ETHNOVETERINARY HERBAL MEDICINE USED BY TRIBAL’S FOR RETENTION OF PLACENTA IN WESTERN MADHYA PRADESH, INDIA

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ABSTRACT
Present study confined to five district of mp namely Alirajpur, Barwani, Dhar, Jhabua and Khargone and densely populated by Bhil, Bhilala, Patelia and Barela tribes. Present paper deals with 16 plant species which are used in retention of placenta by tribals. These plants are distributed in 10 family and 15 genera.

KEYWORDS: Ethnoveterinary, Tribals, District, Traditional knowledge.

INTRODUCTION
Ethnoveterinary medicine is defined as system of folk believes, skills, techniques and practices related to healthcare of animals that transmitted orally from generation to generation (MC Corkle 1986). An Ethnoveterinary medicine (EVM) is a part of the traditional knowledge system that comprises of two distinct forms. One form is formal codified system of knowledge of diseases and healing for both human and animal whose principles and practices were formulated and codified in the form of Ayurveda, Sidha, and Unani. Ethnoveterinary practices are old practices perhaps started before domestication of animals. Veterinary medicine was documented in India as long as 5000BC (Saxena et al, 1998). There are local healers who are knowledgeable and experienced in traditional veterinary healthcare. These healers are called “Badwa” or Ojha they treat both human as well as animal.

STUDY AREA AND ETHNIC PEOPLE
Present study was carried out on five districts of Western Madhya Pradesh which are namely Alirajpur, Barwani, Dhar, Jhabua, and Khargone.

Geographically study area is divided into Malwa plateau, Vindhyan scaps and Narmada Valley. Most part of the study area is covered by Malwa plateau. Northern part of Dhar, Badnawar and Sardarpur tehsils of Dhar district and Jhabua district confined to Malwa plateau. Alirajpur, Bhabra, northern part of Kuksi and northern part Khargone are included in Vindhyan ranges. South-east part of Manawar and Kuksi tehsils of Dhar, part of Jobat tehsils of Alirajpur district and northern part of Barwani comes under Narmada valley. This valley is situated to south of the Vindhyan ranges. Satpura ranges lies to the southern part of Barwani and Khargone district. Main geographical formations are Deccan trap, Bagh beds, Nimar sandstones, Brown loam and laterite soils are main types of soil occupying the area. Vindhyan system, Bijawar series and granitoid. The main rock types are granites, Basalt, shale, Gneissess, Quartzite, Limestone. Alluvial, Black Cotton,

The area exhibits climatic conditions ranging from dry humid to semi arid. The coldest month is the January when the average temperatures fluctuate from 22°C to 32°C. May-June is the hottest months and temperature varies from 41°C to 47°C. The annual average rainfall of study area is 822.4 mm. The main tribes inhabiting in the study area Bhil, Bhilala, Patelia and Barela. Most part of study area is dominated by Bhil tribe and its sub tribes Bhil resides in a small hut in the fringe of forest and rear cows, buffaloes, goats, cock, and dogs."Kadaknath” a local breed of chicken found in Jhabua and Alirajpur district.

METHODOLOGY
Present investigation deals with extensive ethnoveterinary survey and laboratory works. Field study was carried out among the ethnic people during 2015-2016 in different remote villages and forest area. Regular field visits were made in different selected study sites covering different seasons. Plant specimen were collected and preserved following standard method (Jain and Rao, 1977).

After establishing a good relationship with informants, interviews were conducted and a set of questions were asked. The information was further cross checked from experienced persons and veterinary doctors to determine...
the authenticity. Voucher specimens were deposited in the herbarium of PMB Gujarati science college, Indore MP.

RESULT AND DISCUSSION

The placenta is expelled out in 3-6 hours in normal parturition of cattle’s and buffaloes. Difficult parturition, atony of uterine muscles, improper feeding, infections and inflammation of uterus are some of reasons for retained placenta. Present study reports a total of 16 plants which are used by local inhabitants and tribes in retention of placenta. Most frequently used plants are Abrus precatorius L., Acacia nilotica (L.) Delile, Butea monosperma (Lam.) Taub., Caesalpinia bonduc (L.) Roxb., Ceiba pentandra L., Cissus quadrangularis L., Cucumis melo var. agrestis Naudin Ann. Cyamopsis tetragonoloba (L.), Dendrocalamus strictus (Roxb.) Nees, Eclipta prostrata (L.), Euphorbia nerifolia L., Ficus hispida L.f., Ficus religiosa L., Gossypium herbaceum L., Hibiscus rosa-sinensis L.


Jain (1960) made intensive field studies among the tribes of central India. Later on several inventories and documentation of EVM plants used by ethnic people in Madhya Pradesh were recorded (Sikarwar, 1994, 1996; Kadel &Jain, 2006; Shukla et al, 2007; Dwivedi, 2009).

<table>
<thead>
<tr>
<th>S No</th>
<th>Botanical name</th>
<th>Vernacular name</th>
<th>Family</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Abrus precatorius L.</td>
<td>Ghumchi, Ratti</td>
<td>Leguminosae</td>
<td>Seed paste of one or two seeds is given to cattle once for seven days to easy expulsion of placenta after delivery.</td>
</tr>
<tr>
<td>2</td>
<td>Acacia nilotica (L.) Delile</td>
<td>Bobliyo</td>
<td>Leguminosae</td>
<td>Decoction of 2 to 3 years matured thorns is given to cattle in removal of retained placenta after delivery.</td>
</tr>
<tr>
<td>3</td>
<td>Achyranthes aspera L.</td>
<td>Andhijhada</td>
<td>Amaranthaceae</td>
<td>Decoction of whole plant is given for removal of retained placenta after delivery.</td>
</tr>
<tr>
<td>4</td>
<td>Butea monosperma (Lam.) Taub.</td>
<td>Palas, Khakra</td>
<td>Leguminosae</td>
<td>Flowers are mixed with fodder of the animal for quick disposal of placenta after delivery.</td>
</tr>
<tr>
<td>5</td>
<td>Caesalpinia bonduc (L.) Roxb.</td>
<td>Gatar</td>
<td>Leguminosae</td>
<td>20g roots and 5 pepper seeds are grinded and given before delivery for quick detachment of placenta.</td>
</tr>
<tr>
<td>6</td>
<td>Ceiba pentandra L.</td>
<td>Semal</td>
<td>Bombacaceae</td>
<td>Flowers are fed with fodder to Buffaloes for disposal of placenta after delivery.</td>
</tr>
<tr>
<td>7</td>
<td>Cissus quadrangularis L.</td>
<td>Haddijor</td>
<td>Vitaceae</td>
<td>100g stem nodes are ground and mixed in 1 liter water which is given twice a day for three day to quick detachment of placenta.</td>
</tr>
<tr>
<td>8</td>
<td>Cucumis melo var. agrestis Naudin Ann.</td>
<td>Kachra</td>
<td>Cucurbitaceae</td>
<td>Fresh fruit is fed with fodder for disposal of placenta after delivery.</td>
</tr>
<tr>
<td>9</td>
<td>Cyamopsis tetragonoloba (L.) Taub.</td>
<td>Gavar</td>
<td>Legeuminosae</td>
<td>100g of this mixture is given to the animal with pearl millet for disposal of the placenta after the delivery.</td>
</tr>
<tr>
<td>10</td>
<td>Dendrocalamus strictus (Roxb.) Nees</td>
<td>Vashyang,</td>
<td>Poaceae</td>
<td>Decoction of stem is given to the animal for disposal of placenta after delivery.</td>
</tr>
<tr>
<td>11</td>
<td>Eclipta prostrata (L.) Mant</td>
<td>Brangharaj</td>
<td>Compositae</td>
<td>Dry seed powder is given for disposal of placenta after delivery.</td>
</tr>
<tr>
<td>12</td>
<td>Euphorbia neriifolia L.</td>
<td>Danda thuar</td>
<td>Euphorbiaceae</td>
<td>Feeding of root paste with fodder is given to cow help expulsion of placenta after delivery.</td>
</tr>
<tr>
<td>13</td>
<td>Ficus hispida L.f.</td>
<td>Bhui Gular</td>
<td>Moraceae</td>
<td>Fresh leaves with Bamboo leaf (Dendrocalamus strictus) are given for quick removal of placenta after delivery.</td>
</tr>
<tr>
<td>14</td>
<td>Ficus religiosa L.</td>
<td>Pipal</td>
<td>Moraceae</td>
<td>Decoction of bark is given to cattle to remove of placenta.</td>
</tr>
<tr>
<td>15</td>
<td>Gossypium herbaceum L.</td>
<td>Kapas</td>
<td>Malvaceae</td>
<td>Paste of fruit and roots are mixed and given to cattle for the disposal of placenta.</td>
</tr>
<tr>
<td>16</td>
<td>Hibiscus rosa-sinensis L.</td>
<td>Gurhal</td>
<td>Malvaceae</td>
<td>Paste of roots is fed with fodder in retention of placenta.</td>
</tr>
</tbody>
</table>
Leaves (2), Seeds (3), Fruits (2), Roots (3), Stem (2), flowers (2), Thorn (1) and whole plant (1) are most commonly plant parts used for retention of placenta by local tribals. Abrus precatorius L. is used as Ethnoveterinary remedies in retention placenta (Reddy et al, 1998; Galav et al, 2013). Caesalpinia bonduc (L.) Roxb is reported quick detachment of placenta in Koch Bihar district, WB (Banerjee, 2013) present study first time records Ceiba pentandra L., Eclipta prostrata (L.) L. Hibiscus rosa-sinensis L. for retention of placenta which are not reported earlier (Jain, 1999; Katewa, et al, 2003).

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REFERENCES