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Ethno-medicinal Survey of North Kashmir with Special Reference to Bandipora

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Abstract: Bandipora district is one of the 22 districts in Jammu and Kashmir State. The local people of the district have always used medicinal plants for the treatment of various ailments by traditional methods. Utilization of medicinal plants especially by tribal communities is directly linked to their culture and history. There are many villages that are repositories of indigenous knowledge and practices. Documentation of such knowledge is required in view of the day by day disappearing knowledge in the new generations. Therefore, in the present study an attempt has been made to document some locally available plants utilized traditionally by the inhabitants of this district. A total of 30 plant species belonging to 19 different families were reported used traditionally by the inhabitants. Study of this type would help developing a comprehensive database of the plants used in household remedies, strengthening the health care system in the villages and also in conserving the traditional knowledge for prosperity. A large number of people belonging to various tribal groups or races were interviewed during field trips and asked questions regarding the traditional use of plants. The data collected reveals that about 48 plant species belonging to 30 families find use in day to day life including medicinal, aromatic and cultural.
Keywords:- Ethnobotany, Therapeutic, Ayurvedic, Herbalism, Homeopathic.

I. INTRODUCTION

Ethnobotany (from ethnology, study of culture, and botany, study of plants) is the scientific study of the relationships that exist between peoples and plants. Ethnobotanists aim to document, describe and explain complex relationships between cultures and (uses of) plants, focusing primarily on how plants are used, managed and perceived across human societies. This includes use for food, clothing, currency, ritual, medicine, dye, construction, cosmetics and a lot more.[2] Richard Evans Schulte's, called the "father of Ethnobotany", [3] explained the discipline in this way: Ethnobotany simply means […] investigating plants used by primitive societies in various parts of the world. Intellectual property rights and benefit-sharing arrangements are important issues in Ethnobotany.

A. Roots of Ethnobotany

Plants have been wide used by American Indian healers, such as this Ojibwa man. Though the term "Ethnobotany" was not coined until 1895 by the US botanist John William Harshberger, the history of the field begins long before that. Pythagoreanism, which originated in 500 BC included a refusal to eat beans, perhaps because of the human relationship of the beans through matter. Theophrastus the father of botany wrote of plants and people's usage of them in his works. In A.D 77, the Greek surgeon Pedanius Dioscorides published De Materia Medica, which was a catalog of about 600 plants in the Mediterranean. It also included information on how the plants were used, especially for medicinal purposes. This illustrated herbal publication contained information on how and when each plant was gathered, whether or not it was poisonous, its actual use, and whether or not it was edible (it even provided recipes). For generations, scholars learned from this herbal publication, but did not commonly venture into the field until after the middle Ages due to the Inquisition.

B. Medieval and Renaissance Ethnobotany

During the mediaeval period ethno botanical studies were commonly found connected with monasticism. Notable at this time was Hildegard von Bingen. However most botanical knowledge was kept in gardens such as physic gardens attached to hospitals and religious buildings. It was thought of in practical use terms for culinary and medical purposes and the ethnographic element was not

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studied as a modern anthropologist might approach Ethnobotany today. In 1542 Leonhart Fuchs, a Renaissance botanist and medic, led the way back into field research. His " De Historia Stripium Commentarii Insignes" cataloged 400 plants native to Germany and Austria and had employed artists to directly illustrate the plants he had collected, rather than using illustrations derived from others' work, as had been common until this time.

C. The Age of Reason

John Ray (1686-1704) provided the first definition of "species" in his " Historia Plantarum": a species is a set of individuals who give rise through reproduction to new individuals similar to themselves. In 1753 Carl Linnaeus published "Species Plantarum", which included information on about 5,900 plants. Linnaeus is famous for inventing the binomial method of nomenclature, in which all species get a two-part name (genus, species). But he also carried out in 1832 a research expedition in Scandinavia asking the Sami people about their ethnological usage of plants. The age of enlightenment saw a rise in economic botanical exploration. Alexander von Humboldt collected data from the New World, and James Cook's Voyages brought back collections and information on plants from the South Pacific. At this time major botanical gardens were started, for instance the Royal Botanic Gardens, Kew in 1759. The directors of the gardens sent out gardener- botanist explorers to care for and collect plants to add to their collections. As the 18th century became the 19th Ethnobotany saw expeditions undertaken with more colonial aims rather than trade economics' such as that of Lewis and Clarke which recorded both plants and the peoples encountered use of them. Edward Palmer collected material culture artifacts and botanical specimens from people in the North American West (Great Basin) and Mexico from the 1860s to the 1890s. Through all of this research, the field of " aboriginal botany" was established- the study of all forms of the vegetable world which aboriginal peoples use for food, medicine, textiles, ornaments and more.

D. Ethnobotany Becomes A Modern Science

The first individual to study the emic perspective of the plant world was a German physician working in Sarajevo at eh end of 19th century: Leopold Glueck. His published work on traditional medical uses of plants done by rural people in Bosnia (1896) has to be considered the first modern ethno botanical work. The term "Ethnobotany" was first used by a botanist named John W. Harshnberger in 1895 while he was teaching at the University of Pennsylvania. Other scholars analyzed uses of plants under an indigenous/local perspective in the 20th century: Matilda Coxe Stevenson, Zuni plants (1915); Frank Cushing, Zuni foods (1920); Keewaydinoquay Peschel, Anishinaabe fungi (1998), and the team approach of Wilfred Robbins, John Peabody Harrington, and Barbara Freire-Marreco, Tewa pueblo plants (1916). In the beginning, ethonobotanical specimens and studies were not very reliable and sometimes not helpful. This is because the botanists and the anthropologists did not always collaborate in their work. The botanists focused on identifying species and how the plants were used instead of concentrating upon how plants fit into people's lives. On the other hand, anthropologists were interested in the cultural role of plants and treated other scientific aspects superficially. In the early 20th century. Botanists and anthropologists better collaborated and the collection of reliable, detailed cross-disciplinary data began. Beginning in the 20th century, the field of Ethnobotany experienced a shift from the raw compilation of data to a greater methodological and conceptual reorientation. This is also the beginning of academic Ethnobotany. The so-called "father" of this discipline is Richard Evans Schultes even though he did not actually coin the term "Ethnobotany". Today the field of Ethnobotany requires a variety of skills: botanical training for the identification and preservation of plant specimens; anthropological training to understand the cultural concepts around the perception of plants; linguistic training, at least enough to transcribe local terms and understand native morphology, syntax, and semantics. Mark Plotkin, who studied at Harvard University, the Yale School of Forestry and Trufts University, has contributed a number of books on Ethnobotany. He completed a handbook for the Tirio people of Suriname detailing their medicinal plants; Tales of a Shaman's Apprentice (1994); The Shaman's Apprentice, a children's book with Lynne Cherry (1998); and Medicine Quest: In Search of Nature's Healing Secrets (2000). Plotkin was interviewed in 1998 by South American Explorer magazine, just after the release of Tales of a Shaman's Apprentice and the IMAX movie Amazonia. In the book, he stated that he saw wisdom in both traditional and Western forms of medicine. No medical system has all the answers no shaman that l've worked with has the equivalent of a polio vaccine and no dermatologist that l've been to could cure a fungal infection as effectively (and inexpensively) as some of my Amazonian mentors. It shouldn't be the doctor versus the witch doctor. It should be the best aspects of all medical systems (ayurvedic, herbalism, homeopathic, and so on) combined in a way which makes health care more effective and more affordable for all. A great deal of information about the traditional uses of plants is still intact with tribal peoples.[7] But the native healers are often reluctant to accurately share their knowledge to outsiders. Schultes actually apprenticed himself to an Amazonian shaman, which involves a long-term commitment and genuine relationship.

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In Wind in the visiting acupuncturists were able to access levels of Mayan medicine that anthropologists could not because they had something to share in exchange. Cherokee medicine priest David Winston describes how his uncle would invent nonsense to satisfy visiting anthropologists. Another scholar, James W. Herrick, who studied under ethnologist William N. Fenton, in his work Iroquois Medical Ethnobotany (1995) with Dean R. Snow (editor), professor of Anthropology at Penn State, explain that understanding herbal medicines in traditional Iroquois culture is rooted in a strong and ancient cosmological system. Their work provides perceptions and conceptions of illness and imbalances which can manifest in physical forms from benign maladies to serious diseases. It also includes a large compilation of Herrick's field work from numerous Iroquois authorities of over 450 names, uses, and preparations of plants for various ailments. Traditional Iroquois practitioners had (and have) a sophisticated perspective on the plant world that contrast strikingly with that of modern medical science. In the contemporary global milieu, the documentation of the biological resources and the associated indigenous knowledge existing within a country has assumed highest priority. Medicinal plants are highly esteemed all over the world as a rich source of therapeutic agents for the prevention of diseases and ailments. From the earliest days of civilization mankind has turned to plants for healing a tradition that has survived the arrival of modern medicine and found new strength at the end of 20th century1. Plants have played a vital role in the treatment of diseases since prehistoric times and are one of the most important areas of research in the world today. India and China are two of the largest countries in Asia which have the richest arrays of registered and relatively well known medicinal plants2. India endowed with a rich wealth of medicinal plants is unique in that these plants are used by all sections of people either directly as folk remedies or in different indigenous systems of medicine or indirectly in the pharmaceutical preparations of modern medicine. The knowledge of medicinal plants has been accumulated in the course of many centauries based on different Indian systems of medicines such as Ayurveda. Unani and Siddha. Rigveda and Atharveda which dates back to 2000-1000 BC and several post Vedic treatise, viz. Charakasamhita (100 AD), Sushruthasamitha (100-800 AD), Dhanwanthari Nighantu (1200 AD), are the important ancient sources of information on medicinal plnts4. Indigenous knowledge simply refers to health practice, knowledge and benliefs incorporating plant based remedies, spiritual therapies, manual techniques and exercise, applied singly or in combination to treat, diagnose and prevent illnesses or maintain well being. It is as old as human civilization. The scientific study of how the people of a particular culture and region make use of indigenous plants is called Ethnobotany (From "ethno"-study of culture and "botany"-study of plants.)-while the ethnobotanist explores how plants are used for food, shelter, medicine, clothing, hunting and religious ceremonies. It is the relationship between a given society and its environment and in particular the plant world6. The term ethnobotany was first coined by an American botanist John William Harshberger in 1895. He defined ethnobotany as the study of plants used by the primitive and aboriginal people. The natural flora and fauna used by the specific group in the form of medicine in curing and preventing different ailments and diseases are known as ethnomedicine. Ethnomedicine refers to the study of traditional medical practice which is concerned with the cultural interpretation of health, diseases and illness and also addresses the health care seeking process and healing practices. The ethnomedical approach proves useful particularly for the study of indigenous therapeutic agents because it allows the researcher to understand treatment patterns according to native explanatory models instead of only through the lens of biomedicine. Medicinal plants are a valuable natural resource and regarded as potentially safe drugs. They have been playing an important role in alleviating human sufferings by contributing herbal medicines in the primary health care systems of rural and remote areas where more than 70% of the population depends on folklore and traditional systems of medicines. The reason for their popularity is due to the high cost and side effects of allopathic medicines. The state of Jammu and Kashmir, cradled in the lap of Himalayas has been recognized as heaven on earth and is also called the "Biomass" state of India. This area which is located in the far north of the Indian Republic has a diverse variety of plant species especially ethno medicinally important plants due to wide variations in its topography and microclimatic conditions. Many studies have been carried out to document the indigenous knowledge information of the medicinal plants from different areas of the region 10-19. Bandipora district is one of the 10 districts of Kashmir in northern India with a geographical area of 398 Sq.km's. The District is located on the northern bank of the Wular Lake the largest fresh water lake in Asia. Bandipora, the District headquarters, is about 55 kms from Srinagar (summer capital) and is accessible by road as well as by river Jehlum. The District lies 340 64'N latitude and 740 96' E longitude and is situated at an average height of 1701 meters above mean sea level (AMSL). Most of area of the District is hilly terrain and is bounded in the west by district Kupwara, in the South-east by district Ganderbal and in the east by District Kargil, Baramulla in the south and on the north side it is bounded by LOC (Line of Control). The climate of the District has its own peculiarities. The seasons are marked by sudden change and the climate can be divided into six seasons of two months each. These includes, spring (16 March to 15 May), Summer (16 May to 15 July), Rainy Season (16 July to 15 September), Autumn (16 September to 15 November), Winter (16 November to 15 January) and Ice Cold (16 January 15 March). All these seasons are locally called as Sont, Retkol, Waharat, Harud,

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Wandh and Shishur respectively. The winters are usually harsh due to heavy snowfall and low temperatures. During the months of December, January, February and March the precipitation occurs mostly in the form of snow, which starts, melting in March, when the percentage of relative humidity is fairly high. Each part of the district experiences snowfall during winter. The district is divided into three tehsil namely Bandipora, Gureiz and Sonawari (Fig. 1.) The district is topographically very rich in forest and ground vegetation including the medicinally important plants. Since, least documented information is available about the traditional medicinal plant knowledge of this floristically rich area 20,21,13, in the present study an attempt has been made to document some locally available plants (herbal medicines) utilized traditionally by the people of Bandipora district for the treatment of various ailments. The term Ethnobotany was coined by J.W. Harshberger, an American botanist in 1895 to describe the studies of plants used by primitive people and aboriginals. He defined Ethnobotany as "the study of the utilitarian relationship between human beings and vegetation in their environment, including medicinal uses". This relationship is not limited to the use of plants for food, clothing, shelter and medicine but also includes their use for religious ceremonies1. Knowledge of plants used by humans is based on thousands of years of experience. By trial and error people learnt how to recognize and use plants. Although the term Ethnobotany was not used until 1895, practical interests in this field go back to the beginning of civilization when people relied more on plants as a wa of Survival. Among the oldest testimonies to plant use were the pollen remains of medicinal plants, about 6000 years old, found in an archaeological dig in Iraq. In 77 AD the Greek surgeon Dioscorides published 'De Materia Medica' which was a catalog of about 600 plants from Mediterranean containing information how the Greeks used plants, especially for medicinal purposes. Dioscorides thus highlighted the economic potential of plants. Over the last century, ethnobotany has evolved into a specific discipline that looks at the people-plant relationship in a multidisciplinary manner, such as ecology, economic botany, pharmacology, public health and social and cultural systems3, 4, 5. India is known for its valuable heritage of herbal medicinal knowledge6, therefore, experiencing a great pressure on its resources due to fast growing population7. The World Health Organization (2003) has estimated that 80% of the population of the developing countries being unable to afford pharmaceutical drugs, rely on traditional medicines, mainly plant based, to sustain their primary health needs. Biodiversity constitutes the resource upon which families, communities, nations and future generations depend. Plants provide us food, building material, medicines, oils, lubricants, rubber, and other latexes, resins, waxes perfumes, dyes and fiber. So far only about 10% of plants have ever been evaluated for their medicinal and agricultural potential and so there is immense pressure on the select group of plants, especially medicinal, which are overexploited by man for his welfare. The present study aims at documenting the tribal use of some of the plants which can prove beneficial for the industry and such plants need to be propagated on large scale to narrow down the ever increasing pressure on these plants. Efforts were made to meet and interact with the elderly people of all these areas for documentation of the hidden knowledge of plants because traditional healers are believed to provide considerable information about the use of many plants or plant parts as medicine.

II. MATERIALS AND METHODS

During the investigation, frequent field trips and plant collections were made from various regions of the study area from March 2015 to November 2015. Methods used to document the traditional knowledge included interviews and discussions with local knowledgeable persons, herbal healers called "Bhoris" and Tribals (Gujjars and Bakerwals). During surveys a total of about 63 informants were consulted who were between the ages of 37-98 years among whom most enjoyed a respectable status in the community. A questionnaire was devised to identify the indigenous knowledge of plant based remedies from local people. Informants were asked questions in Kashmiri language that was understandable in most of the cases. However, Urdu language (official language of J&K) was also used in tribal areas. In order to provide independent information, informants were separately asked to share their traditional knowledge on the utilization of medicinal plants such as the local name, plant part used, ailment(s) in which plant part used and mode of administration. The method of field work followed was after 22-24. With the view to bring an element of accuracy, the information was cross-checked with that of others. From the natural habitats, plants were collected in their flowering and fruiting stages as far as possible. Field photographs of the plants were taken for easy identification and habitat recognition. Collected plants were dried, pressed, preserved (poisoned) and finally mounted on herbarium sheets following standard herbarium techniques. Plant specimens were then identified and accessioned from the KASH Herbarium of Kashmir University, Srinagar (J&K), where one copy of every specimen was deposited for authenticity and future use. Apart from it, for identification, help was also sought from the Department of Botany, Government Degree College Baramulla, and Kashmir. Available floristic literature 25-31 and various publications dealing with the flora of temperate regions were also consulted. Finally one more copy of every specimen was deposited in the herbarium section of the department of Botany, Bhagwant University Ajmer (Raj.), India for

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authenticity and future use.

III. RESULT AND DISCUSSION

Life and diseases go together, where there is a life, diseases are bound to exist. Traditional uses of plant remedies provide potential indicators for biological activities. In the last few decades, there is a resurgence of public interest in medicinal plants and their role in primary health care 32. Alternative medicine using herbal mixtures is becoming more popular as these are believed to be safer and natural. However, there still exists an immense gap between the local traditional knowledge and modern medical sciences. This has resulted in the development of research priorities on plants used in traditional medicine to provide sufficient important information for commercialization. According to WHO, about three quarters of the world population relies upon traditional medicines made from herbs for their health care. At a global level, traditional medicine is now increasingly becoming essential part of the medicinal curriculum and it is anticipated that the modern physicians who are also skilled with some alternate methods of treatment are likely to be more successful physicians in the years to come 33. Thus there is a huge potential of medicinal plants in health care not only in remote areas of developing countries but also in the industrialized world and the acceptance of botanicals in modern medicines is likely to increase in future. During ethnomedicinal survey of Bandipora district, a total of 30 plant species belonging to 19 different families were found to be used as effective remedies by the local people in their day to day life to treat and cure various ailments. The highest number of medicinal plants were recorded in two families viz. Asteraceae (6 species) and Apiaceae (4 species) followed by families Cucurbitaceae, Rosaceae, Nympheaceae (2 species each) while all other families included only one species. Most of the collected plants were herbs 34. While on the basis of the plant parts used, it was observed that the maximum plant species (31%) were found to be used as various parts such as leaves, flowers, seeds, barks, rhizomes, thorns, stolens and fruits etc. followed by whole plants (24%), fruits (17%), seeds (14%), leaves (7% each), bulb (4%) and roots (3%) to cure various ailments (Table 1& Fig. 2) Most of the combinations for remedies were prepared from a single species; however some applications were always prepared with a mixture of plants. Medicines were used in different forms including powder, paste, poultice, decoction, juice and infusion. In our study paste was found to be used more often followed by ecoction, poultice, infusion, powder, juice and latex. For the preparation of indigenous medicines, the people of the area always collected plants that were fresh and best in all respects i.e., disease free 35,36. Medicinal uses of certain locally available plants being used in the treatment of various ailments prevalent in the area are given in table-2 below, mentioning plant's botanical name, local name, family, habit, accession number and their ethno medicinal uses, including plant part used, ailments in which part of the plant used and mode of administration. Results also show that the people of Bandipora district used these plants through different modes of preparation for curing various ailments such as rheumatism, chilblains, urinary disorders, jaundice, indigestion, cough, general body weakness, gaseous bloat, fever, cold, headache, hair fall, warts, skin infections etc.37, 19,13 Herbal medicines were not only used for the treatment of diseases in humans but also in case of domesticated animals. The choice of use for herbs was noticed to be influenced by many factors such as season of the year and knowledge of other species. The choice of use for herbs was noticed to be influenced by many factors such a season of the year and knowledge of other species. Beside, results also reveal that a major proportion (75%) of folk medicinal knowledge comes from people above the age of 55 years, while a small proportion (25%) of it comes from people between the ages of 37 and 5038. Discussions and interviews with both old and young people and Bhoris indicated that the attitude of the younger generation was not towards continuing this traditional medicine system because they realized less opportunity in this tradition for getting immediate benefits mainly in terms of cash in the form ot money. During surveys, ethno medicinal data was gathered by consulting people of different ethnic groups such as Gujjars, Bakerwals, Bhoris and also some knowledgeable persons of the plains. Gujjars are generally permanent settlers in the foot hills of Himalayas. Besides breeding their own livestock, they also take care of the animals of other communities, fulfilling the role of village cowherd. Bakerwals constitute nomadic tribe and high altitude goatherds/shepherds who lead a lonely and tough life in the high altitude meadows of the Himalayas and Pir Panjal ranges39. While interacting with the Bakerwals it was found that they actually belonged to for flung Rajouri and Poonch districts of J&K and visited the study area every year in the months of April and May. Every year, they take their livestock animals. High into the mountains, above the tree line to graze in the lush eadows. They travel by foot and it takes them more than thirty days to reach these meadows. During the summer, they move from one meadow to another and ultimately leave the district in the months of August and September. They are accompanied by their dogs to guard the sheep/goats and their pack animals. Some of them have settled permanently in the foothills of the Himalayas of the district. For example, a few could be easily found near Saderkoot Bala area, living there for years. Both of these ethnic groups (Gujjars and Bakerwals) have their own knowledge of traditional herbal medicine inherited from their fore-fathers. These medicines are well accepted by the local people since generations have experienced their efficacy in alleviating a variety of diseases34. Besides, these ethnic groups have to rely on the traditional system

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as they do not have the modern medicinal facilities available in the vicinity. Traditionally, Bhoris are the practitioners of this indigenous medicine system. Earlier, in the study area, Bhoris were mainly the Kashmiri Pandiths who had vast deep rooted knowledge of prescribing the patients by traditional herbal medicine. This knowledge was descended to them from their forefathers in the form of oral folklores, and is not yet documentd. But due to uprising turmoil that started in 1989 in the valley, they left the district in order to defend themselves and migrated along with this precious knowledge to other parts of the state as well as country. This is the reason that a few abandoned shops that belonged to them were reported during the course of survey in the main market of Bandipora. Till they stayed in the district they shared their precious medicinal knowledge with some Kashmiri Muslims among whom a few at present are carrying forward and practicing this profession. The people who sell them herbal medicine in return get a little money to sustain their basic needs of livelihood. The low cost of herbal medicine and its unlikely income is one of the reasons that youth of Bhoris are now discouraged from carrying forward this profession and that is why only few Bhoris were found in the study area. On the other hand, the cost of modern medicine is very higher than the cost of indigenous medicine so there is public demand for service40. The availability of medicinal plants is not only drastically decreasing due to various reasons such as increased marketing pressure, lack of job opportunities, development works, increased population of the area, over-grazing by animals and indiscriminate harvesting by unskilled gatherers but also the existing traditional medicinal knowledge of these plants is depleting at an alarming rate. Therefore, it is high time that a feasible conservation strategy and action plan should be formulated and implemented effectively in order to save this high value dwindling resource. For sustainable and long term conservation of these plant species it would be better to involve the local people through creating awareness among them as they are the best judges of the area.

Table-2 Some locally available medicinal plants of Bandipora District (J&K) and their uses to cure. Various ailments based on information gathered by using questionnaire, discussions and field trips.

Botanical Name/ Local Name/Family	Habit/ Accession Number	Plant Part Used	Ailments	Mode of Action
Adiantum venustum D Don Kakbai (Pteridaceae)	perennial evergreen fern/39283	Whole Plant	Cough, Jaundice, stomach ailments, headache, fever body muscular pains and hair fall	Black stalks are used as tooth stick to clean teeth. Dried fronds are crushed to obatain powder. Powder is added to a glass of water and kept as such overnight. The extract is given next day early in the morning for the treatment of cough, jaundice and stomach ailments. The herb forms and important ingredient of a combination of several different herbs such as whole plants of Cotula anthemoides. Leaves of Ocimum basilicum and leaves and flowers of prunella vulgaris. This combination, locally called "Lossa Ghasa" is thoroughly boiled in water to prepare hot water extract. Ladies, after their deliveries are advised to have bath with this hot water extract (after dilution with more water) to cure headache, fever, body muscular pains and hair fall.
Aesculus indica (wall. Ex Camb.) Hook (Haandoon) (Hippocastanaceae)	Perennial tree/38865	Fruits	Chiblain, joint pains, boils, skin rashes, eruptions, headache burns, wounds and rat killer.	Fruits after crushing are boiled in water to prepare hot water extract which is used to be feet against chilblain, a painful itching swelling caused by exposure to cold which is locally called "Shush". Fruit powder is mixed with mustard oil to make paste. The resultant paste is used to cure joint pains, boils, skin rashes, eruptions and headache by its external massage. Sometimes dried fruits are burnt to get ash which is mixed with oil and honey to make paste. Paste is then applied on burns and wounds to stimulate their healing. Dried fruit pieces are mixed with the kernels of Juglans regia and mustard oil. The resultant mixture serves as best home remedy for killing rats. Crushed fruits are mixed with crushed onion bulbs and common salt to make small soft balls which are given to cattle during severe cold to keep them healthy.

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Allium cepa Linn Gundh (Liliaceae)	Annual herb/38877	Bulb	Loss of appetite, acidity, impotency, cold, anorexia, forthy bloat and flow of tears.	Small thin slices of bulb are mixed with local mint, common salt and cured and given against loss of appetite and stomach acidity. Slices are also placed in water for overnight. The same water is taken next day early in the morning on empty stomach to strengthen male potency. A mixture of crushed bulbs and common salt is made into balls. These balls are widely used as a traditional household remedy for cattle against cold, anorexia and in cows to stimulate the estrus cycle. balls are also given to horses to cure the frothy bloat which is caused due to the grazing of Bataklunt (Trifolium repens) A small piece of bulb is placed on top of the ear to prevent the flow of tears from eyes while cutting onions.
Amaranthus retroflexus Linn Ganhaar (Amaranthaceae)	Annual herb/38904	Whole Plant	Measles and dandruff.	Children suffering from measles are advised to inhale smell that emanates from roasting dried seeds. Seeds once roasted are mixed with fur (local sugar) and made into small balls. Balls are given to the same children to treat measles. Plant is burnt to get ash which is locally called "Suzz". It is gently spplied on scalp and then washed with water to clean the hair and check dandruff.
Anagallis arvensis Linn. Chari-saban (Primulaceae)	Annual herb/38906	Whole Plant	Skin itches	Fresh herb is crushed to obtain juice which is applied on hands and arms and then washed with water to cure skin itches with dry bran like eruptions.
Brassica oleraces var. haka Linn. Hakh (Brassicaceae)	Biennial herb/38852	Leaves	Corns and constipation	Leaves are taken as vegetable. Fresh leaf is gently placed in warm mustard oil with haldi and salt till it becomes soft. It is then tightly tied with muslin cloth on painful comes of toes and fingers which helps them to ripe, burst and evacuate the pus and hence to alleviate the pain. The petiole of the leaf after peeling off the rind is placed in the rectum of the new born baby as a best home remedy to cure constipation.
Bunium Persicum (Bioss) Fedtsch Kala Zeera (Apiaceae)	Perennial herb/38872	Fruits	Digestive disorders, foul breath, joint pain, lumbago and weak memory	Dried fruits are used as spice in case of digestive disorders. Fruits are chewed to remove foul breath. Roasted fruits are ground into powder which is mixed with banana to make paste. Paste is given orally for the treatment of joint pain, lumbago and as brain tonic to enhance memory.
Calendulla officinalis Linn Hamesh Bahar (Asteraceae)	Annual herb/38884	Leaves and flowers	Boils, burns, eyelid abscesses and pneumonia	Leave and flowers are crushed and paste is made by mixing with cow butter. Paste is then applied on boils. Burns and abscesses of eye lids to give relief from pain. Poultice is made by crushing of fresh leaves and flowers which is slightly warmed and then spread on a cloth and tied on chest to cure pneumonia in children.
Centaurea iberica Trevir. Ex Spreng Krech (Asteraceae)	Perennial herb/38830	Leaves and thorns	Burns, skin rashes, eye vision and defective lactation	Thorns are burnt to get ash which is mixed with cow butter to make paste. Paste is applied on burns and skiing rashes for their treatment. Fresh leaves after crushing are mixed with egg and then cooked to prepare omelets. Latter is given to improve the eye vision. It is also given to enhance lactation in females.
Cichorium intybus Linn Kasni.Wari Hundh (Asteraceae)	Perennial her/38913	Leaves	Body weakness, loosening of joints, body muscular pains, frequent bleeding loss of appetite and liver problems	Leaves are cooked and given to fresh mothers to cure body weakness, loosening of joints, body muscular pains, frequent bleeding and as appetizer and liver tonic.

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Conyza canadensis (Linn) cronquist Shallut (Asteraceae)	Annual herb/38834	Aerial portion	Indigestion, dysentery, stomach gases, internal, injuries, fever and cough	Aerial portion of the plant is crushed and made into small soft balls which are given to cattle for immediate relief from indigestion and dysentery. Fresh leaves are eaten to cause cooling effect. Cure stomach gases and internal injuries. Leaf decoction with sugar is given to cure fever and cough.
Coriandrum sativum Linn Daniwaal (Apiaceae)	Annual herb/38833	Seeds	Fever, palpitation of heart, jaundice, drying of mouth and headche	Dried seeds are put in cold water at least for one hour. Cold sponging is done by dipping a clean cotton cloth in this cold water and applying it to the chesh, head and feet to relieve fever and palpitation of heart. Seed decoction is given to cure jandice,drying of mouth and headache.
Cucumis sativus Linn Laer (Cucurbitaceae)	Annual climbering herb/38903	Fruits and seeds	Headache, fever, stomach heatup, kidney stones and burning sensation of urine	Fruits slices are consumed as salad. Proximal end of the fruit is sliced. The resultant slice is rubbed on rest of the fruit for about 2-3 minutes so that white foam comes out of it. The slice along with this foam is kept as poultice on forehead to cause cooling effect and to relieve headache and fever. Dried seeds along with the dried seeds of lagenaria siceraria and Cucumis melo are put in a glass of cold water as such for overnight. Thus a composite infusion is made which is given to cure stomach heatup, kidney stones and burning sensation of urine.
Cydonia oblonga Mill Bumchuont (Rosaceae)	Perennial tree/38886	Seeds, fruits and flowers	Constipation, birth problems, jaundice, cough, cold, chronic constipation, fever, dysentery, blood purifier, astham, chest problems, general body weakness and body muscular pains.	Seed infusion is given to pregnant women against constipation and to loosen body parts so as to facilitate the normal dilivery. The seeds also form an important ingredient of a combination of different herbs such as seeds of Cucumis sativa, Malva neglecta, Foeniculum vulgare, fruits of Zizphus jujuba, leaves and flowers of Arnebia benthamii and fronds of Adiantum capillus-veneris. This combination is locally called as "Sharbeth". The composite decoction of "Sherbeth" is given to cure jaundice, cough, cold, chronic constipation, fever and as a good blood purifier. Fruit slices are sun dried, stored for winter season. Slice decoction is administered orally in case of dysentery. Ripe fruits after being coated externally with a thin layer of mud are roasted and then eaten as a best home remedy against asthma, cold, chest problems and general body weakness, Sundried flowers and sugar after mixing are crushed. The same is then kept in air tight jar for about 10-15 days for fermentation. This fermented mixture is locally called "Khambir Bihi". It is given to cure cough, cold, asthma and body muscular pains.
Daucus Carota Linn Moharmunj Ghasa (Apiaceae)	Biennial herb/39277	Roots	Dysuria, digestive disorders and fatigue.	Roots at juvenile stage are considered highly energetic and are consumed raw by the local livestock grazers while travelling long distances by foot to give relief from painful and difficult urination digestive disorders and fatigue.
Euphorbia helioscopia Linn Gur-sochal (Euphorbiaceae)	Annual herb/38886	Aerial portion	skin eruptions, warts, arthritic pain, indigestion, worms, and constipation	White coloured latex obtained from the herb is used to cure skin eruptions and warts by its external application. Poultice made by crushing of aerial portion of the plant is applied on arthritic joints to stimulate the formation of blisters. The blisters lateron burst releasing the fluid which in turn alleviates the arthritic pain. Leaf decoction is taken against indigestion, worms and constipation

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Euryale ferox Salisb Juwar/Kena bub (Nymphaeaceae)	Annual herb/38854	Seeds	Stomach problem, whooping cough, semen deficiency and weak libido	Dried seeds are considered highly energetic and are eaten against stomach problems, whooping cough, and semen deficiency and to increase libido. Kashmiri Panditha considered the seeds as 'sacred' because they used to break their fast by the eating the bread prepared from its flour.
Foeniculum vulgare Mill Bodiyaan (Apiaceae)	Perennial herb/38863	Whole Plant	Dyspepsia, acidity, constipation, abdominal pain, Jaundice, cough, cold, chronic constipation, fever, blood purifier and joint pains.	Seeds are eaten to cure dyspepsia, acidity, and constipation. In case of abdominal pain and constipation of a small baby, seeds are chewed to make paste which is applied respectively on abdomen and buttoks. Dried seeds form an important ingredient of "Sharbeth". The composite decoction of "Sherbeth" is given to cure jaundice, cough cold, chronic constipation, fever and also acts as a good blood purifier. Seeds are alos eaten to abstain from smoking. Whole plant is burnt to get ash which is mixed with oil to make paste. Paste is then applied on painfull joints.
Funaria indica Ihausskn) Pugsley Shahtar (Fumariaceae)	Annual herb/38845	Whole Plant	Defective eye vision, palpitation of heart, breathing problems, skin diseases, blood purifier, asthma, defective urination with pus, skin rashes, dropsy, menstrual irregularities, male impotency and general body weakness.	Dried plant is grinded and powder is made which is administered orally with water against defective eye vision, palpitation of heart, breathing problems, skin diseases and as good blood purifier. Whole plant decoction is taken to overcome asthma, defective urination with pus,skin rashes, dropsy, menstrual irregularities, male impotency and general body weakness.
Galinsoga parviflora Cav. Marchawagan Ghasa (Asteraceae)	Annual herb.38890	Whole Plant	Joint pains	Fresh plants are crushed to make poultice which is tied on painfull joints to alleviate pain.
Helianthus annuus Linn Gulaftab (Asteraceae)	Annual herb/38905	Seeds	Whooping cough and joint pains.	Seeds are chewed and eaten to cure whooping cough. Seed oil is gently warmed and applied on painful joints.
Juglans regia Linn. Duon Juglandaceae	Perennial tree/38866	Bark, fruits and leaves	Tooth infection and toothpaste, tongue cleaning, mouth ulcers, dry cough, hypertension, joint pains, hair fall, weak milk production in cows, chilblain, insect repellent	Bark of the root is used as an antiseptic tooth brush locally called "Dandasa". It is used to clean the teeth and hence to protect them from infection and ache. The bark is also chewed to clean the tongue, heal the mouth ulcers and by ladies to decorate their lips. Ripe fruit kernels are eaten to cure dry cough and hypertension. Oil obtained by grinding of fruit kernels is considered a best home remedy for joint pains and hair falls by its external massages. The oil cakes are fed to cows to enhance milk, production. Dried leaves along with the dried seeds of Datura stramonium are vigorously boiled in water to prepare hot water extract which is used to wash the feet during severe cold in winter to cure Chiliblain. Fresh green leaves are used as insect repellent.

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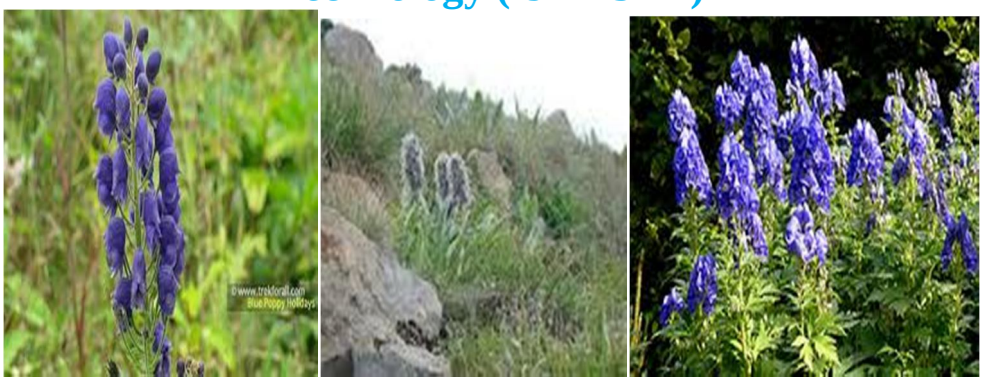

Fig- 1,2,3- Aconitum vidaceum

Fig- 4- Aconitum heterophylum. Fig-5- Acorus calamus. Fig-6- Ajuga parviflora

Fig-7-Arnebia benthamii. Fig-8-Bergenia ciliata. Fig-9- Cotula anthemoides

Fig-10- Hyoscyamus niger. Fig-11- Inula racemosa.

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IV. CONCLUSION

Keeping in view the high cost and side effects of allopathic medicine, the use of medicinal plants against different ailments plays a significant role in meeting the primary health care needs of the rural communities of Bandipora district. The district is fairly rich not only in medicinal plant species but has also deeply rooted traditional knowledge of these medicinal plants among the people. An immensely valuable database could be the outcome of this knowledge which in turn could provide baseline information for the commercial exploitation of bio-resources. Besides, the information could prove a fruitful source for pharmacologists, phytochemists, botanists and to those interested in the development of alternative therapies. Utilization of indigenous drug resources eill increase the local industry on one hand and minimize the expenditure incurred on the purchase of foreign drugs on the other. In view of the present study of medicinal plants, research and conservation efforts should be focused on these resources of the area so that in future the coming generation could benefit from these precious plants that area real gift to mankind. Besides, an understanding of the market potential of medicinal plants could provide rural farmers with the incentive for the cultivation of high. Unani, ayurvedic &Homeopathic Medicine are based on these herbs and since age are used by people of south Asian countries. No after affect, cheap & give a slow but permanent cure all possible aliments.

REFERENCES

[1] Cotton CM. Ethno botany: Principles and Application. John Wiley & Sons. Chichester, England, 1996.
[2] Mathias E, McCorkle CM. Animal health In: J. Bunders B. Haverkort W. Hiemstr. 'Biotechnology: Building on Farmers' Knowledg. MacMillan Education Publishing, Bsingstoke, Uk, 1997, 22-51.
[3] Hoareau L, Da-Silva EJ. Medicinal plants: A reemerging health aid. Elect J Biotechnol 1999, 2.
[4] Gupta OP, Srivastava TN, Gupta SC, Badola DP. An Ethnobotany and Phytochemical Screening of higher altitude plants of Ladkh part 2 Bull Medico – Ethnobot. Res 1982; 1:301-317. 5. Kachroo P, Nahvi IM (Ethno botany of Kashmiris, in; Forest Flora of Srinagar and plants of Neighborhood. (Bishen Singh Pal Singh, Dehra Dun) 1987,239.
[5] Kiran HS, Kapahi BK, Srivastava TN. Non Timber forest Wealth of Jammu and Kashmir state (India). J Non-Timb for Prod 1999; 6(1 and 2): 1-18.
[6] Kaul MK, Sharma PK, Singh V. Ethnobotanical studies in North West and Trans Himalaya Iv. Some traditipnally tea substitute from JK State. Himalaya Plant J 1987; 4:23-28.
[7] Lone FA. Folklore medicinal system of Uri sector Kashmir valley. India. 2nd world congress on biotechnology development of herbal medicine. Feb 2003; (91) 20-22.
[8] Mala FA, Lone MA, Lone FA, Aray N. Ethno-medicinal survey of Kajinaag range of Kashmir Himalaya, India. Int jr Pharma and Biosciences 2012;3(2):442-449.
[9] Lone FA, lone S, Aziz MA, Mala FA. Ethnobotanical studies in tribal areas of Kupwara, India. Int Jr Pharma & Bioscience 2012;3(4):399-411.
[10] Hassan GA, Ahmad TB, Mohi-ud-din RA. An Ethno Botanical study in Budgam district of Kashmir Valley. IRJP 2013;4(1):201-204.
[11] Mir MY. Ethno medicinal survey of plants from Kupwara, j & k India. International Journal of Advanced Research 2014; 2(1):846-587.
[12] Qureshi RA, Ghufran MA, Gilani SA, Yousf Z, Abbas G, Batool A. Indigenous medicinal plants used by local women in southern Himalayan regions of Pakistan. Pakistan J Botany 2009; 41(1): 19-25.
[13] Lone PA et al. Ethno veterinary Medicinal Uses of Plants of District Bandipora of Jammu and Kashmir, India. Int J Trad Nat Med 2013;2(3):164-178.
[14] Khan SS. Ethnomedicinal Studies on plants of Bhopal District of M.P Ph.D Thesis, Barkatullah University, Bhopal, India, 1993.
[15] Jain SK. Ethnobotany: Its scope and study. Indian Museum Bulletin 1967; 2:39-43.
[16] Jain SK. A Manual of Ethnobotany, 2nd edn. Scientific Publishers, Jodhpur, 1995.
[17] BSI. Flora of India. Botanical survey of India Kolkata, 1996.
[18] Kaul MK. Weed flora of Kashmir valley. Scientific publishers Jodhpur India, 1985.
[19] Hooker JD. The Flora of British India. 1872-1897; 1-7. BSMPS, Dehra Dun.
[20] Sullivan, K. and Sheally, C. N., Complete Natural Home Remedies, (Element Books Limited, Shaftesbury U.K), 3, (1973).
[21] Ravan, P. H., Medicinal plants and global sustainability: the canary in the coal mine. In medicinal plants: a global heritage, proceedings of the international conference on medicinal plants for survival. New Delhi; International Development Research Center, 14-18, (1998).
[22] Alagesaboopathi, C., Ethnomedicinal plants used by Kurumba tribals in Pennagaram region Dharampuri district of Tamilnadu, Asian Journal of Experimental Biological Sciences, 2(1), 140-142, (2011).
[23] Rajith, N. P., Nawas, M., Thaha, A. M., Manju, M. J, Anish, N., Rajesekharan, S. and George, V., A study on traditional mother care plants of rural communities of south Kerala, Indian Journal of Traditional Knowledge, 9(1), 203-208, (2010).
[24] Oklatokun, W. M., Indigenous knowledge of traditional medical practioners in the treatment of sickle cell anaemia, Indian Journal of Traditional Knowledge, 9(1), 119-125, (2010).
[25] Aumeeruddy, Y., Ethnobotany, Linkages with Conservation and Development, In Proceedings of First Training Workshop on "Ethnobotany and its applications to conservation" NARC, Islamabad, 152-157, (1996).
[26] Aiyeloja, A. A. and Bello, O. A., Ethnobotanical potentials of common herbs in Nigeria, A case study of Engu State, Educational Research and Review, 1(1), 16-22, (2006).
[27] Ali, N. and Ghosh. B., Ethnomedicinal plants in Arunachal Pradesh: some tacit prospect, Himalayan Ecology, 14(2), 1-6, (2010).
[28] Krippner, S., Models of Ethnomedicinal Healing, Paper Presented at the Ethnomedicine Conferences, Munich, Germany, April 26-27 and October 11-12, (2003).
[29] Sharma, B. M. and Kachroo, P., Flora of Jammu and Plants of Neighbourhood. Vol. 1, Bishen Singh Mahendra Pal Singh, Dehra Dun, India. (1981).

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[30] Sharma, B. M. and Jamwal, P.S., Flora of Upper Lidder valley, Journal of Economic Botony, 40(2), 112-116, (1988).
[31] Battacharyya, A., Ethnobotanical observations in the Ladakh region of Northern Jammu and Kashmir State, India, Economic Botany, 25(3), 305-308, (1989).
[32] Ara, S. and Naqshi, A. R., Ethnobotanical Studies in Gureiz valley, Journal of Economic and Taxonomic Botany, 17(3), 185, (1992).
[33] Kaul, M. K., Sharma, P. K. and Singh, V., Contribution to the Ethnobotany of Paradise of Doda in (J&K) State, India, Bulletin of Botanical Survey of India, 33(1-4), 267-275, (1994).
[34] Kaul, M. K., Medicinal plants of Kashmir and Ladakh (Temperate and Cold Arid Himalaya), Indus Publishing Company, New Delhi, (1997). 16. Kapur, S. K., Traditionally important medicinal plants of Bhaderwah hills, Jammu Province, International proceeding conference current programme, Aromatic plants research Calcutta, India, 103, (1995).
[35] Singh, V., Herbal remedies in traditional medicines of the local valley in Kashmir Himalayas, India, round progress in medicinal plants, Ethnomedicine and Pharmacology, 1: 63-71, (1995).
[36] Sharma, G. K., Medicinal flora of Ladakh (Little Tibet), Flora and Fauna, 1(2), 105-106, (2002).
[37] Lone, F. A., Folklore medicinal system of Uri sector Kashmir valley, India, Proceeding of the 2nd world congress on Biotechnology Development of Herbal medicine, Feb. 20-22, India, 91-92, (2003).
[38] Kapahi, B. K., Srivastava T N and Sarin Y K, Traditional medicinal plants of Gurez (Kashmir)-An ethnobotanical study, Ancient Science of Life, 1&2, 119-124, (1999).
[39] Dad, J. M. and Khan, A. B., Threatened medicinal plants of Gurez valley, Kashmir Himalayas: distribution pattern and current conservation status, International Journal of Biodiversity Science, Ecosystem Services and Management, 7(1), 20-26, (2011).
[40] Jain, S. K., Ethnobotany: Its Scope and Study. Indian Museum Bulletin, 2, 39-43,(1967).
[41] Jain, S. K., A Mannul of Ethnobotany, (2nd edn.), Jodhpur; Scientific Publishers, (1995).
[42] Khan, S. S., Ethnomedicinal studies on plants of Bhopal district of M.P. Ph.D. Thesis, Barkatullah University, Bhopal, India, (1993).
[43] Javeid, G. N., Flora of Srinagar, Kashmir, Sci., 5, 59-71, (1968).
[44] Nawchoo, I. A. and Kachroo, P., Flora of Pulwama (Kashmir). Bishen Singh and Mahendra Pal Singh, Dehradun, (1995).
[45] Kachroo, P., A reflection of flora of Kashmir, Biovegyanum, 4: 13-28, (1978).
[46] Wali, M.K and Tiker, S.K., Contribution to flora of Kashmir (Lolab valley), Bull. Bot. Surv. India, 6:141-149, (1964).
[47] Kachroo, P., Sapu, B. L. and Dhar, U., Flora of Ladakh, Bishen Singh, Mahendra Pal Singh, Dehradun, (1977).
[48] Kirtikar, K. R. and Basu, B. D., Indian Medicinal Plants. Vol. 1 to vol. 8 (4 vols. Text and 4 vols. Plates), Reprint 1994, Dehradun, 1933-1935).
[49] Nasir, E. and S. I. Ali, Flora of Pakistan, No. 1-187, Pakistan Agricultural Research Council, Islamabad, Pakistan, (1970-1987).
[50] Haq, I., Medicinal Plants-Report of Committee on Economic and Therapeutic importance of Medicinal Plants, Ministry of Health, Govrnment of Pakistan. Hamdard Foundation Press; 1-13, (1983).
[51] Shinwari, M. l. and Khan, M. A., Multipledimensions of Ethnobotany and its present status in Pakistan, J. Hamd. Medicus., XLII, (2): 5-10, (1999).
[52] Trantray, M. A., Tariq, K. A, Mir, M. M., Bhat, M. A. and Shawl, A. S., Ethnomedicinal survey of Shopian, Kashmir, India, Asian Journal of Traditional Medicine, 4 (1), 1-6, (2009).
[53] Kala, C. P., Farooquee, N. A. and Majila, B. S., Indigenous knowledge and medicinal plants used by Vaidyas in Uttaranchal, India, Natural Product Radiance, 4(3), 195-204, (2005).
[54] Samal, P.K., Dhyani, P. P. and Dollo, M., Indigenous medicinal practices of Bhotia tribal community in Indian Central Himalaya, Indian Journal of Traditional Knowledge, 9(2), 256-260, (2010).
[55] Malik, A. H., Khuroo, A. A., Dar, G. H. and khan, Z. S., Ethnomedicinal uses of some plants in the Kashmir Himalaya, Indian Journal of Traditional Knowledge, 10(2), 362-366, (2011).
[56] Khan, M. A., Khan, S. A., Qureshi, M. A., Ahmed, G., Khan, M. A., Hussain, M. and Ghulam, G. M., Ethnobotany of some useful plants of Poonch valley Azad Kashmir, Journal of Medicinal Plants Research, 5(26), 6140-6151, (2011).
[57] Bhat, T. A., Nigam, G. and Majaz, M., Study of Some medicinal plants of the Shopian District, Kashmir (India) with emphasis on their traditional use by Gujjar and Bakerwal tribes, Asian Journal of Pharmaceutical and Clinical Research, 5(2), 94-98, (2012).
[58] Samal, P. K., Shah, A., Tiwari, S. C. and Agarwal, D, K., Indigenous health care practices and their linkages with bioresource conservation and socio-economic development in central Himalayan region of India, Indian Journal of Traditional Knowledge, 3(1), 12-26, (2004).

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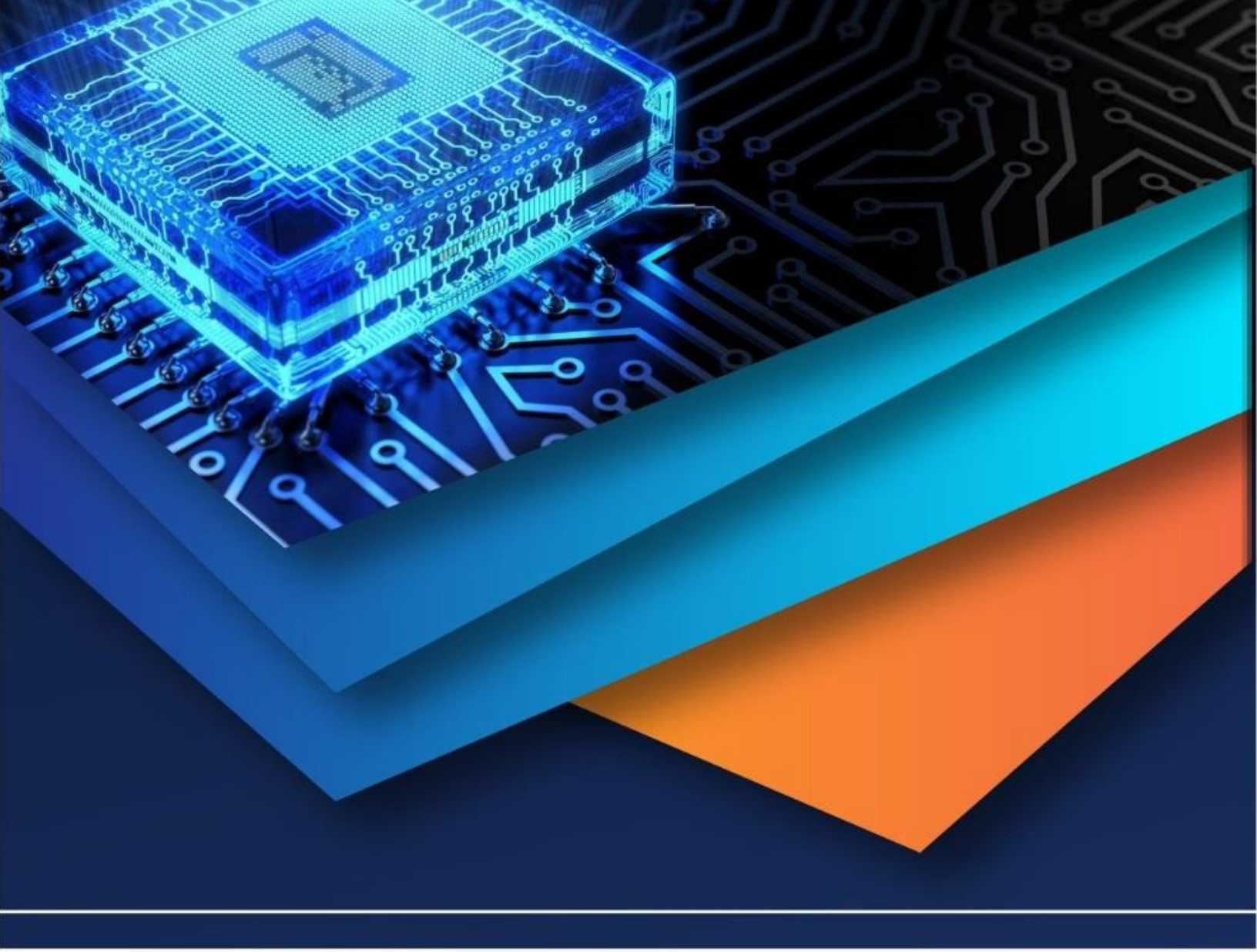

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