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Research Article

VALUABLE WILD HERB PLANT SPECIES FROM PRAVARA BASIN, AHMEDNAGAR MAHARASHTRA, INDIA

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ABSTRACT

Present investigation is aimed at gathering information of valuable wild plants species occurring in Pravara basin which have been ignored so far. Investigations of the remote areas where Pravara basin dwellers are reside for data collection, identification and documentation of the plant. Valuable wild plants are among the important service providing to human. In this study, a valuable survey of Pravara Basin from Ahmednagar districts, Maharashtra has been conducted through personal visit and interviews with key community members of the villages. Medicinal species ranked highest contributing to 100 % of reported use followed by food 47.05%. Based on their use-values 11 wild plant species scored high economic importance values represented in their actual or potential value-chain as food and medicine as well as being a vital pool for plant genetic material for food and agriculture. There are so many different kinds of plants out there in the world. It can really help to initially lump them into more manageable groups. We are surrounded by wild edible herb plants every day. In trying to learn about them, you might quickly feel overwhelmed by the staggering amount of information available. It is vital that you can identify the wild valuable plants that you intend to utilize. Some valuable plants have deadly poisonous look-alikes. Good field guides are invaluable. Wild valuable plants are very beneficial for you and your family for many reasons. First of all, there are wild valuable growing near you no matter what part of the world you live in. Chances are good, you can find a large number of species where you live and some of them are likely to be plentiful

INTRODUCTION

Pravara is the important smallest river of the major Godavari River located in western part of Ahmednagar districts, Maharashtra, India. The river originates in Western Ghats and meets to Godavari River. The water sources of Pravara River are Sahayadris hills of Western Ghats. Pravara River is occupying more or less the central position in the Maharashtra state and with an area of 6537 km2 (2524 sq mi). It is situated between 19°31'45"N and 73°45'5" E latitude and is situated somewhat in the upper Godavari basin. Indigenous traditional knowledge about the utility of wild plant resources for different purposes is in practice since long Gayake D. N., Awasarkar U.D. and P. P. Sharma (2013). Several texts have been written in different parts of world on the medicinal and edible plant resources. Some scholars of those days wrote the texts based on the information they had but still the vast reservoir of traditional knowledge is still to be documented. In doing this several researchers done excellent job. The use-values based on the number of repeated and independent reports were used to describe the relative importance of plants to local people and compare the local importance of different species Phillips O, *et, al* (1994) and Gazzaneo LRS, de Lucena RFP and de Albuquerque UP (2005). Characteristics and maintenance of indirect services of wild plants and ecosystems in the Mediterranean forests are well recognized to be linked to biodiversity and keystone species that are likely to play a vital role in relation to various ecosystem services to support multifunctionality of these forests in providing multiple goods and services to society Palahi M, Mavsar R, Gracia C and Birot Y (2008). Studies on medicinal plants of a particular area were carried by Nag and Hasan (2013).

MATERIAL AND METHODOLOGY

The present research involved extensive valuable studies, survey and collection of wild plants in different localities from

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Pravara basin, Ahmednagar district. During the fieldwork voucher specimens of each plant were collected and numbered by following standard methods (Jain and Rao, 1976). Plants specimens were identified with the help of keys to the families, genera and species provided in reputed floras like Cooke (1967), Singh *et al* (2000 & 2001), Pradhan and Singh (1999), etc. Balapure, *et. al*. (1987), Hopkins, (1901), Karnick, (1975), Macdonell & Keith, (1912), Sagreiya, (2005), Shastri, (1957) and Varma, Dipti (2015), and information about use in Ayurveda are based on Kapoor (2001). The information about the wild valuable plants given by mentioning there botanical name, family, common name and their uses.

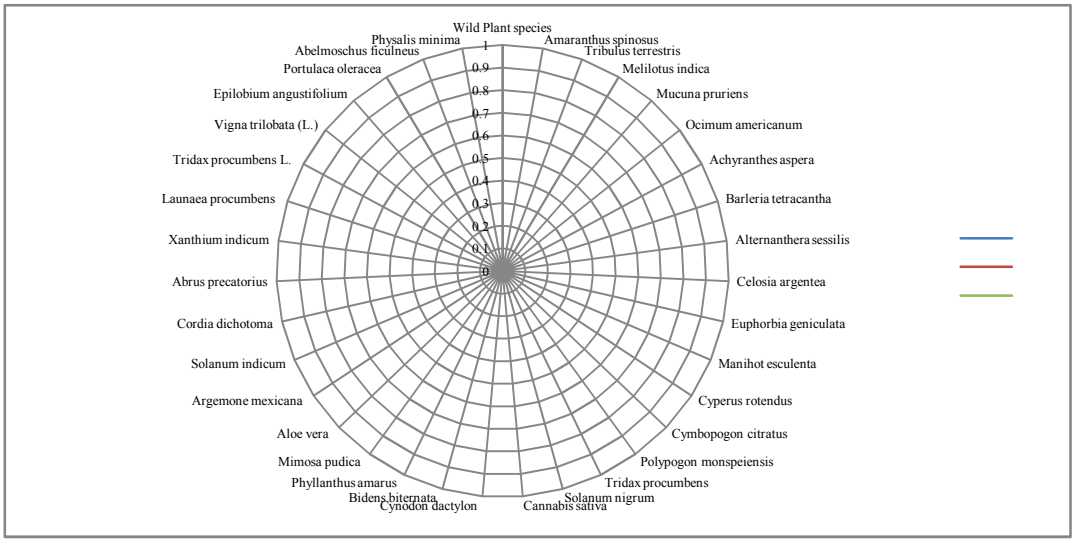
Photographs of some important specimens are taken for further details. Plants were identified using relevant scientific literature and standard floras.

RESULT AND DISCUSSION

This study illustrates the valuable importance of 34 wild plants of Parvara basin reported by local informants to provide significant food and medicine which are of fundamental importance for local livelihood development and resilience to environmental change.

Table No 1 List of valuable wild herb plant species of Pravara basin

	Wild Plant species	Local name	Family	Uses	
				Food	Medicine
1	*Amaranthus spinosus*	Katerimath	Amaranthaceae	+	+
2	*Tribulus terrestris*	*Sarata*	Zygophyllaceae	+	+
3	*Melilotus indica*	*Ran-methi*	Fabaceae	+	+
4	*Mucuna pruriens*	*Khaj kuhiri*	Fabaceae	+	+
5	*Ocimum americanum*	*Ran–tulsi*	Lamiaceae	+	+
6	*Achyranthes aspera*	*Aghada*	Amaranthaceae		+
7	*Barleria tetracantha*	Katekorta	Acanthaceae		+
8	*Alternanthera sessilis*	*Chimutkata*	Amaranthaceae	+	+
9	*Celosia argentea*	*Kombada*	Amaranthaceae		+
10	*Euphorbia geniculata*	*Dudhani*	Euphorbiaceae		+
11	*Manihot esculenta*	*Dudhani*	Euphorbiaceae		+
12	*Cyperus rotendus*	Nagarmotha	Cyperaceae	+	+
13	*Cymbopogon citratus*	*Gawatichaha*	Aracaceae	+	+
14	*Polypogon monspeiensis*	*Gawat*	Aracaceae		+
15	*Tridax procumbens*	*Dagadipala*	Asteraceae		+
16	*Solanum nigrum*	Amoni Kamoni	Solanaceae	+	+
17	*Cannabis sativa*	*Ganja*	Cannabaceae		+
18	*Cynodon dactylon*	*Durwa*	Poaceae		+
19	*Bidens biternata*	*Chikata*	Asteraceae		+
20	*Phyllanthus amarus*	*Bhuiawala*	Euphorbiaceae	+	+
21	*Mimosa pudica*	*Lajalu*	Mimosaceae		+
22	*Aloe vera*	*Korphad*	Liliaceae	+	+
23	*Argemone mexicana*	*Piwaladhotra*	Papaveraceae		+
24	*Solanum indicum*	Raan wange	Solanaceae		+
25	*Cordia dichotoma*	Gondhan	Ehretiaceae		+
26	*Abrus precatorius*	Gunj	Fabaceae		+
27	*Xanthium indicum*	Gokharu	Asteraceae		+
28	*Launaea procumbens*	Pathri	Asteraceae	+	+
29	*Tridax procumbens L.*	Ekdandi/ Jakhamjudi	Asteraceae		+
30	*Vigna trilobata (L.)*	Ranmug	Fabaceae	+	+
31	*Epilobium angustifolium*	Fireweed	Onagraceae		+
32	*Portulaca oleracea*	Purslane	Portulcaceae	+	+
33	*Abelmoschus ficulneus*	Ran Bhendi	Malvaceae	+	+
34	*Physalis minima*	chirboti, dhan mori	Solanaceae	+	+



List of valuable wild herb plant species of Pravara basin

Medicinal species ranked highest contributing to 100 % of reported use followed by food 47.05%). Based on their use-values *Amaranthus spinosus, Tribulus terrestris, Melilotus indica, Mucuna pruriens, Ocimum americanum, Achyranthes aspera, Barleria tetracantha, Alternanthera sessilis, Celosia argentea, Euphorbia geniculata, Manihot esculenta, Cyperus rotendus, Cymbopogon citrates, Polypogon monspeiensis, Tridax procumbens, Solanum nigrum, Cannabis sativa, Cynodon dactylon, Bidens biternata, Phyllanthus amarus, Mimosa pudica, Aloe vera, Argemone Mexicana, Solanum indicum, Abrus precatorius, Xanthium indicum, Launaea procumbens, Cordia dichotoma Tridax procumbens, Vigna trilobata, Epilobium angustifolium*, *Portulaca oleracea* and *Physalis minima* were among the highest-ranking valuable medicinal species, where as *Amaranthus spinosus, Tribulus terrestris, Melilotus indica, Mucuna pruriens, Ocimum americanum, Cyperus rotendus, Cymbopogon citrates, Launaea procumbens* and *Solanum nigrum* valuable wild herb species used as food. 11 wild plant species scored high economic importance values represented in their actual or potential value-chain as food and medicine as well as being a vital pool for plant genetic material for food and agriculture. The economic value contained in these species highlights the importance to consider them among the priority species for research and development programs necessary to sustain the local livelihood of traditional societies. Keeping in view the fast vanishing traditional knowledge, this study documents important information ensuring that future users recognize the contributions made by traditional communities, the current custodians of traditional knowledge.

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