

38.	Urine problem	<i>Colocasia esculenta</i> (L.) Schott [Araceae]	Stem is ground into paste, given orally with water thrice daily for 2 days.
39.	Intermitted fever	<i>Tinospora cardifolia</i> (Willd) [Menispermaceae] <i>Centratherum anthelminticum</i> (L.) [Asteraceae]	Leaves are ground into paste given orally twice daily for 3 days.
40.	Anthrax	<i>Withania somnifera</i> (L.) Dunal [Solanaceae] <i>Asparagus racemosus</i> (Willd) [Liliaceae]	Corm paste is given orally with water twice daily for 3 days.

4. Plant Families

The family Acanthaceae was represented by the highest number of species (18 species). This was followed by Solanaceae (16 species), Rutaceae (14 species), Lamiaceae (13 species), Apocynaceae (12 species) and Malvaceae (9 species). Poaceae, Fabaceae were represented 8 species. Apiaceae, Ulmaceae, Papaveraceae and Mimosaceae with 6 species each, while Cucurbitaceae, and Asclepiadaceae with 5 species each (Fig. 1).

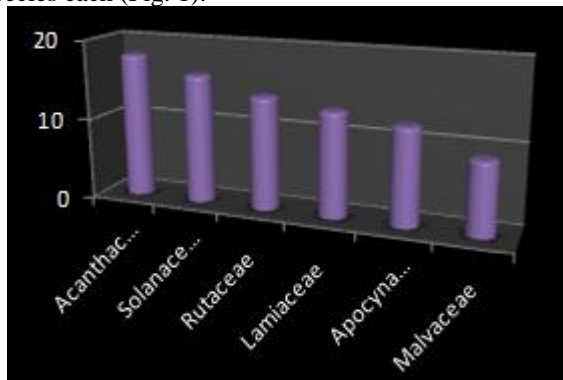


Figure 1: Most dominantly used represented families of Ethnoveterinary knowledge of Jagalur Taluk.

Life forms of Medicinal Plants

In Jagalur taluk, most of the traditional practitioners used locally available plants to cure veterinary diseases. Habit-wise analysis of medicinal plants indicated that tree species were preferred most of the herbal drug preparations represented with 48 species followed by herbs (30 species), shrubs (28 species) and climbers (15 species). Large number of healers preferred wild plants as compared to cultivated species for the preparation of herbal formulation (Fig.2).

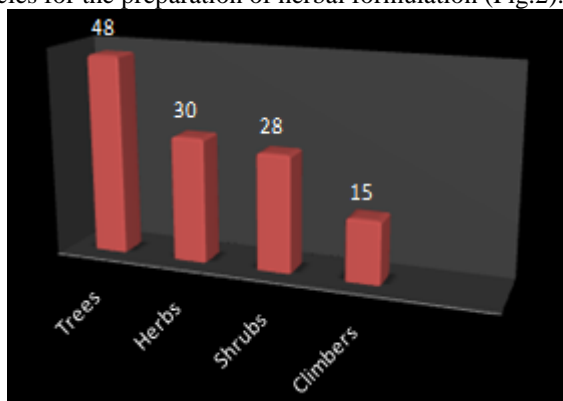


Figure 2: Life form of medicinal plants used in Study area

Plant Parts used and Herbal Preparation

The most commonly used plant part to prepare the herbal remedies was leaf and bark followed by seed, fruit, latex, rhizome, tubers whole plant and flower . In many case, more

than one part of the same plant species is used in the treatment of different ailments. The use of plant material can also depend on its availability. The leaves and bark are always available and most of the healers prefer these parts for preparing herbal formulation. The less prefer parts of the plants were flower and fruits because they have short time of availability. The percentage of plant parts included in veterinary applications are, leaves (67%) followed by bark (13%), root (3%) seeds(7%), fruits (5%), latex (5%), Rhizome (2%), Flower (1%), whole plant (2%) (Fig.3). Amongst all the plant parts, leaf is most commonly used in the preparation of different remedies in the study area. This is in agreement with most other ethnobotanical studies in the world (Macia *et al.*, 2005; Srithi *et al.*, 2009).

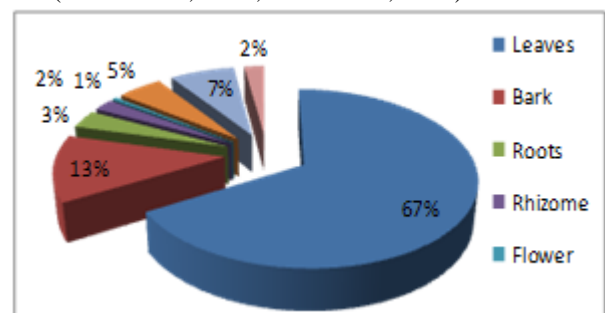


Figure 3: Plant parts used in herbal preparation in Jagalur taluk.

Drug Preparation and Additives

The medicinal plants have various methods of preparation and application for different types of ailments. The majority of herbal remedies are prepared in the form of paste (58 remedies) and juice (36 remedies) followed by decoction (12 remedies), raw (12 remedies) and latex (6 remedies) form (Fig. 4). The rural folk healers prepared remedies in single and in multiple preparations in different ways. The mode of preparation are grounding, crushing, boiling, and chewing or eating fresh part. The crushed parts are used to prepare juices or paste to be taken orally or applied topically.

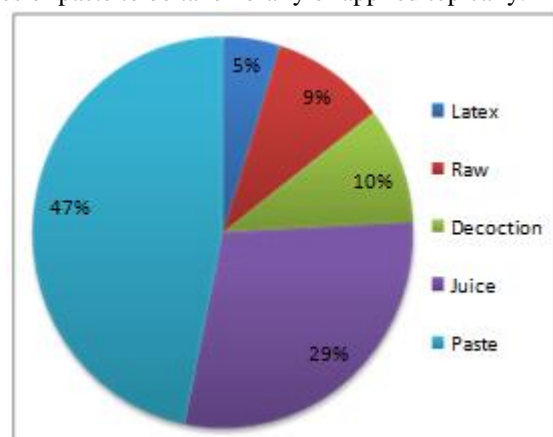


Figure 4: Preparation of herbal drug formulation in study area.

Traditional healers use different mixtures or additives or solvents for the preparation of herbal formulation. In most cases, water was the solvent employed in preparation of the remedy. Besides plants and water, some other materials were

also incorporated in the preparations; buttermilk (37%), freshmilk (33%), oil (4%), ghee (2%), sugar (4%), salt (2%), lime paste (7%), coriander powder (4%) and egg (2%).

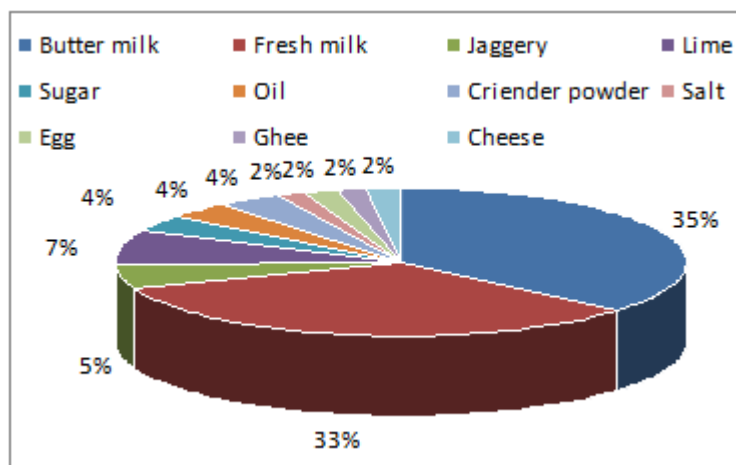


Figure 5: Additives used in herbal formulation in the study area

The majority of the formulations were prepared using a combination of plants. For example, fruit of *Punica granatum* in combination with the leaves of *Pedaliium murex* and the bark of *Ailanthus excels* for diarrhoea. Flower of *Cymbopogon caesius* in combination with the leaves of *Dichrostachys cinera*, fruits of *Piper nigrum* and bulb of *Allium sativum* for seizure. And leaves of *Cissus quadrangularis*, *Withania somnifera*, *Toddalia asiatica* in combination with the bark of *Holoptelea integrifolia* for bloat. Occasionally, single plant species was used for specific diseases. For example, *Jatropha curcas* for bloat, *Azadirachta indica* for common fever, *Argemone maxicana* for lack of appetite and *Terminalia chebula* for ephemeral fever.

The drug preparations and their therapeutic uses have always differed from region to region. For examples, herbal healers of Andhra Pradesh used, *Tinospora cordifolia* while local people of Salem district in Tamil Nadu used *Cardiospermum halicacabum* for treating fever in cattles. However, traditional practitioners of Jagalur taluk used *Azadirachta indica* or *Leucas aspera*, *Momordica charantia*, *Andrographis paniculata* to treat the same disease. The local healers also used certain plant species to treat the most common multiple ailments. For example *Withania somnifera* to treat bloat. Common fever, lack of appetite, anthrax and *Wrightia tinctoria* to treat fever, cough and snake bite. Herbal healers had their own methods of the preparation of herbal formulation, mode of application, dosage and duration. The present study revealed that all respondents of the study area were male individuals, who learnt traditional healing therapy from their parents and their own experience. Rural people of Jagalur taluk have faith in herbal medicines and utilized locally available plants for veterinary health care as they are easily available.

This lack of effort to sustainable utilization of resources may result in depletion of medicinal herbs in natural habitats. There is a great need to create awareness among the indigenous communities about endangering medicinal plants, if over exploited meet market demand. So that the

present status of the economically and medicinally important plants of the study area needs to be determined in order to develop plants for their protection. Improved awareness of conservation issue is needed. Proper documentation of indigenous knowledge about the plants could be supportive constructive of conservation programmes and phytochemical investigation.

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