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Original Research Article

An Ethnobotanical Study of Wild Edible Plants of District Baramulla Jammu and Kashmir

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ABSTRACT

Kashmir has a unique floral diversity and contains a rich quantity of green gold. The aim of this paper is to throw light on diversity of edible plants of Baramulla district of Jammu and Kashmir. The paper provides an account of 33 species of edible plants belonging to 17 different families. The dominant family being used by local population of district Baramulla is asteraceae with 04 different species.

Keywords:- Ethnobotany, Edible plants, Baramulla.

INTRODUCTION

Kashmir is characterized by a rich heritage of wild edible plants system. A famous quote by Kashmir's 14th century Sufi saint, Sheikh ul Alam "Ann poshi teli, Yeli van poshi'', throws light on the age-old understanding of the link between forests (van) and food productivity (ann) as forests are repositories of wild relatives of our food crop. Wild plants play vital role in the livelihoods of rural communities as well as in many developing countries (Jadhav VD 2011). Maximum population in many developing countries don't have enough food to meet their daily requirements and many more people are deficient in one or more micronutrients (FAO, 2004) and same is the case in India, the country with second largest human population on this planet. In India most rural communities depend on the wild edible plants to meet their food needs in periods of food crisis, as well as for additional food supplements. A detailed account of wild edible plant species occurring in India have given by Arora and Anjula (1996). Plants are the incredible, invaluable and traditional sources for the curability of various diseases in the form of medicines (Guerra et al., 2003). According to the study conducted by Debarata (2002) on the wild food plants of Midnapore, West Bengal showed that 31 wild edible plants species are frequently used during the flood and droughts.

Significant work in the field of ethnobotany has been done in the Himalayan State of Jammu and Kashmir by many workers like Abrol and Chopra (1962), Gupta et al. (1982), Kachroo and Nahvi (1976), Kiran et al. (1999), and Kaul et al. (1987). Many papers have been published on the ethno medicinal and economic aspects of plants of this state. But this is the first report on wild edible plants from district Baramulla.

MATERIALS AND METHODS

Study area

The state Jammu & Kashmir constitutes the Northern most extremity of India and is situated between 320 .17′ and 360 .58′ N latitude and between 370 .26′ and 800 .30′ E longitude. Baramulla is one among the 22 districts of J&K state, situated at an average

height of 1581m above mean sea level (AMSL) and is spread over an area of 4191 sq.kms. Baramulla district lies between 320 -58/ to 350 -50/ North latitude and 730 -45/ to 750 -20/ East longitude (Fig. 1). It is bounded in the North side by district Kupwara, in the South side by districts of Budgam, Poonch and parts of Srinagar and in the East side by Ladakh. Line of control lies in its West. The climate of the Baramulla district is of Mediterranean type with four distinct seasons viz. Spring, Summer, Autumn and Winter. The mean temperature ranges from -0.030C in January to 30.10 C in July. Average annual rainfall has been recorded as 1270 mm in district. Forests are one of the most important resources of district Baramulla, spreading over an area of 2963 sq. kms and the forests cover 71% area of the district (Raina,2002). During the course of study field trips of Tangmarg, Kreeri, Sopore and Pattan areas were conducted.

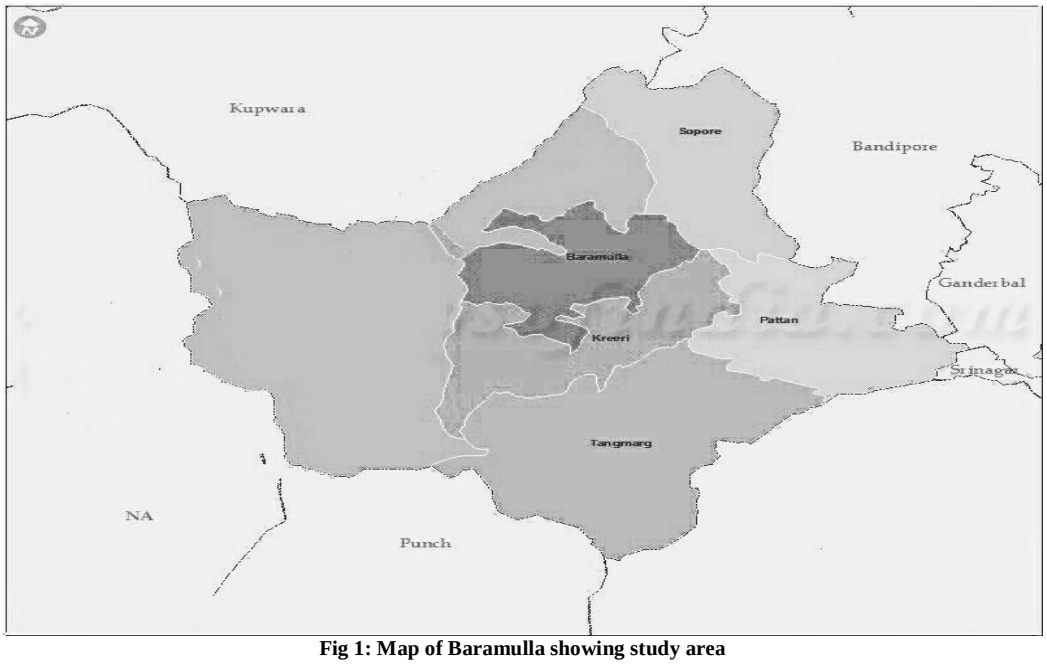

Fig 1: Map of Baramulla showing study area

Methodology

For the course of investigation entire areas were frequently surveyed during the course of study. Plant specimens were collected from the study area. Possible information regarding the use of plants was obtained from the local population and herbal healers (Hakeems). They provide us with ethnic knowledge regarding the medicinal plants which was noted accordingly. The unidentified plant specimens of appropriate size with relevant parts were collected from the field and sealed in polythene bags after taking photographs. The dried specimens were mounted on the herbarium sheets according to perfect Jain and Rao (1977). The plant species were identified by matching with the species at herbarium of Govt. Degree College Baramulla and by using concerned floras (Dhar and Kachroo, 1983; Gaur, 1999)

RESULTS

Baramulla district of Jammu & Kashmir represents a rich diversity of edible plants. Being the largest district of valley, Baramulla contains maximum number of villages where plants are used as vegetables in large quantity. The present study was an attempt to know about the diversity of edible species found in said areas. In the present study, a total of 33 plant species belonging to 17 families that were traditionally used by rural communities of Baramulla district in their day to day life and also surve as food. In the plant families, Asteraceae represented maximum number

of species (04 species) followed by Amaranthaceae, Apiaceae, Brassicaceae and Rosaceeae (3 species each). The present study revealed that ethno-botanical plants are being used as food from beginning by the people of Baramulla district.

Table 1. List of wild edible plants used by local people of (Tangmarg, Kreeri, Sopore and Pattan) Baramulla Jammu & Kashmir.

S.No.	Botanical name/ Family	Vernacular name	Part used	Uses
1	*Amaranthus caudatus* L. Amaranthaceae	Leesa	Whole plant	Herb is used as Vegetable
2	*Capsella bursa pastoris* L. Brassicaceae	Kralmund	Whole plant	Used as vegetable
3	*Malva neglecta* L. Malvaceae	Sochal	Leaves	Used as vegetable
4	*Mentha longifolia* L. Lamiaceae	Pudina	Whole plant	Shoots are used as vegetable. Also used as Condiment.
5	*Morus alba* L. Moraceae	Tul	Fruits	Fruits are eaten.
6	*Plantago lanceolate L.* Plantaginaceae	Gul	Leaves	Fresh leaves are used as vegetables.
7	*Plantago major L.* Plantaginaceae	bud gul	Whole plant	Used as vegetable in Juvenile stage.
8	*Ranunculus arvensis L.* Ranunculaceae	Cherim	Whole plant	The green part of the plant before flowering is cooked and is used as vegetable.
9	*Ranunculus muricatus L.* Ranunculaceae	Thul Hakh	Whole plant	Before flowering the plant is used as vegetable.
10	*Rumex acetosa L.* Polygonaceae	Abjie	Whole plant	Vegetable in juvenile stage.
11	*Taraxacum officinale* F.H.Wigg. Asteraceae	Handh	Leaves	Young leaves are cooked and used as vegetable.
12	*Solanum nigrum* L. Solanaceae	Cambli kul	Fruits	Fruits are eaten.
13	*Cichorium intybus L.* Asteraceae	Posh handh	Whole plant	Used as vegetable especially by women during pregnancy.
14	*Berberis lycium* Royle. Berberidaceae	Kawdach	Leaves	Raw leaves are eaten
15	*Vicia sativa* L. Fabaceae	Hibill hamb	Fruits	Beans are cooked as vegetable and raw beans are also eaten
16	*Scandix pectin veneris* L. Apiaceae	kachkagin	Leaves	leaves are used as vegetable
17	*Sisymbrium loeselli* L. Brassicaceae	Throughe	Leaves	leaves are cooked as vegetable
18	*Torilis scabra* Adans. Apiaceae	Moharmund	Roots	roots are used as vegetable
19	*Lactuca serriola* L. Asteraceae	Dodhkandicj	Leaves	leaves are used as vegetable
20	*Nepeta cataria* L. Lamiaceae	Gand soii	Leaves	leaves are used as vegetable
21	*Urtica dioica* L. Urticaceae	Soii	Leaves	leaves are used as vegetable
22	*Portulaca oleracea* L. Portulaceae	Nunar	Leaves	leaves are used as vegetable
23	*Chenopodium album* L. Amaranthaceae	kunne	Leaves	leaves are cooked as vegetable
24	*Stellaria media.*L Caryophyllaceae	Narumnor	Whole plant	cooked as vegetable
25	*Centaurea iberica* Trevir & Spreng. Asteraceae	Kreaxeh	Leaves	leaves are used as vegetable
26	*Polygonum aviculare* L. Polygonaceae	Drubbe	Leaves	leaves are cooked as vegetable
27	*Nasturtium officinale* W.T.Aiton. Brassicaeae	Nagbabur	Leaves	leaves are used as vegetable
28	*Cuminum cyminum* L. Apiaceae	Zxueer	Fruits	Fruits are eaten.
29	*Rosa indica* L. Rosaceae	Gulab	Flowers	Flowers are used in Kashmiri kehwa and khembeer
30	*Rubus niveus* Thunb. Rosaceae	chhanchh	Fruits	Fruits are eaten.
31	*Amaranthus paniculatus* L. Amaranthaceae	Wazig lissi	Leaves	leaves are cooked as vegetable
32	*Morchella esculenta* Fr. Morchellaceae	Guich	Whole plant	Fruiting body is used as vegetable
33	*Rubus ulmifolius* Schott. Rosaceae	chhanchh	Fruits	fruits are eaten

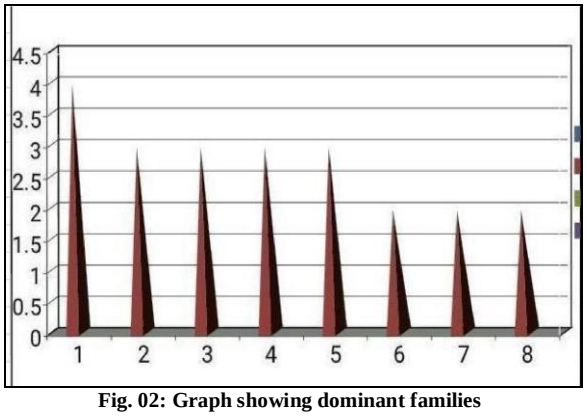

Fig. 02: Graph showing dominant families

CONCLUSION

The plants play an important role as a natural source of food since ages. The wild plants provide nutritious leaves, delicious fruits and other parts like bulbs, seeds etc. for people especially at the time of scarcity. District Baramulla is gifted with rich green diversity and local people have enough knowledge about the use of plants. The edible plants listed above (Table 01) are frequently used in almost all parts of district Baramulla especially in study areas which are Tangmarg, Kreeri, Pattan, Sopore and Baramulla. So, there is an urgent need of conserving the edible plants that are over harvested so that in future the coming generation could benefit from these precious plants that are a real gift of nature for the mankind.

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