

## **Utilization of leaves flowers and fruits by Tribal communities of South Gujarat in India**

**M. B. Baraiya<sup>1</sup> and N. K. Patel<sup>2</sup>**

Department of Botany, Sheth M.N. Science College, Patan-384265 (India)  
[bmunesh7@gmail.com](mailto:bmunesh7@gmail.com)

### **Abstract**

The forest of South Gujarat drops on the Great Northern Parts of Western Ghats area, which is also home for many tribal people *e.g. Vasava, Dhodiya, Kotavaliya, Kolcha, Gamit, Valvi, Chaudhary, Naik*. These local Tribal communities are contingent on forestry for their housing, housing material, firewood, food, fodder and fiber. Present study carried out work on use of some plant species as food as medicinal purpose. Sixteen Species of tree species 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 regional market of South Gujarat. It was also noted that the species which are used in disease of the digestive tract. Thus, present study will be helpful in the isolation of such medicinal properties of wild plants for human well-being.

**G**ujarat state has nearly 4,320 plant species recorded, which accounts for almost 9.33% of the total floral diversity of India.<sup>1</sup> Indian traditional knowledge is broadly used in the home of tribal and local people. Traditional knowledge often includes practices based on a long time duration basis of observations. Multipurpose uses of plants among multiethnic human societies are all practice-based observations. A review of past literature on ethnobotany and ethnomedicine indicates those sufficient study works which have been done on forest area of India. Plant is man's friend in survival, giving him food and fuel and medicine<sup>2</sup> from the day beyond the earth of civilization. Tribal Communities have

an intricate connection with their nearby plant flora. In the study, importance has been placed on plant species used for various purpose<sup>3</sup>. Root, stem, leaf, bud, flower, fruit, seed are used as vegetables. In the studied area, many people still have faith in the herbal remedy which plays an important role<sup>4</sup> in the life of this tribal people<sup>5-6</sup>.

### *Study Area :*

The South Gujarat area drops in the bio geographical zone in Western Ghats. Upper portion of South Western Ghats is part of Deccan Peninsula and is constituted by five districts viz., Surat, Tapi, Dangs, Navsari and

Valsad. Mandvi taluka situated at Surat district of South Gujarat in Gujarat State. As far as the geographical distribution is concerned a Mandvi is situated at (North border) lat. 21° 25' 48" lon. 73° 19' 46", (East border) lat. 21° 23' 35" lon. 73° 28' 37", (South border) lat. 21° 13' 20" lon. 73° 18' 11", (west border) lat. 21° 23' 59" lon. 73° 02' 04". Border touch to Songadh, vyara, valod, bardoli, kamrej, mangrol, umarpada taluka.

This study information was collected from various people of Mandvi taluka

(kotavaliya, vasava, chaudhary community, Bhagat and also from local public, local vegetable markets). The plants identification and ethnobotanical use of the study area is randomly. Documentation of plants was made with the help of flora and other taxonomic literature<sup>7</sup>. The information collection was through questionnaire methods and dialogs with tribe, local communities. The data include local name, morphological structure, stages of plant parts, relation to other plants, collection time, use time, use of method, mode of preparation, parts used etc.<sup>5-7,11,13,15,16</sup>.

Table-1. Use of Plant parts by tribal Communities

S. No.	Botanical name	Family	Local name	Season	Useful parts	Use for
1	<i>Anacardium occidentale</i> L.	Anacardiaceae	Kaju	Mar-jul	Fruit	Memories
2	<i>Mangifera indica</i> L.	Anacardiaceae	Abmbo	Feb-jun	Fruit	Nutrient purpose
3	<i>Spondias pinnata</i> (L.f.) Kurz	Anacardiaceae	Khatam-bhadu	May- jul	Leaves	Digestive tract
				Jan-jul	Flower All parts	Joint pain
4	<i>Holarrhena pubescens</i> (Wall.) Ex G. Don	Apocynaceae	Moti kudi	Mar-jul	Flower All parts	Joint pain
5	<i>Bombax ceiba</i> L.	Bombacaceae	Shimalo	Fab-may	Flower Corolla	Nutrient purpose
6	<i>Cordia myxa</i> L.	Boraginaceae	Gunda	Mar-jul	Fruit	Digestive tract
				Mar-jul	Flower All parts	Digestive tract
7	<i>Bauhinia racemosa</i> Lam.	Caesalpiniaceae	Asitro	Sep- nov	Flower Corolla	Nutrient purpose
8	<i>Cassia fistula</i> L.	Caesalpiniaceae	Garmalo	May-jun	Flower Corolla	Nutrient purpose
9	<i>Delonix regia</i> (Boj.) Raf.	Caesalpiniaceae	Gulmahor	Mar-jul	Flower Corolla	Nutrient purpose
10	<i>Tamarindus indica</i> L.	Caesalpiniaceae	Khati ambli	Mar-jul	Leaves	Pain

						problems
				Mar-jun	Flower All parts	Pain problems
11	<i>Carica papaya</i> L.	Caricaceae	Papaya	Mar-jul	Fruit	Digestive tract
12	<i>Pithecellobium ducle</i> (Roxb.) Benth.	Fabaceae	Goras ambli	Feb-jun	Fruit	Nutrient purpose
13	<i>Sesbania grandiflora</i> (L.) Pers.	Fabaceae	Shekati	Mar-jul	Fruit	Nutrient purpose
				Apr-may	Flower Corolla	Nutrient purpose
14	<i>Moringa oleifera</i> Lam.	Moringaceae	Saragavo	Evergreen	Leaves	Skin problems
				Evergreen	Flower Corolla	Joint problems
				Evergreen	Fruit	Nutrient purpose
15	<i>Ceriscoides turgida</i> Roxb.	Rubiaceae	Gulguro	Nov-jan	Flower Corolla	Nutrient purpose
				Nov-jan	Fruit	Nutrient purpose
16	<i>Tamilnadia uliginosa</i> Retz.	Rubiaceae	Gagada	Apr-oct	Flower Corolla	Nutrient purpose
				Apr-oct	Fruit	Nutrient purpose

In the data survey it was found that plants of 16 species in to 9 families used by local people of Mandvi taluka area of south Gujarat. Important taxa which remain used by the tribal group are flowers of four plants from the family Caesalpiniaceae, one - one plant from each family like Anacardiaceae, Apocynaceae, Bombacaceae, Boraginaceae, Fabaceae, Moringaceae, Rubiaceae is widely used as flower. Two plants are used from Anacardiaceae, Fabaceae, Rubiaceae are used as fruit. One -one plant from each family from Boraginaceae, Caricaceae, Moringaceae

family used as fruit. One plant each from Anacardiaceae, Caesalpiniaceae, Moringaceae are used for leaves. *Moringa oleifera* Lam. is use to leaves, flowers & fruits. These are valuable plants that essential protection and additional agriculture in the current situation, therefore that the tribal people could be more helped to stay alive. Ethno medicinal base to health, which are used by local inhabitants for various alignment including digestive system, stomach problem, joint pain, urinary disease, stone crake<sup>15</sup>. Mostly use these nourishment plants are folded to the dealers as crude drugs

for which they happen to be main economic sources of the tribal 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 a food for vegetal purpose and plants on a large scale for optimizing their financial market basis. There is also need to documentation the widely information about more other ethnomedicinal plant exist still in Mandvi area.

This study accomplishes that the flowers of numerous plant species remain used by tribal communities as vegetables. Among them, Corolla is a widely used flower. These people also use several other plants species aimed at Non-Medicinal drives. The collection information not only shows that many preparations are made from single plant parts. Mostly plant parts are mixed to additional plant part or vegetables is used. In the study area, local people still take belief in the herbal medicine which herbal base significant portion in life<sup>16</sup> of these communities. Some of the species are also sold out in the regional market of south Gujarat. It was also noted that the species which are used has some medicinal properties.

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