

Ethnobotanical Exploration of Flora of Sathan Galli District Mansehra, KP, Pakistan

Khalid Rasheed Khan

Pakistan

ABSTRACT

Statement of the Problem: The investigated (Sathan Galli) area is remote and Community of the area is poor depend on the use of medicinal plants for curing a variety of ailments such as toothache, backache, headache, body pain, abdominal pain, rheumatism, indigestion, wound healer, cough, expectorant and tonic. This was the first ever survey on medicinal plants exploration to check out the local community pressure on their utilization. Methodology: The investigated area was visited frequently during 2014 to 2015 to collect ethnomedicinal flora. Plant specimens were collected, dried, poisoned, preserved and mounted on standard herbarium sheets. Semi-structured questionnaire method was used to gather ethnobotanical information from 34 randomly selected villages. Information about the local uses of the plants such as medicinal, timber, fodder and fuel wood etc. were got through random sampling by interviewing 300 individuals. The data was gathered and analyzed by using MS Excel, 2013. Conclusion & Significance: A total of 170 plant species belonging to 55 families were identified which are being used by the locals of the study area. The study revealed that the indigenous peoples of the area exploited 86 (51.19%) species as traditional medicinal plants, 136 (80.95%) species for fodder, 48 (28.57%) for fuel wood, 28 (16.66%) for timber woods, 07 (4.16%) for wild vegetable and 02 (1.19%) for ethno-veterinary therapies. Similarly 17 (10.11%) species for wild edible fruits, 2 (1.19%) species for making agricultural tools, 1 (0.59%) species for fencing field borders. It was observed that the local inhabitants used plants resources for not only for ethmedico but also for multiple purposes. There is dire need of free medical treatment for the local inhabitants therefore government should provide free medical facility in such a remote areas so that the local medicinal flora can be conserved which is being extinct. This first ever ethnobotanical study may become baseline study for future researches.

INTRODUCTION

Medicinal plants offer a real substitute in developing countries for the treatment of human and animal ailments. Ethnomedicine is often the single easily reached and affordable therapy available. The world market for herbal medicines based on traditional knowledge is now estimated at US\$ 60 billion. Plant-based traditional medicine plays a key role in the development of novelties in drug discovery .

Pakistan has a rich medicinal plants history having more than 600 plants being used traditionally for medication . The majority of the medicinal plants are confined to northwest regions of Pakistan due to the presence of Himalayas, Karakoram, Sulaiman, and Hindu Kush mountain ranges that lie in association with Pak-Afghan border. Both countries Pakistan and Afghanistan share almost 2,500 kilometers of boundary, called Durand Line, which was demarcated in 1893 following an agreement between the British Empire and the Afghan king . The Durand Line separates Pashtun ethnic group in the Pak-Afghan border areas. Culturally, Pashtuns represent the majority of the populace of Afghanistan and also have significant population in Pakistan. The local language of southeastern Afghanistan and northwestern Pakistan Pashtun ethnic group is Pashtu . The majority of the northwest areas of Pakistan living in the proximity to border region are rural in nature with high illiteracy rate and greatly depend on medicinal plants for primary health care and for generating income. In Pakistan, various ethnobotanical studies have been conducted in the different regions. Most of the ethnobotanical studies in Pakistan have documented just the uses of medicinal plants. Almost no studies

have been documented on detailed ethnomedicines preparations in the border region villages. The current research is the first effort to provide a thorough overview on the ethnomedicines employed by conventional healers and their detailed appliance in the region. This research will offer baseline data for more comprehensive studies on effectiveness and security of these preparations, as well as the potential applications in the communal health system. Traditional healers mostly use leaves (40%) of the plants followed by whole plant (28%) and fruits (19%) for the preparation of different ethnomedicines. The current investigation showed that leaves (40%) are the most collected plant parts for medicinal purposes. This might be due to easy availability and containing high amount of chemicals and could be easily extracted and used in different forms but it needs biochemical analysis and pharmaceutical screening to cross-check the local information. Use of leaves of plants does not cause damaging effect on the plant life cycle as compared with other parts like roots and flower, and so forth. Due to good rainfall conditions about eight months in the year, the leaves remain green and abundant for most of the months. Our findings of the frequent use of green leaves in the preparation of remedies corroborate the results of. Monotherapy preparations using single medicinal plant were found to be more abundant in comparison with herbal concoction that was prepared by mixing two or three species; for example, healers take equal amount of extract of onion bulb and mint and mix them for the treatment of cholera. Another example is taking 70 gm dried leaves of wild mint and 30-40g of "bishops" weed and grinding them together and 10-12 gm of common salt is also added to them and taken for the treatment of gastric problem and stomach pain.