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RESEARCH ARTICLE

ETHNOBOTANIAL STUDY OF SOME IMPORTANT MEDICINAL PLANTS OF SHOPIAN DISTRICT OF JAMMU AND KASHMIR (INDIA)

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ABSTRACT

The Shopian district is floristically very rich having both deciduous and evergreen forests which harbors wide range of biological biodiversity. The tribals of the area are Gujjar and Bakerwals. Paharis and shepherds (Chopans) also have living habits more or less like the tribals. They have many things common to each other. These tribals and some local people have been traditionally using native plants for the alleviation of several ailments. These people either cannot afford costly mode of treatment or have a firm faith in their own remedies whether Allopathic, Ayurvedic or Unani. In the present paper 35 selected medicinal plant species, used extensively by local people and tribal communities have been screened qualitatively to find out their ethnomedicinal properties. The listing includes botanical names, family, local names, part used, used for and mode of application.

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INTRODUCTION

Kashmir has a long history of utilization of herbal drugs. There has been a continuously growing tradition of herbal treatment, and both Ayurvedic and Unani systems of medicine have played a major role in the health care systems of this region. Kashmir has produced famous hakims and, who have been reported to make miracles in alleviating the sufferings by prescribing herbal drugs (Kaul, 1997). These medical practitioners prescribe herbal mixtures emphasizing the principle of synergistic activity among the components of plant ingredients in these mixtures. It is assumed that, just as the body is designed to do the same from medicinal plant materials. The herbal mixtures form the basis of prescriptions and these are frequently prepared through a process which may include drying, crushing, heating, boiling, even reducing to a form of ash. The multiple ingredients in a traditional prescription may include some plant materials which have been selected to address the particular site of pathology, others to stimulate a more generalized immune response, still others to offset side-effects in some of the ingredients, and others to increase cellular uptake. This complex approach to pharmacology is based on a concept of 'synergistic activity' of the multiple components in a traditional formula.

In view of the demand of these herbal mixtures, there has to be a regular supply of medicinal plants to the market (Hooker, J.D. 1872-1897). These medicinal plants are mostly collected from wild sources and sold in Kashmir market under different names (Kaul, R.N. 1928). In early times these medicines used to be very cheap and were designated as 'common man's medicine'.

MATERIALS AND METHODS

Study Area

Shopian district came into existence in 2007 and was carved out of the Pulwama district. The geographical area of the district is 312 Sq. km (Hussain, Majid, 1988), with a population of 266215. It is situated at a distance of 51 km from Srinagar capital. The district Shopian derives its name from its town Shopian, about which Frederic Drew, while justifying the basis of its nomenclature, states that it is the distortion of word "SHAH-PAYAN", i.e., Royal Stay. Shopian district is known as the "Apple Bowl" of the state. The district possesses tremendous scope for expansion of fruit industry, which can boost the economy not only of this district but to the whole state.

Methodology

Ethnomedicinal surveys of the various sites of district shopian were undertaken during the spring and summer seasons of the

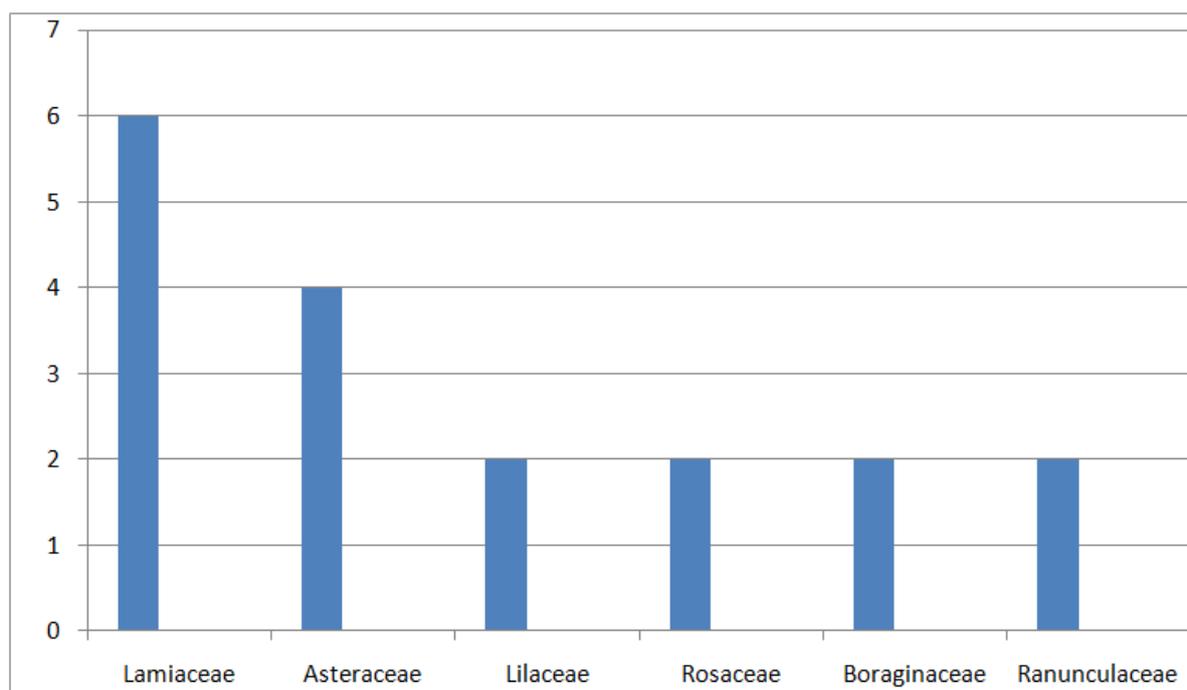
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Table 1. Enumeration of Medicinal Plants used in Shopian district of Jammu & Kashmir

S.No	Botanical Name	Family	Local Name	Part used	Used for and Mode of Application
1	<i>Achillaemilefolium</i> L.	Asteraceae	Pahel-gas	Whole plant	Common cold: 5 g whole plant extract is taken 2 times a day for 3-days.
2	<i>Aconitum heterophyllum</i> wall. Ex.Royle.	Ranunculaceae	Patris	Root	Tooth ache: Fresh root is chewed until pain is removed.
3	<i>Adiantumvenustum</i>	Filicinae	Geuther	Leaves	Skin eruptions: Fresh juice of leaves is used once a day for 6-days.
4	<i>Aesculusindica</i> Hook.	Hippocastanaceae	Handoom	Fruit	Hair fall: Powder of a fruit is made into paste with mustard oil, applied on a head twice a day before & after hair wash.
5	<i>Anagalisarvensis</i> L.	Primulaceae	Teherisaban	Aerial part	Pimples: water extract of aerial part is applied externally once a day for 2-3 days.
6	<i>Arnebiabenthamii</i> (Wall. Ex G. Don)	Boraginaceae	Khazaban	Root, leaves	Fever & Bronchitis: Leaves are put in tea or water to alleviate cough & fever
7	<i>Brassica campestris</i> L.	Brassicaceae	Tilgogul	Seed	Dandruff/ Hair fall: Seed oil is applied on hair daily after hair wash as a hair tonic, enhances hair growth, prevents dandruff formation and hair fall.
8	<i>Boragoofficinalis</i> L.	Boraginaceae	Botin	Seed	Rheumatism: The seed oil is applied externally once a day for 5- days.
9	<i>Calendula officinalis</i>	Asteraceae	HameshBahar	Flower	Muscle spasm: Paste of flower is mixed with ghee & massaged thoroughly at bed time for 5-days.
10	<i>Colchicum luteum</i> Baker.	Liliaceae	Whirkin posh	Corm	Joint pain: Corm is grind into paste, mixed with mustard oil & massaged twice a day for 10-15 days.
11	<i>Cuscutareflexa</i> Roxb.	Cuscutaceae	Kuklipot	Whole plant	Warts: Paste of whole plant is applied externally twice a day for 15-20 days.
12	<i>Cydonia oblongata</i> Mill.	Rosaceae	Bomb chont	Fruit	Asthma: The fresh pulp of fruit make excellent preserves, jellies & syrups. 20 g Jelly is taken twice a day for 20 days.
13	<i>Daturastramonium</i> L.	Solanaceae	Datur	Seed	Dental caries: seeds are burned to smoke in a cigar the cigar is put on the affected tooth, inhaled 2-3 times at the time of pain.
14	<i>Ficus carica</i> L.	Moraceae	Anjeer	Leaves	Hyper critic dermatitis: Fresh sap of leaves is applied externally twice a day for 3-5 days.
15	<i>Fritillariaimperialis</i> L.	Lilaceae	Yemberzool	Bulb	Fever: The extract of bulb is taken twice a day for 1-5 days.
16	<i>Iris nepalensis</i> Wall Ex Lindle.	Iridaceae	Mazarmond	Rhizome	Pimples: Rhizome is crushed & sap is obtained, the sap is applied on pimples daily for 10-days.
17	<i>Juglansregia</i> L.	Juglandaceae	Doonkul	Leaves	Frost- bite: leaves boiled in water, the extract is used to wash feet for children in winter once a day at bed times for 2-5 days.
18	<i>Lycopuseuropacus</i> L.	Lamiaceae	Gagermanz	Aerial part	Skin allergy: The fresh juice of the plant is used to cure skin allergy of legs, caused by some weeds to the farmers during weeding in paddy fields.
19	<i>Marrubiumvulgare</i> L.	Lamiaceae	Troped	Leaves	Chest congestion:10ml leaf decoction is taken 2 times a day for 5-days
20	<i>Ocimumcanum</i> Sims	Lamiaceae	Baber	Aerial part	Skin problems: The aerial part is put in water & boiled. The extract is used to bath daily for 10 days.

Continue.....

21	Origanum vulgare L.	Lamiaceae	Mazren	Aerial part	Tonsillitis: The aerial part is made into fine paste & applied externally twice a day for 4-5 days.
22	Plantago major L.	Plantaginaceae	Logout gul	Leaves	Insomnia: The leaves are looked as vegetable & taken with rice twice a day for many days.
23	Potentillanepalensis Hooker.	Rosaceae	Panzpater	Root	High fever: One cup decoction of root given once a day for 10 days.
24	Prunella vulgaris L.	Lamiaceae	Kal-weth	Flower	Dizziness: The decoction of flower is mixed with prepared hot salt tea & taken twice a day for 2 days.
25	Pinus wallichiana A.B Jackson.	Pinaceae	Kayur	Resin	Cracked heel: After proper cleaning of crakes the region is pasted on the heels once at the bed time for 5-days.
26	Ranunculus scleratus L.	Ranunculaceae	Sochal	Root	Hypercritical dermatitis: The fine powder of the root is mixed with cow butter & applied externally against hypercritical dermatitis for 2 days
27	Rhododendron campanulatum D.Don....	Ericaceae	Wan-nas	Leaves	Toothache: The fine powder of leaves is put on painful tooth for pain relief.
28	Sagittariasagittifolia	Alismaceae	Kew	Leaves	Skin rashes: The fresh juice of the leaves is applied once a day for 2 days.
29	Salix babylonica L.	Salicaceae	Veer	Twig	Weak gums: Branch twigs are chewed daily once a day.
30	Saussurea Sacra Edgew.	Asteraceae	Zoogpadshah	Whole plant	Boil: The whole plant is made into paste mixed with pine resin & applied externally on boil.
31	Thymus serpyllum L.	Lamiaceae	Ardjavind	Flower	Asthma: 10g paste of petals is taken to an empty stomach early in the morning for 15-days.
32	Urticadioica	Urticaceae	Soi	Aerial part	Skin infections: The fresh aerial parts are rubbed on skin thrice a day for 2-days
33	Vicia faba L.	Fabaceae	Bagle	Whole plant	Skin abrasions: The poultice made from the plant is externally applied twice a day for 10-days.
34	Vitis vinifera L.	Vitaceae	Dush	Fruit	Diarrhea: Fruit 50g boiled in water, strained & taken as drink for diarrhea
35	Xanthium strumarium L.	Asteraceae	Phaghood	Root	Abscess: The extract of root is applied externally on abscess thrice a day for 3-days.



Graph 1. Showing 6 Dominant Families of Shopian Jammu and Kashmir

year 2015-2016as suggested by Schultes,1962; and Jain, 1967). Plants were collected from different sites of the study area and data relating to different ethnomedicinal uses were collected from native people of the area. This was initially done by carrying the plant specimens of the old men *and* sometimes to the old ladies. The informants were asked questions in their native language regarding traditional use of medicinal plants. The necessary information collected from the above people was further cross checked and verified from knowledgeable persons of the study area *and* key informants (Hakims). Data was collected as per the appropriate methodology. (Jain, 1995; Khan, 1993; Croom, 1983). Identification of the field collected plants was done from Herbarium of Botanical Garden of University of Kashmir and several published floras and some important works including Flora of Pulwama (Nawachoo *and* Kachroo, 1995), Flora of Srinagar Kashmir (Javeid, 1968), Reflection of Flora of Kashmir (Kachroo, 1978), and Contribution to the flora of Kashmir (Walietal, 1964).

RESULTS AND DISCUSSION

The Shopian district a part of Pirpanchal range of Kashmir Himalaya is very rich is medicinal plant wealth. These medicinal plants are used by local people *and* tribal communities (Gujjars *and* Backerwals) for various remedies (Bhat et al., 2012). Hence these medicinal plants have a great potential to be used in drug *and* pharmaceutical industries.(Tantray et al., 2009). In the present investigation, 35 plant species belonging to 23 families are used as traditional medicine for the treatment of various diseses. Lamiaceac has 6 species was the dominant family followed by Asteraceae, lilaceae, Rosaceaeetc (Table 1). Most of the medicinal plants are used in skin diseases, hairfall/ dandruff, fever, chest pain etc.

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