



An Ethno-medicinal Aphrodisiac Drug of Gujjar Community of Indian Central Himalaya

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ABSTRACT *Badoi rus* is an aphrodisiac drug prepared by the fresh prop root of *Ficus benghalensis* L. It is frequently used by Gujjars to fuel their sexual flames and to improve erectile dysfunction. The methods used to gather the relevant information regarding the medicinal use of the plant included semi-structured interviews, personal observation and audio video documentation. The ethno-medicinal use of the plant was also cross checked with the earlier studies. This paper depicts the method of preparation of drug and its mode of administration and there is a dire need to preserve this traditional knowledge to develop a novel potential compound in pharmaceutical/viagra industry.

INTRODUCTION

Kumaon Himalaya has a great wealth of biological diversity, unique physical and ethnic diversity, traditional culture and much indigenous knowledge or tribal wisdom. There are many tribes and aboriginal communities residing in remote areas and have close connection to forest since the time immemorial. Due to close proximity and long association with forest they have acquired tremendous knowledge of plants, plant products and their uses in their daily requirement and health care practices (Joshi and Pant 2012; Padalia 2015; Pande and Joshi 2015; Pandey and Pande 2015; Chauhan et al. 2017). Ethno-medicinal plants constitute a precious resource for mankind. Since long times, plants have been put to medicinal use by the traditional herbalists/*Hakims*, *Vaidays*, herbal practitioners and the local people (Sarad et al. 2017). Indian central Himalayan region have vast biodiversity that are serving as vital source of ethno-medically important plants (Pathak and Navneet 2017).

Sexual impotency is a major problem that affects many men especially between 20 to 60 years, which has become a common male disorder nowadays. It is the inability to maintain a firm penile erection during sexual intercourse. Sexual health is an important determinant of quality of life. For decades men have been looking for *pick me up* in the bunk room and use several kinds of natural products as a solution to erec-

tile dysfunction. An estimate 20-30 million men suffer from some degree of sexual dysfunction due to high levels of chemicals in the diet (Galle and Trummer 2003). Erectile dysfunction and sexual impotence are old problems and traditionally the indigenous knowledge had ways to treating and maintaining sexual performance. To overcome this problem of erectile dysfunction, many natural aphrodisiac potential were preferred.

An aphrodisiac decoction is prepared by the fresh prop root of *Ficus benghalensis* L. *F. benghalensis* (English- Banyan, Hindi-*Bargad* and locally named by Gujjar as *Badoi*) is a perennial evergreen tall tree up to 25 m high with spreading branches and many aerial roots belonging to moraceae family. It is a sacred tree found to be growing commonly in the forests, near temples, home gardens, road sides and hilly slopes. Its aerial root decoction is traditionally used by the Gujjars of Uttarakhand to enhance penile erection sufficient for mutually satisfactory intercourse.

Objectives

This study was carried out mainly to preserve the practice of conventional knowledge of the aphrodisiac drug prepared by fresh prop root of *F. benghalensis* L. which will be fruitful for the discovery of a new drug in the pharmaceutical industry.

METHODOLOGY

The primary data were collected through personal observation on the mode of preparation and its traditional use during 2016 and 2017 with an aim to document the ethno-botanical use of plant occurring in the forest region of Corbett National Park, which is situated in the foothills region of Kumaon Himalaya, India. The information collected on use of the plant was cross checked by several other elder Gujjars of different *khattas* (Settlements of Gujjar) through many visits. For the preparation of aphrodisiac drug, 1/2 kg reddish fresh tender aerial roots (Fig. 1a) of *F. benghalensis* are collected from the plant. Care should be taken that the fresh prop roots are healthy and disease free. They were cleaned well and washed thoroughly in water to remove dust particles, surface microbes and other soil debris. Take approximately two liters water in a pot made from non-reactive metal such as stainless steel. The aerial roots are cut or crushed into small pieces and boiled with water (Fig. 1b) until reduced to quarter volume and have changed its color to blackish brown (Fig. 1c, d). This decoction is allowed to cool for half an hour, filtered through a muslin cloth and stored in a cool place for not more than 5 days (Fig. 1e, f).

RESULTS

Fresh aerial tender roots of *F. benghalensis* plant are boiled in water to extract oils, volatile organic compounds and other various chemical substances. The roots are boiled in water until the volume of water remains one-fourth. Now this boiled water is filtered off and the filtrate is called decoction (Fig. 1e). Two teaspoonful decoctions are taken orally in the morning before meal until cured. This decoction of aerial roots is a very effective homemade remedy for the treatment of sexual dysfunction and performance, having no side effects and low risk of long erection as found in traded artificially synthetic drugs. During field survey it was found that most of male Gujjars used this natural medicine to enhance sexual arousal.

DISCUSSION

About eighty to ninety percent of the Gujjar populations still rely on traditional medicine for day- to- day healthcare due to the absence of hospitals and medical facilities in the forest area as well as nearby areas. There are several ailments that Gujjars have been handling and treating from the very beginning and sexual impotence and erectile dysfunction is one of them.

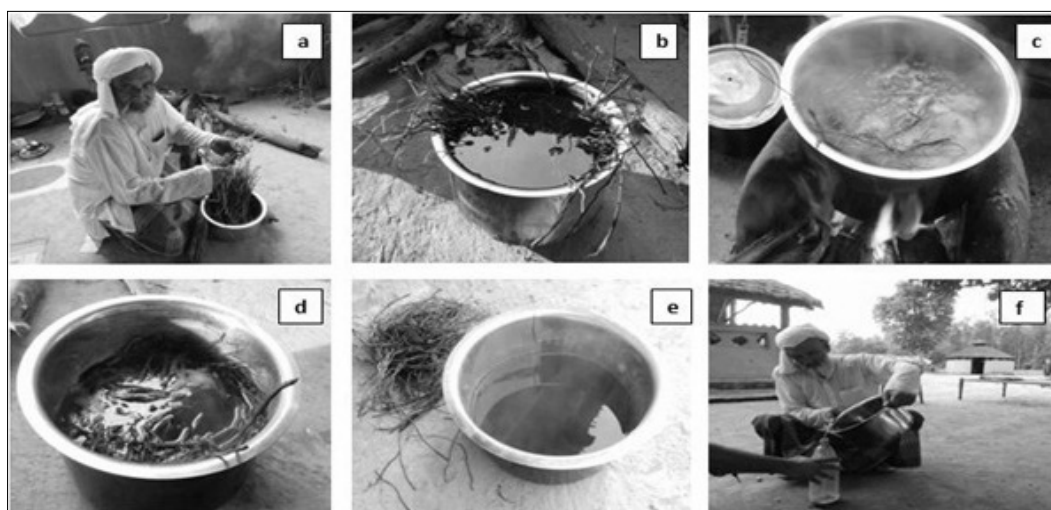


Fig. 1. a. Male Gujjar demonstrating prop root. b. Prop roots are plunged in tap water. c. Boiling of aerial roots over fire. d. Decoction of roots. e. Decoction after filtration through cotton cloth. f. Preservation of aphrodisiac drug.

The medicinal plant *F. benghalensis* continues to play an important role in sexual health care of the Gujjar community. Shah (2006) reported that latex of the whole plant is taken orally in the treatment of sexual dysfunctions. Although various parts of *F. benghalensis* is subjected to treatment for sexually related disorders in earlier studies by many ethno-botanists (Joshi and Pant 2012; Pandey and Pande 2015) but the proper documentation of preparation of remedy and doses is still lacking in the available literature. Therefore, present study bridges this gap by adding to the knowledge.

Different parts of the plant also have been found to possess several other medicinal properties. For example, leaves are used to treat ulcers, seeds and fruits as coolants and tonic, aerial roots are given for obstinate vomiting and gonorrhea and bark infusion is considered as a tonic and astringent (Mandal et al. 2010). Powder of aerial roots is given to the patient suffering from jaundice (Gupta et al. 2010). Milky juice is applied externally on boil and soles of feet when cracked or inflamed (Patil and Patil 2010). Latex is useful in lumbago bruises and in odontopathy (Kaur 2015). Aerial roots are useful in liver inflammation, dysentery and gonorrhea (Bajpai et al. 2016). Root bark powder is taken orally with sugar and cow's milk improves memory efficiency (Balkrishna and Misra 2017). Whole plant latex is useful in diabetes (Chauhan et al. 2017). According to Ayurveda and Unani system of medicine, this plant has several medicinal values to cure different diseases involving vaginal complaints, leprosy, ulcers, piles, syphilis and many more. Several other ethnomedicinal plants have also been used time to time as sex stimulants or sexual performance enhancer in traditional system of medicine of various countries (Mugisha and Origa 2005; Low and Tan 2007; Afolayan and Yakubu 2009; Kumar et al. 2009; Chauhan et al. 2009; Sharma et al. 2010; Singh et al. 2017).

CONCLUSION

Generally the Gujjars of Kumaon Himalaya still have a great belief in the effectiveness and success of this natural medicine. In modern medication of erectile dysfunction, the oral prescription medication of popular allopathic medicines is taken. However this medicine is only effective for a short while and afterwards its effects wears

off but in many males it is not compatible and provokes serious adverse effects, therefore, effective natural treatment is still in demand. The use of this homemade drug to stimulate sexual desires or to enhance performance during intercourse does not create any side effects and provides an alternative safe route over present traded medicine. The tree *F. benghalensis* is considered sacred in India. Although the plant is not facing any risk of extinction in the study site but the traditional use of plant is facing threat in the near future due to lack of interest among the younger generation. So there is a dire need for inventorying and documenting all ethno-botanical information related to this plant among the Gujjar community. This study is therefore an attempt to preserve the traditional knowledge in the era of modernization and to develop a platform for future research.

RECOMMENDATIONS

The traditional knowledge of the Gujjar community concerning ethno-medicine should be documented and scientific validation should be done. A framework to conserve the traditional knowledge should be designed. Herbal medicine system should be encouraged. Aerial root of above mentioned plant should be chemically profiled.

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