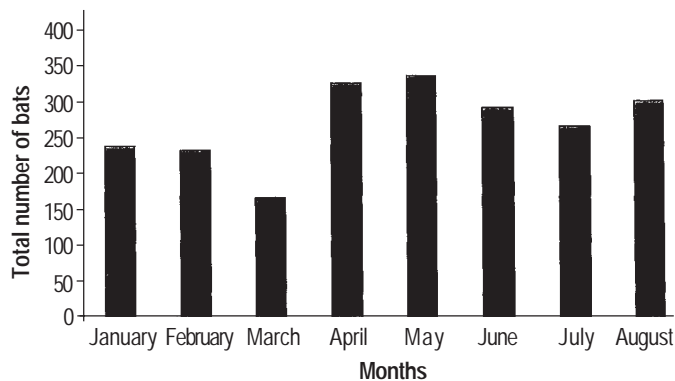


Table 1. Fruit plants of *Cynopterus sphinx* at the I.I.Sc. campus.

<i>Clusia rosea</i>	<i>Ficus racemosa</i>	<i>Ficus bengalensis</i>
<i>Pheonix</i> sp.	<i>Diospyros montana</i>	<i>Guazuma ulmifolia</i>
<i>Syzygium jambus</i>	<i>Muntingia calabura</i>	<i>Musa paradisiaca</i>
<i>Arachas zaposa</i>	<i>Santalum album</i>	<i>Mangifera indica</i>
<i>Psidium guajava</i>	<i>Terminalia catappa</i>	

**Figure 1. Seasonal variation of fruit bats**

nearby tree. It was also recorded that the Shikra had attacked the roosting site continuously on three occasions. It was successful on two occasions killing young juveniles and injuring a large adult fruit bat.

Feeding activity: Feeding activity was noticed after sunset. Bats would fly to a chosen fruit tree, pluck a fruit or seed and return to their respective roost to consume them. This was seen only during a partly cloudy or rainy day. A total of 14 plant species (Table 1) were identified from the collection below day roosts. Plant species such as *Muntingia calabura*, *Musa paradisiaca*, *Santalum album* were seen to be constant throughout the year. The food sources were usually present 45-450m away from each of the colonies. The seeds found below the roost were collected and identified periodically. No count was made on the amount of seeds of a particular plant species.

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ETHNOMEDICINE OF GADIA LOHARS OF RAJASTHAN

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Gadia Lohars or “Blacksmiths in carts” are one of the most well known nomadic tribes of Rajasthan. Even to date, they proudly mention the association of their forefathers with the brave Maharana Pratap, the gallant ruler of Mewar. After the death of Maharana Pratap, they took a vow to leave their homes and to lead a nomadic life until the fort of Chittor was liberated again. This tribe has still refused to settle down at one place inspite of the efforts of the government of Rajasthan.

Owing to their association with carts and their profession as blacksmiths, they are called *Gadia Lohars*. For the most part of the year they are confined to the outskirts of the cities and towns, but before the arrival of monsoon, they shift to rural areas and prepare agricultural implements for the peasant community. During the monsoon, they stay in rural areas, and as soon as it is over, they start for another place.

Jhalawar District is situated between 23°45'-24°55'N and 75°51'-76°95'E, having an area of 6323.13sq.km located in the southeastern part of the state adjacent to the northern edge of Deccan Plateau. The average annual rainfall is 925mm. The temperature fluctuates between 39°C (during January) to 47.5°C (during May and June).

Gadia Lohars reach an area before the onset of rainy season. Once the season commences, they remain confined to the outskirts of towns and villages of districts Jhalapatan, Asnawar, Baknai, Raipur, Eklara, Khanpur and Manoharthans. I visited these places during the rainy season to study their ethnobotanical practices (Table 1).

Medical beliefs

Ojhas or Bhopas used to be medical practitioners of the tribe, (twenty to twenty five years back). Of late, the Patel or the head of the community performs this duty. However, sons and grandsons of Ojhas also assist the Patels as they possess some medical knowledge learnt in the family. Since they are in continuous touch with urban life these days they are gradually losing their touch with the knowledge of herbal medicines. Some of them

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have started to use allopathic drugs for the treatment of certain diseases. Therefore, it is of immense value to record ancient wisdom of medicinal plants, as it is inherited by word of mouth through generations, before they become extinct.

Health status of the community

Although by profession Gadia Lohars are blacksmiths this profession does not provide them the basic standards of living, not even two square meals a day. Malnutrition is found to be a major causative factor of diseases in adults and children. The houses of Gadia Lohars are their carts, which are always exposed to the elements. Besides, their close proximity to fire during

long working hours of the day while making tools is a source of respiratory and allergic diseases. However, in recent times, they have been observed to cover their carts in a hutment-like made of bamboo chips. Ventilation and sanitation levels are very poor. Most prevalent diseases are malaria, tuberculosis, worm infestation, gastrointestinal infections, allergies, skin infections and unknown fevers. Occupational hazards and poor living conditions are the major problems for the community.

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Table 1. Checklist of medicinal plants used by the Gadia Lohars.

Scientific Name	Common name	Collection details	Extraction and Processing	Drug Therapy
<i>Argyreia speciosa</i> Sweet	Tamesari	Mature leaves collected throughout the year	Fresh mature leaf coated with mustard or groundnut oil, mildly heated.	Mildly hot leaf tied to abscess twice a day. Efficacious if applied for five days.
<i>Argemone mexicana</i> L.	Pili Kateli	Roots collected throughout the year.	Roots of mature plants are crushed and the extract is mixed with 30ml coconut oil and 15g fine sulphur powder to prepare a paste.	Paste thus prepared is applied twice a day for seven days. It is said to be effective in eczema and other skin diseases.
<i>Bauhinia purpurea</i> L.	Kachhar	Tender twigs and branches of mature trees are plucked and stored in wet cloth for seven days.	Bark is separated from twigs.	Crude bark is chewed and twigs are used as "Datun" for cleansing teeth for 15 days, twice a day. Tooth aches and swelling of gums are said to be cured.
<i>Blumea lacera</i> (Burm. f.) DC.	Kakronda	Mature leaves collected fresh.	Ten mature and fresh leaves are crushed and a paste is prepared.	Paste thus prepared is applied locally on piles. It is effective if the treatment is continued for 20 days.
<i>Calotropis procera</i> (Aiton) R. Br.	Aankdo	Fresh leaves or branches, collected throughout the year.	White latex collected from fresh leaves.	Two drops of latex is applied on the margins of thumbs. It is also said to be useful for the treatment of eye troubles and conjunctivitis.
<i>Cassia occidentalis</i> L.	Kusumbi	Branches or mature plant itself collected during rains.	Either plant itself is grown near hutments or mature branches kept in each cart.	It is used as snake repellent.
<i>Echinops echinatus</i> Roxb.	Oont Kateli	Root collected throughout the year.	Dried root is applied or tied directly on the hairdo of the lady at the time of child birth.	It is said to facilitate child birth.
<i>Hygrophila polysperma</i> T. Anders	Kala bichhu	Roots of mature plants collected in spring used fresh or dried.	Roots are crushed with water and a paste is prepared.	Paste applied on the wound of snake bite. The treatment is repeated every hour until the patient is cured.
<i>Kickxia ramosissima</i> (Wall.) Janchen.	Brahma toomari	Fresh leaves of mature plants used whenever required.	20-25 leaves are crushed to prepare a paste.	Paste applied on abdominal swellings thrice a day for three days.
<i>Ocimum americanum</i> L.	-	Fresh leaves of mature plant collected during rains and afterwards.	10-15 fresh leaves crushed with water to form a paste.	Freshly prepared paste taken two times a week as prophylactic therapy for malaria.
<i>Salvia plabeia</i> R. Br.	Tukhmaria	Fresh leaves collected in winter, spring and summer.	10-15 fresh leaves crushed with water and 5g sugar or sugar candy to form a paste.	Paste used with cold water early in the morning for a week is said to be useful for urinary trouble treatment.