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Perceived effectiveness of Harjora plant (*Cissampelos quadrangularis*) among the Tharu tribes of Bihar

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Abstract

The Indigenous Technical Knowledge in Animal Husbandry, which is stylish all through the Tharuhat region in Bihar, is undocumented or, minimal reported and there is a risk of elimination of this information. It is of focal importance to record these practices and evaluate their apparent adequacy. Recollecting this heap of things, a focus on "Indigenous Technical Knowledge (ITK)" in Animal Husbandry was taken up during 2020-2021. A semi-organized interview plan was utilized for information assortment from 100 traditional healers and 200 livestock owners in the Tharuhat area of Bihar. A stock of Indigenous Specialized Knowledge was organized by distinguished reproducing, taking care of and medical services rehearsing. These ITK were exposed to check apparent viability told by domesticated animal owners on their expense, accessibility, reasonableness, and so forth and utilizations of the Harjora plant (*Cissampelos quadrangularis*). The current review was led to investigate the apparent adequacy of the Harjora plant (*Cissampelos quadrangularis*) stem and leaf towards fracture or, sprain and external fixation to the animal. It was tracked down that a larger part (61.50%) of the respondents tracked down it as the most cost-effective followed by 59.00 percent who felt it was the most simplified. Further, it was seen that about (54.00%) felt it was generally accessible followed by (43.50%) who thought that it is most sustainable. The reception of the Harjora plant (*Cissampelos quadrangularis*) was seen better because of its accessibility, lesser incidental effects, and lower costs. These Indigenous Practices might be suggested and disseminated among the farmers for their easily accessible.

Keywords: Indigenous technical knowledge, perceived effectiveness, Tharuhat area

1. Introduction

Native specialized information alludes to the novel neighborhoods desijugar existing inside and created around the specific conditions of women and men indigenous to a specific geographic region (Grenier, 1998) [13]. These practices have been saturating beginning with one mature and then onto the following by oral transmission and seen as the widely inclusive philosophy for trained creatures the chief's methodologies embraced by no proficient social orders. These grouped assortment and assortments give more tints to the country's perspective. India includes the greatest number of hereditary masses on the planets and Tharu groups is one of them, typically known as Tharu Adivasi. They inhabit the Tharuhat zone in the West Champaran locale of Bihar. West Champaran is one of the 38 districts of Bihar and Bettiah city is the administrative headquarter of this district. It is a part of the Tirhut Division. It occupies an area of 5228 sq. KM. It is located between 260 16' to 270 31' N latitude and 830 50' to 850 18' E longitude. It is bounded on the north by the hilly region of Nepal, on the south by Gopalganj district and part of East Champaran district, on the west by the state of Uttar Pradesh, and on the east, by part of East Champaran district and Nepal. A number of ongoing works likewise examine the utilization of plants as an Ethno veterinary medication in the Indian subcontinent, yet no examinations are accessible in the Tharu Tribes of Bihar. Since no extensive also, world-class endeavor has been made such a long way to study the utilization of plants in ethno veterinary practices in West Champaran District of Bihar. The current study was embraced to distinguish, gather furthermore, and report the native specialized information on restorative plants like the Harjora plant (*Cissampelos quadrangularis*) plant and their usage for essential medical services of animals on the board in the West Champaran area of Bihar.

2. Materials and Methods

The ongoing study was completed in the West Champaran district of Bihar, India. Out of 18

blocks of the West Champaran region, four blocks which were having significantly higher Tharu Adivasi populace, in particular, Bagha-2, Ramnagar, Gaunaha, and Mainatand were purposively chosen. In the wake of choosing a block, a rundown of ranchers who have a place with Tharu Adivasi had no less than one animal creature, and rehearsing Indigenous Technical Knowledge (ITK) was ready from each block. From the rundown 50 domesticated animal proprietors which are known for the utilization of ITK and 25 conventional healers which were viewed as learned in ITK's in creature farming in encompassing Tharuhat regions were chosen haphazardly with the assistance of nearby local area pioneers (Gumasta) and staffs of veterinary clinics and NGOs from each block. Accordingly, altogether 200 animal proprietors and 100 traditional healers (300 respondents) were distinguished for the review. The information was 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 the Harjora plant (*Cissampelos quadrangularicus*) among Tharu tribes.

3. Results and Discussion

The apparent viability of indigenous technical knowledge (ITK) among haphazardly chosen animal proprietors for the utilization of the Harjora plant (*Cissampelos quadrangularicus*) plant in creature farming practices was distinguished. The apparent adequacy of ITKs was concentrated in regard to cost, simplicity/complexity, availability/accessibility, adaptability, rationality, and sustainability.

Table 1: Perceived effectiveness of Harjora plant (*Cissampelos quadrangularicus*) towards bone fracture or, sprain and swelling in animal among livestock owner

S.N.	Variables	Not	Somewhat	Most
1.	Cost-effective	31 (15.50%)	46 (23.00%)	123 (61.50%)
2.	Simplicity/Complexity	25 (12.50%)	57 (28.50%)	118 (59.00%)
3.	Availability/Accessibility	36 (18.00%)	56 (28.00%)	108 (54.00%)
4.	Adaptability	22 (11.00%)	81 (40.50%)	97 (48.50%)
5.	Rationality	30 (15.00%)	74 (37.00%)	96 (48.00%)
6.	Sustainability	20 (10.00%)	93 (46.50%)	87 (43.50%)

(Figures in parenthesis indicate percent value)

The pooled data in table-1 revealed the Perception of respondents towards the effectiveness of the Harjora plant (*Cissampelos quadrangularicus*) with respect to chosen variables viz; cost, simplicity, availability/ accessibility, adaptability, rationality, and sustainability. It was found that 59.00 per cent of the respondents perceived it as simple to utilize, followed by 54.00 per cent tracked down it as most accessible in the village and forest area (i.e Tharuhat area). Around 61.50 per cent of the respondents favor it as it is less expensive as far as cost followed by around (43.50%) who felt it was most sustainable.

Table 2: Distribution of respondent for perceived effectiveness of Harjora plant (*Cissampelos quadrangularicus*) towards bone fracture or, sprain and swelling

S. N.	Categories (score)	Frequency	Percentage
1.	Low (0-4)	21	10.50
2.	Medium (5-8)	64	32.00
3.	High (9-12)	115	57.50

Table-2 illustrates the distribution of respondents towards perceived effectiveness of the Harjora plant (*Cissampelos quadrangularicus*) and was tracked down that the greater part (57.50%) of the respondents falls into the high category of perceived effectiveness followed by (32.00%) in medium and (10.50%) low classification separately. It was might be because of its minimal expense and availability in the nearby area (i.e Tharuhat area), which motivate them to use it.

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