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Utilization of leaves, flowers and fruits by Tribal communities of Palanpur Taluka in Banaskantha District, North Gujarat

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Abstract- Palanpur is the administrative headquarters of Banaskantha district. Early man was very close to nature and lived in continuous contact with plants and animals. Since man appeared on the earth, he has been reliant on plants for many of his needs. Some villages of Palanpur taluka are under the forest area. This is also home to some tribal people e.g. Rabari, Thakor, Bhil, Gamar, Garasia, Dama, and Kharadi. The local and tribal communities depend on forestry for their food, fodder, fiber, housing, and housing materials. The present study carried out work on the use of some plant species for food and medicine uses. 20 species of tree were identified which are commonly used as food. Many plant parts like leaves, flowers, and fruits are used as food. Some of the species are also sold out in the local market of the Palanpur taluka Banaskantha district. It was also noted that the species which are used in disease of the digestive, and tonic tract. Thus, present study will be valuable in the separation of such medicinal properties of wild plants for human well-being.

Key words: Utilization, Tribal, Palanpur, Ethnobotany, Nourishment

INTRODUCTION

Gujarat state has almost 4,320 plant species recorded which account for about 9.33% of the total floral diversity of India.[1] In 1895, the term 'Ethnobotany' was introduced by J.W. Harshberger to signify plants used by the native from 'ethano'- the study of people and 'botany'- the study of plants. Ethno-botany is considered as a branch of ethno-biology. Ethno-botany is the study of how folk of a particular culture and region make use of native plants.[2] Ethnobotany is the study of plants that are traditionally used by human society's indigenous groups or various tribal people who are residing in interior or remote areas of the hilly tracts. These people use the plants for their food, medicine, shelter, agriculture implements beside other purposes.[3] From the day beyond the earth of culture. Tribal communities have an intricate relationship with their nearby plant flora. In the study, value has been placed on plant species used for different purposes.[4] Leaf, stems, buds, flowers, fruit, seed, and roots, are used as vegetables. In the studied area, many communities still have trust in the herbal remedy which plays an important role.[5] In the life of this ethnic people.[6]

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MATERIALS & METHOD

Study area:

Palanpur taluka is situated in the Banaskantha district in north Gujarat in Gujarat State of India. The administrative headquarters of the district is at Palanpur which is also the largest city. The Banaskantha district is famous for the Amabaji temple and Balaram temple which attracts many tourists. As far as the geographical

distribution of concerned Palanpur taluka is situated at 24° 10' 12' N, latitude 72°25' 48' E longitudes. The total area of the Palanpur taluka is 4,574 km^2.

METHODOLOGY

This study information was collected from various people of Palanpur taluka (Rabari, Thakor, Bhil, Gamar, Garasia, Dama, and Kharadi, also from local people, and local vegetable markets). The plant identification and ethnobotanical use of the study area are random. Documentation of plants was made with the help of flora and other taxonomic literature.[7] The information collection was through face-to-face interviews, questionnaires, and dialogs with tribal and local communities. The information on plants used for other than medicinal purposes is also given. During the survey information regarding the data included local name, plant parts, plant relation to other plants, collection time, use of the method, mode of preparation, use time and parts used etc.[6,7,9,12,13]

RESULT & DISCUSSIONS

In the data survey, it was found that plants of 20 species in 13 families were used by the local people of Palanpur taluka of Banaskantha district. Important taxa that remain used by the tribal group are flowers of two plants from the family Caesalpiniaceae, and one plant from each family like Fabaceae, Myrtaceae, and Sapotaceae are used as flowers. Two plants are used Rutaceae, and Myrtaceae are used as fruits. One-one plants from each family of Annonaceae, Rhamnaceae, Anacardiaceae, Fabaceae, Caesalpiniaceae, Caricaceae, Sapotaceae, Euphorbiaceae, and Arecaceae family used as fruit. Two plants are used from Rutaceae are used as leaves. One plant each from Meliaceae, Moringaceae, Caesalpiniaceae, and Euphorbiaceae is used for leaves. These are valuable plants that are essential for protection and additional agriculture in the current situation therefore the tribal people could be more helped to stay alive. Ethnomedicinal base to health, which are used by local people for various alignment including digestive system, stomach problem, joint pain, urinary disease, stone crake.[12] Mostly these nourishment plants are folded to the dealers as simple drugs for which they happen to be the main economic sources of the local people. It is important that the flora should be conserved for future generation groups and the tribal people must be fortified for growing these plant parts as food for vegetable purposes and plants on a large scale for optimizing their financial market basis. There is also a need to document the wide information about other ethnomedicinal plants that exist still in the Palanpur taluka area.

Table-1 Use of Plant parts by tribal Communities

S.N.	Botanical Name	Family	Local Name	Useful parts	Use for
1	*Annona squamosa* L.	Annonaceae	Sitafal	Fruits	Nutrient purpose
2	*Ziziphus nummularia* (Burm.f.) Wight & Arn.	Rhamnaceae	Chanibor	Fruits	Nutrient purpose
3	*Aegle marmelos* (L.) Corr.	Rutaceae	Bili	Fruits	Tonic, Digestive system
4	*Murraya koenigii* (L.) Spreng.	Rutaceae	Mitholimdo	Leaves	Digestive system
5	*Limonic acidissima* L.	Rutaceae	Kotha	Leaves, Fruits	Vomiting Refrigerant
6	*Azadirachta indica* A. Juss.	Meliaceae	Limdo	Leaves	Skin disease
7	*Mangifera indica* L.	Anacardiaceae	Ambo	Fruits	Nutrient purpose
8	*Moringa oleifera* Lam.	Moringaceae	Saragavo	Leaves	Skin disease
9	*Butea monosperma* (Lam.) Kuntze	Fabaceae	Kesudo	Flower	Skin disease
10	*Pithecellobium dulce* (Roxb.) Benth.	Fabaceae	Gorasamli	Fruits	Nutrient purpose
11	*Bauhinia racemosa* Lam.	Caesalpiniaceae	Asitro	Flower Corolla	Nutrient purpose
12	*Delonix regia* (Bojer ex Hook.) Raf.	Caesalpiniaceae	Gulmahor	Flower Corolla	Nutrient purpose
13	*Tamarindus indica* L.	Caesalpiniaceae	Amli	Leaves, Fruits	Pain, Digestive system
14	*Psidium guajava* L.	Myrtaceae	Jamfal	Flower, Fruits	Tonic, Bronchitis
15	*Syzygium cumini* (L.) Skells	Myrtaceae	Jambu	Fruits	Stomach complaints
16	*Carica papaya* L.	Caricaceae	Papaya	Fruits	Digestive system
17	*Madhuca indica* J.F.Gmel.	Sapotaceae	Mahudo	Flower	Cooling and tonic
18	*Manilkara zapota* (L.) P. Royen	Sapotaceae	Chiku	Fruits	Nutrient purpose
19	*Emblica officinalis* Gaertn.	Euphorbiaceae	Ambla	Leaves, Fruits	Pain problem, Digestive system
20	*Cocos nucifera* L.	Arecaceae	Narial	Fruits	Nutrient purpose

CONCLUSION

In the ethnobotanical study of Palanpur taluka in Banaskantha district, the plant species have been used wealthily by local and tribal people in their daily life. This study shows that the fruit of numerous plant species is used by local and tribal communities for nutrient purposes. In the study area, local and tribal people still believe in herbal medicine which herbal base significant portion of life in 13 of these communities. During this study, we can know the use of plants found in the field area by local and tribal people and the value of plants as medicine. The elements that are present in the plant are valuable for future medicine and this study is also helpful for the bio-diversity. Some of the species are also sold out in the regional market of Palanpur taluka Banaskantha district north Gujarat. It was also noted that the species which are used have some medicinal properties.

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