Indigenous Technical know-how in the healthcare of domestic animals

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The Indigenous Technical Knowledge (ITK) in utilizing some of the commonly available ingredients of plants used by our rural farmers, have been observed and documented along with their scientific rationale in the treatment of many diseases affecting livestock.

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Indigenous Technical Know how (ITKs) are traditionally accumulated information evolved by experience and practice over the years and adopted by the people from ancient time, from generation to generation. With the recent advances in science and westernization of some of the indigenous practices/culture, ITKs are slowly endangering from their existence. This paper describes various ITKs followed by the farmers over the years for the treatment of different ailments in livestock.

**Observations**

The farmers commonly use neem oil against many ailments. Bitterness in neem helps in deworming. When applied on the wounds, it exhibits its repellent action thereby preventing maggot formation. Kumatti fruit pulp (Cucurbitaceae family) mixed with neem oil kills the maggots, by the toxic action of fruit pulp. The mixture of Lucas aspera leaf extract removes the larvae in the wounds. Acorus calamus Linn. paste is applied on the body of the animal against ticks. Acorus calamus Linn. controls the ticks in animals through its repellent action. Further, Acorus calamus is mixed with turmeric and used for the control of ticks, mites, flies and lice on poultry. Sesbania grandiflora Pers. is used against hepatitis and worms. It has exhibited ulcer-healing capacity in dogs. An alkaloid, sesban, found in Sesbania grandiflora Pers. also acts as anthelmintic. Pumpkin (Cucurbita maxima Duch.), seeds without coat rich in iron content are used as anthelmintic against round worms and tapeworms. Calotropis procera (Ait.) R.Br. leaves are used for deticking in poultry.

Powdered gingelly (Sesamum indicum Linn.) is orally administered with palm jaggery for treating retention of placenta in cattle as the ergometric alkaloid present in the gingelly mix helps in the contraction of uterus. Oral administration of slimy inner portion of Agave leaves mixed with caster oil as lubricant is beneficial in relieving impaction of rumen. Banana flowers and turmeric are commonly used for the treatment of diarrhoea in cattle. The astringent activity of banana flowers and antiseptic action of turmeric help to control diarrhoea. Calcium supplementation to the pregnant cows is achieved through oral administration of lime water. Oral administration of oil is another common practice for frothy bloat and the oil reduces surface tension. The swelling in udder during mastitis is overcome by the application of calcite bar. To increase the laying capacity in hens, cooked protein-rich jackfruit (Artocarpus heterophyllus Lam.) seeds are fed.

Pomegranate (Punica granatum Linn.) leaves or coconut buttons are ground well and given to cows to cure enteritis. The root and stem bark powder of pomegranate is used as anthelmintics against round worms and to some extent to cestodes. Further, flower is used as tonic, while fruits and fruit rind of pomegranate is used for non-specific diarrhoea. The pectin present in the rind acts as astringent. The

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estrogenic content in *Triubuluo* sp., soaked over night in rice-fermented water, is helpful for the induction of oestrous cycle in cattle. Lime juice is mixed with caster oil and fed to cows against plant poisoning. Ground garlic and bamboo leaves are fed to cows for curing sneezing.

**Conclusion**

These ethnoveterinary practices unique in nature are considered to be better in terms of cost effectiveness and treating the ailments with out side effects. Though these techniques are still followed in villages by our farmers without knowing the scientific rationale of these ingredients. There is a need for their scientific validation.

**References**