



ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2021; SP-10(10): 635-637
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www.thepharmajournal.com

Received: 25-08-2021

Accepted: 27-09-2021

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Perceived effectiveness of Satawar (*Asparagus racemosus*) among the Tharu tribes of Bihar

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Abstract

The Indigenous Technical Knowledge in Animal Husbandry, which is in vogue throughout Tharuhat area in Bihar, is undocumented or, little documented and there is danger of extinction of this knowledge. It is of central significance to record these practices and assess their perceived effectiveness. Remembering this load of things, a concentrate on "Indigenous Technical Knowledge in Animal Husbandry (ITK)" was taken up during 2020-2021. A semi-structured interview schedule was used for data collection from 100 traditional healers and 200 livestock owners in Tharuhat area of Bihar. An inventory of Indigenous Technical Knowledge's was arranged according to identified breeding, feeding and health care practices. These ITK's were subjected to check perceived effectiveness told by livestock owners on their cost, availability, rationality etc and uses of Satawar (*Asparagus racemosus*). The present study was conducted to explore the perceived effectiveness of Satawar (*Asparagus racemosus*) roots towards increasing milk production and uterus cleanliness. It was found that majority (54.50%) of the respondents found it as most cost effective followed by 61.00 per cent felt it as most simplified. Further it was found that about (58.00%) felt it as most available followed by (56.50%) found it as most sustainable. The adoption of Satawar (*Asparagus racemosus*) was perceived better due to their availability, lesser side effects and lower costs. These Indigenous Practices may be recommended and disseminated among the farmers for their easily accessible.

Keywords: indigenous technical knowledge, perceived effectiveness, Tharuhat area

Introduction

Indigenous technical knowledge (ITK) refers to the unique local desijugar existing within and developed around the specific conditions of women and men indigenous to a particular geographic area (Grenier, 1998) [13]. These practices have been permeating starting with one age then onto the next by oral transmission and viewed as the all-encompassing methodology for domesticated animals the executive's approaches embraced by no literate societies. These assorted variety and varieties give more hues in nation's viewpoint. India involves biggest number of ancestral populaces on the planets and Tharu clans are one of them, usually known as *Tharu adivasi*. They live at Tharuhat zone in West Champaran region of Bihar. A number of recent works also discuss in the use of plants as an ethno veterinary medicine in the Indian subcontinent but no studies are available in Tharu Tribes of Bihar. Since no comprehensive and elite attempt has been made so far to survey the use of plants in ethno veterinary practices in West Champaran District of Bihar. The present survey was undertaken to identify, collect and document the indigenous technical knowledge (ITK) on medicinal plants like Satawar (*Asparagus racemosus*) plant and their utilization for primary health care of animals and management in West Champaran district of Bihar.

Materials and Methods

The current study was carried out in West Champaran district of Bihar, India. Out of 18 blocks of West Champaran district, four blocks which were having substantial higher Tharu tribal population namely, Bagha-2, Ramnagar, Gaunaha, and Mainatand were purposively selected. After selecting block, a list of farmers who belong to Tharu tribes had at least one livestock animal and practising ITK was prepared from each block. From the list 50 livestock owners which are known to use of ITK's and 25 traditional healers which were considered to be knowledgeable in ITK's in animal husbandry in surrounding Tharuhat areas were selected randomly with the help of local community leaders (Gumasta) and staffs of veterinary hospitals and NGOs from each block. Thus, all together 200 livestock owners and 100 traditional healers (300 respondents) were identified for the study.

The information were gathered and documented by utilizing a pre-tested interview schedule. The data thus collected were coded for the precise conclusion with the objective to study the perceived effectiveness of Satawar (*Asparagus racemosus*) among Tharu tribes.

Results and Discussion

The perceived effectiveness of indigenous technical knowledge (ITK) among randomly selected livestock owners for the use of Satawar (*Asparagus racemosus*) plant in animal husbandry practices was identified. The perceived effectiveness of ITK's was studied in terms of cost, simplicity/complexity, availability/accessibility, adaptability, rationality and sustainability.

Table 1: Perceived effectiveness of Satawar (*Asparagus racemosus*) root towards increasing the milk production and cleaning of uterus after parturition amongst the respondents. (N=200)

S.N.	Variables	Not	Somewhat	Most
1.	Cost effective	35 (17.50%)	56 (28.00%)	109 (54.50%)
2.	Simplicity	28 (14.00%)	50 (25.00%)	122 (61.00%)
3.	Availability/Accessibility	38 (19.00%)	46 (23.00%)	116 (58.00%)
4.	Adaptability	44 (22.00%)	97 (48.50%)	59 (29.50%)
5.	Rationality	34 (17.00%)	104(52.00%)	62 (31.00%)
6.	Sustainability	26 (13.00%)	61 (30.50%)	113 (56.50%)

Figures in parenthesis indicate percent value

The table-01 revealed that Perception of respondents towards effectiveness of Satawar (*Asparagus racemosus*) with respect of selected variables viz; cost, simplicity, availability/accessibility, adaptability, rationality and sustainability. It was found that 61.00 per cent of the respondents perceived it as easy to use followed 58.00 per cent found it as most accessible in the village and forest area. About 54.50 per cent of the respondents prefer it as it is cheaper in terms of cost followed by about (56.60%) felt it as most sustainable.

Table 2: Distribution of respondent for perceived effectiveness of Satawar root towards increasing the milk production and cleaning of uterus after parturition. (N=200)

S.N.	Categories (score)	Frequency	Percentage
1.	Low (0-4)	26	13.00
2.	Medium (5-8)	91	45.50
3.	High (9-12)	83	41.50

Table-02 depicts the distribution of respondents towards perceived effectiveness of Satawar and was found that the majority (45.50%) of the respondents falls into medium category of perceived effectiveness followed by (41.50%) in high and (13%) low category respectively. It was might be due to its low cost and availability in the nearby area, which motivate them to use it.

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