Analysis of ethno veterinary angiospermic species

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Abstract
Present study records 12 wild and naturalized flowering plants species during 2017-2018 which are distributed in 11 genera and 7 families. Tribal communities used these taxa in traditional way and its practitioners known as Barwa or vaidhya from the primary health care provider in rural areas. Which are used in 10 different types of diseases like Galactagogue, Lack of oestrus, Immune-deficiency, cramps, Swelling, Bone fracture and Maggot infested wounds etc. Out of 12 plant species 2 are climbers including, 6 Herbs, 2 trees and 2 shrubs are recorded. Leguminosae is the largest family used for Animal disease. Leaf (5) is most useful plant part followed by seed (4), stem (1), root (1), and bark (1).

Key word: ethno-veterinary, Biodiversity, conservation.

Introduction
Veterinary practice is an age old profession and perhaps dated back to the period of Neolithic which changed the lifestyle of ancient nomads and paved the way to beginning of civilization. People association and care for animal’s health is very ancient. Ethnoveterinary medicine (EVM) is a part of the traditional Knowledge system. Ethnoveterinary knowledge is acquired over many years through trails and errors but this information is rapidly depleting due o cultural changes. Our knowledge in ethno medicine is available through Vedic texts and commentaries. There is another less exploited source of information in use which comes from folklore passed on through generations in certain restricted and remote habitations. Mc Corkle (1986) first time used the term ethno veterinary in a article “An introduction to ethno veterinary research and development”. Mathia and Corkle (1989,1996) have been published bibliography on ethno veterinary research. Veterinary medicine was documented in India as long as 5000 BC. Ethnoveterinary in India Jain (1991) is known as father of Indian Ethnobotany, mentioned about 1500 Ethnomedicinal plants in India at least 500 plant species are commonly used for the treatment of diseases of man and animals.

Methodology
The present piece of work is completely surrey based. Intensive floristic survey has been carried out in different seasons from 2017-2018 by well planned schedule. The plants of ethno-veterinary importance were chosen and enumerated as the base material for the present work. For plant collection and preservation of voucher specimens standard methodology has been followed (Jain and Rao 1977). Voucher specimens were collected in polybag and identified in the laboratory with the help of flora (Hooker, 1892-1897; Cook, 1903; Gamble et al., 1915; Haines,1921-1924; Duthie,1960; Verma et.al.,1994; Mudgal et. al., 1997; Singh et.al.,2001; Khanna et.al.,2001). Recent up-to-date nomenclature of ICBN was followed. The Habit, Habitat and local names of these plants were studied on spot consulting the people of the locality and information about their ethnomedicinal uses was collected from villagers and local Vaidyas.
Results and Discussion
This area is very rich in plant diversity and most of the plants are of medicinal importance. Local Vaidya have superficial knowledge about ethno-medicinal plants and their uses along with properties but a large number of plants are unknown regarding their medicinal values. An extensive and intensive plant survey was carried out during 2017-2018. Present study observes 7 families and 11 genera and 12 species (Fig.-2 ). Tribal communities used these taxa in traditional way and its practitioners known as Barwa or vaidhya from the primary health care provider in rural areas. Which are used in 10 different types of diseases like Lack of oestrus, Galactagogue, Lack of oestrus, Immune-deficiency, cramps, Swelling, Bone fracture and Maggot infested wounds etc. Out of 12 plant species 2 are climbers including, 6 Herbs, 2 trees and 2 shrub are recorded (table-1 & Fig.1). Largest number of ethnoveterinary plants is used by local inhabitants from family Leguminosae. Leaf (5) is most useful plant part fallowed by seed (4), stem (1), root (1), and bark (1).

Conclusion
Vegetation is the most precious gift, nature has provided to us as meeting all kinds of essential requirements of the humans in the form of food and fodder. Animal play a fundamental role in people’s life. Animal disease studies acquire increasing importance in recent years.

Acknowledgement
The author is thankful to local men for corporation in providing information about the plant.

References

Table-1: Ethno veterinary angiospermic species

<table>
<thead>
<tr>
<th>Family</th>
<th>Botanical name</th>
<th>Common name</th>
<th>Plant part</th>
<th>Disease</th>
<th>Life form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leguminosae</td>
<td>Abrus precatorius L.</td>
<td>Ghumchi</td>
<td>Seed</td>
<td>Lack of oestrus</td>
<td>C</td>
</tr>
<tr>
<td>Leguminosae</td>
<td>Abutilon indicum (L.) Sweet</td>
<td>Kanghi</td>
<td>Seed</td>
<td>To control constipation.</td>
<td>H</td>
</tr>
<tr>
<td>Leguminosae</td>
<td>Senna tora L.</td>
<td>Chakwarh</td>
<td>Seed</td>
<td>Galactagogue</td>
<td>H</td>
</tr>
<tr>
<td>Leguminosae</td>
<td>Acacia leucophloea (Roxb.) Wil.</td>
<td>Safad Babool</td>
<td>Bark</td>
<td>Lack of oestrus</td>
<td>T</td>
</tr>
<tr>
<td>Leguminosae</td>
<td>Acacia nilotica (L.) Del.</td>
<td>Babool</td>
<td>Seed</td>
<td>Immune-deficiency</td>
<td>T</td>
</tr>
<tr>
<td>Amaranthaceae</td>
<td>Achyranthes aspera L.</td>
<td>Lat jeera</td>
<td>Root</td>
<td>In cramps</td>
<td>H</td>
</tr>
<tr>
<td>Acanthaceae</td>
<td>Justicia adhatoda L.</td>
<td>Aroos</td>
<td>Leaf</td>
<td>Cough &amp; Cold</td>
<td>S</td>
</tr>
<tr>
<td>Nyctaginaceae</td>
<td>Boerhavia diffusa L.</td>
<td>Punarnava</td>
<td>Stem</td>
<td>Hepatic disorders</td>
<td>H</td>
</tr>
<tr>
<td>Apocynaceae</td>
<td>Calotropis gigantea (L.) Dry.</td>
<td>Safer aak</td>
<td>Leaf</td>
<td>Swelling</td>
<td>S</td>
</tr>
<tr>
<td>Menispermacae</td>
<td>Cocculus hirsutus (L.) Theob.</td>
<td>Jal jamiya</td>
<td>Leaf</td>
<td>Bone fracture</td>
<td>C</td>
</tr>
<tr>
<td>Compositae</td>
<td>Eclipta prostrata (L.) L.</td>
<td>Bhangriya</td>
<td>Leaf</td>
<td>Swelling</td>
<td>H</td>
</tr>
<tr>
<td>Compositae</td>
<td>Ageratum conyzoides L.</td>
<td>Gadhanhiya</td>
<td>Leaf</td>
<td>Maggot infested wounds</td>
<td>H</td>
</tr>
</tbody>
</table>

Abbreviations: C=climbers, H=Herbs, S=Shrubs T=Tree
Fig.- 1: Distribution of Species, Genera and Families

Fig.- 2: Life form diversity

Fig.- 3: Different plant parts used in different diseases