



ETHNIC HERBALS USED AS ANTIDOTE TO SNAKE BITE BY YANADI, YERUKULA AND LAMBADI TRIBES OF TIRUVUR NTR DISTRICT, ANDHRA PRADESH, INDIA

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ABSTRACT

The study on ethnic herbals used as antidote to snake bite by Yanadi, Yerukula and Lambadi tribal people of Tiruvuru area provides information regarding nine herbal species of plants which comes from nine genera and seven Angiosperm families. Ethnic tribes of Tiruvuru mainly comprises of Yanadis, Yerukulas and Lambadis. The 9 plant species recorded against snake bite had shown that ethnic tribes were still depended on local vegetation for the care of their life, indeed.

Keywords: Antidote, Snake bite, Herbal medicine, Tiruvuru, NTR district.

INTRODUCTION

Antidote to snake bite was one of the health problems neglected around the tribal areas of Tiruvuru. Role of medicinal plants in treating snake bites, in rural area are not documented because of the dependence on medical practitioners. In human history using of medicinal plants was a chosen practice from many generations. Medicinal resources mainly gained from the plant world. The pet animals and humans were killed by snake bite (Peter and Ibrinke, 1993). Communities of indigenous people depended on herbal medicines from ancient times to cure variety of ailments including cases of snakebites (Samy et al. 2008). In India, specific plants were used for the treatment of victims bitten by specific snakes in 'Ayurvedic' system of medicine. In both developing and developed countries it remains an important problem to find suitable antidotes for snakebite. Herbals which were used as medicine were readily available in tribal areas to treat snake bite, where as in urban areas, available is not easy. The tribal inhabitants of present study area are mainly consist of Yanadis, Yerukulas and Lambadis. Earlier few Ethnobotanical works were carried out in Andhra Pradesh (Sekhar et al., 2011). The latest study was under taken since there is no documentation of ethnic herbal remedies for snake bite of Tiruvuru area of NTR district, Andhra Pradesh, India.

METHODOLOGY

Field surveys were conducted during September, 2022 –May, 2024 for systematic recording of ethnomedicinal practices in the tribal hamlets of Tiruvuru area of NTR district. Collected Ethnomedicinal data, as per the methodology suggested by Jain (2010). Routine methods of plant collection and herbarium techniques have been followed. Ethnomedicinal usages of plants against snake bite were gathered from the village chief and tribal practitioners. Local names, plant parts used and mode of administration were recorded. With the help of Medicinal plants in Andhra Pradesh, India (T.Pullaiah 2002) and Flora of Andhra Pradesh (T.Pullaiah and E.Chennaiah 1997), the ethnomedicinal plants were documented..

Results and Discussion

Ethnomedicinal study against snake bite at Tiruvuru tribal areas revealed that a total of 9 plants distributed in 9 genera belonging to 7 families were recorded. The latest study, had been shown that root was used predominantly to treat snake bite followed by leaf, latex, bark and stem respectively. In the table displayed, explains that species were arranged alphabetically which includes the information regarding scientific name, vernacular name, family names along with the plant parts used and Ethnomedicinal usage. Asclepiadaceae and Caesalpiniaceae have 2 species each and one species each for Apocynaceae, Aristolochiaceae, Asteraceae, Lamiaceae and Mimosaceae respectively. Among all species, herbs were 3, shrubs were 3 followed by 2 climber and one tree. The study on ethnomedicinal plants used for snake bite indicated that the Tiruvuru area consists of species like *Aristolochia indica* L., *Bauhinia variegata* L., *Calotropis procera* (Aiton) W.T. Aiton, *Cassia occidentalis* L., *Eclipta prostrata* L., *Hemidesmus indicus* (L.) R.Br., *Hyptis suaveolens* (L.) Poit., *Mimosa pudica* L., and *Rauvolfia serpentina* (L.) Benth. ex Kurz are mostly used for this purpose

Table 1 Tribals of Tiruvuru area used the following plants as Antidote to snake bite

Botanical name/Family/Local name	Habit	Part used	Mode of administration
<i>Aristolochia indica</i> L., Aristolochiaceae, Nalleswari.	Climber	Leaves	Dried leaves are crushed to make pills, and administered twice a day.
<i>Bauhinia variegata</i> L., Caesalpiniaceae, Devakanchanam	Tree	Bark and Stem	Bark and stem are used on bitten area
<i>Calotropis procera</i> (Aiton) W.T. Aiton, , Asclepiadaceae, Tella jilledu	Shrub	Latex	Latex is used.
<i>Cassia occidentalis</i> L., Caesalpiniaceae, Kasintha	Shrub	Leaves	Leaves are used as an antidote
<i>Eclipta prostrata</i> L., Asteraceae, Guntagalagaraku	Herb	Root	Tribals made the root into paste and applied it as an antidote to snakebite .
<i>Hemidesmus indicus</i> (L.) R.Br., Asclepiadaceae, Sugandhi pala	Climber	Roots	For viper venom root paste is applied immediately at the bitten area.
<i>Hyptis suaveolens</i> (L.) Poit., Lamiaceae, Seema tulasi	Shrub	Roots	Root paste is applied over bitten spot
<i>Mimosa pudica</i> L., Mimosaceae, Dongalamullu	Herb	Whole plant	Whole plant is grounded made pills and given orally .
<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz. Apocynaceae, Sarpagandha.	Shrub (perennial)	Roots	Roots are grounded and applied over the bitten spot.

In Ethnomedicinal usage *Aristolochia indica* has been found most valuable plant to treat snakebite. It was also reported by Prashanthkumar and Vidyasagar from Bidar district of Karnataka India (2006). *Bauhinia variegata* L Bark and stem are used on bitten area. Latex of *Calotropis* applied on the snake bitten area for healing. Leaves of *Cassia occidentalis* L. were used in treating antidote to snake bite. It has been also reported by the tribal people of Chittagong hill tracts of Bangladesh (Biswas et al., 2010). One of the highly regarded antidote to snake bite was *Eclipta prostrata* (Mors et al., 1989). *Hemidesmus indicus* (L.) R.Br., displayed inhibitory activity against Viper venom. Whole plant of *Mimosa pudica* L. was grounded and made pills orally administered. *Hyptis suaveolens* (L.) root paste was applied over the bitten area. The roots of *Rauvolfia serpentina* (L.) are crushed and extract given orally and applied over the bitten spot.

Conclusion

There is a need to conserve these useful medicinal plant species by actively involving the acquiescence process. The investigation shown lucidly that the local tribal people are still depended upon vegetation against snake bite. The documented plants as antidotes for snake venoms in the Tiruvuru area are further required pharmacological screening and clinical trails before recommending as potential remedy.

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