctaginaceae)	Stomachic, laxative, diuretic, expectorant, diaphoretic, emetic, edema, anemia, heart diseases, dyspnea and eye diseases.	Nasal disorders, constipation, arthritis, dyspnea, jaundice, retention of urine, anasarca.	Whole plant, root
6.	<i>Cassia absus</i> / Chanubala vittulu (Caesalpinaceae)	Eye diseases	Skin diseases, eye diseases, constipation, ulcers, retention of urine	Leaf, seeds
7.	<i>Cassia occidentalis</i> / Kasinda (Caesalpinaceae)	Purgative, febrifuge, diuretic and antiperiodic	Constipation, rejuvenator.	Root, leaf, flower, seed.
8.	<i>Cassia tora</i> / Tagirisa (Caesalpinaceae)	Aperient, germicide, anodyne	Veneral diseases, glandular swellings, fever, skin diseases, urticaria	Root, leaf, seeds
9.	<i>Cleome viscosa</i> / Nelavaminta Kukkavaminta (Capparidaceae)	Carminative, anthelmintic, antiseptic, sudorific, rubefacient, skin diseases, polyuria, anemia and gynecological problems.	Indigestion, ear diseases, nasal disorders, skin eruptions, fever, worm infestations, abdominal disorders, coryza.	Root, leaf, seed, whole plant
10.	<i>Cyperus rotundus</i> / Tunga musta (Cyperaceae)	Stomachic, tonic, demulcent, diuretic, anthelmintic, carminative, diaphoretic, emmenagogue, vermifuge	Fever, thirst, worm infestations, dysentery and distaste	Tubers
11.	<i>Indigofera tinctoria</i> / Neeli chettu (Fabaceae)	Alterative, purgative, antiseptic, astringent	Fever, jaundice, anemia, arthritis, leucorrhoea	Root, leaf
12.	<i>Leucas aspera</i> / Tumiki (Labiatae)	Insecticide, scabies and snake bite		Whole plant
13.	<i>Oxalis corniculata</i> / Pulichinta kura (Oxalidaceae)	Antiscorbutic, astringent, appetizing, fevers and biliousness	Fever, headache, abdominal disorders, veneral diseases, warts, abscess, digestive disorders	Leaf
14.	<i>Phyllanthus amarus</i> / Nela usiri (Euphorbiaceae)	Diuretic, stomachic, febrifuge, anti-septic. Reduces jaundice, ophthalmopathy, fever and genitor-urinary disorders	Jaundice, diabetes, eye diseases, urinary disorders, skin diseases, menorrhagia, vomiting	Whole plant
15.	<i>Portulaca oleracea</i> / Gangavavili kura (Portulacaceae)	Diseases of kidney, dysuria, haematuria, gonorrhoea, haematemesis and haemoptysis	Eye diseases, amnesia, headache, constipation	Leaf, seed
16.	<i>Psoralea corylifolia</i> / Bavancalu (Fabaceae)	Anthelmintic, diuretic, diaphoretic	Glandular swellings, skin diseases, skin diseases, leprosy, laxative, carminative, tonic	Seeds
17.	<i>Solanum nigrum</i> / Kamanci chettu (Solanaceae)	Alterative, sedative, diaphoretic, diuretic, hydragogue and expectorant	Ascites, stomatitis, anemia, cough, tuberculosis	Leaf, fruit
18.	<i>Solanum surratense</i> / Vakudu (Solanaceae)	Aperient, digestive, alterative and astringent	Expectorant, diuretic, carminative, cough, tuberculosis, fever, hysteria	Whole plant
19.	<i>Sphaeranthus indica</i> / Bodataramu chettu (Asteraceae)	Stomachic, stimulant, alterative, demulcent	Eczema, skin diseases, worm infestations, piles and aphrodisiac	Root, leaf, flower, seed

the standard literature and with help of pharmacognosy scientist. The medicinal uses of these plants were recorded from the folk lore claims and the standard literature of the Indian systems of medicine.

The medicinal uses of the weeds plants used in the Indian system of medicine are enumerated as in Table 1. The list of the weeds with Botanical name, family, vernacular name, medicinal uses (Ayurveda and Siddha) and useful parts is mentioned in the alphabetical order of the botanical name of the plants. [15-24] As per the collected information it was identified that plants belonging to 15 families and 16 genera are identified as weeds. Most of the weeds identified were herbs or under shrubs and the medicinally useful part for most of the plants was whole plant, leaves or seeds. Several recent studies have proved the weedy plants contain many medically useful active principles (alkaloids, glycosides, polyphenolics, steroids, tannins, resins, flavonoids, tetraploids and fatty acids) that are able to cure many nutritional disorders and diseases [1, 25-35] in the human health care system.

Weeds compete with the cultivated plants and decrease their productivity hence these plants are removed for the increased productivity of the cultivated plants. Some of these weed plants have good medicinal value. These plants form the major source of medicine for the tribal people of most of the developing countries. So it is important to conserve the medicinally useful weeds. Farmers must be educated regarding the medicinal uses of the plants and trained to preserve the weeds with out affecting the development of the cultivated food plants and to collect and process the medicinally useful parts of the weed plants. This may help to develop additional revenue without disturbing the productivity of the commercial plants.

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