



A review of plants used in ethnoveterinary medicine in Central India

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The Central Indian region consists mainly with Madhya Pradesh and Chhattisgarh states of India and occupied the core zone of the country. The various tribal communities comprise about 24% population of Central India. The scrutiny of literature on ethnoveterinary medicines of Central India indicates that there are about 270 plant species under 218 genera and 84 families are used by tribal and rural communities of Central India for the treatment of 139 types of different ailments, diseases and disorders of their pet/domestic animals. This indigenous knowledge and practice of tribal and rural people is based primarily on locally available medicinal plants found in their surroundings. Therefore, all these medicinal plants should be scientifically screened in order to find out newer sources of ethnoveterinary drugs of herbal origin.

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The men and animal relationship are as old as human civilization. Man is dependent on his livestock for fulfilment of various requirements such as food, milk, clothing, agriculture, fertilizers, labour and cash. In many societies animals play a significant role as equal to human. For keeping animals healthy, traditional medicine men treat various diseases and ailments of animals with the locally available herbs since centuries. These practices passed down orally from generation to generation. The study of traditional healing practices of animals' health is called 'ethnoveterinary medicine'.

Ethnoveterinary medicine consists of local people's knowledge, skills, methods, practices and beliefs pertaining to animal health and production¹. Ethnoveterinary medicine is based on locally available herbs, which are easily available in all seasons and often provides cheaper options than comparable to the modern medicines having no side effects. In the above facts, it is increasing interest in the field of ethnoveterinary research and development².

In India ethnoveterinary medicines were practiced since ancient times. In various ancient Indian

scriptures particularly, Atharva veda is regarded as a repository of traditional medicine including the prescriptions for animal cure. Other ancient scriptures like Agni purana, Devi Purana, Garuda purana, Matsya Purana, Skand Purana, and Linga purana and Charaka Samhita, Susruta Samhita and Shalihotra contain information on the treatment of animal diseases through medicinal plants. In Mahabharata, Prince Nakul and Prince Sahadev were the veterinary doctors of horses and cows respectively. Salihotra, the greatest and most revered teacher of veterinary science was regarded as 'the father of veterinary science'³.

The Central Indian region consists mainly with Madhya Pradesh and Chhattisgarh states of India and occupied the core zone of the country. The area is very rich in cultural as well as biological diversity. The total area of Central India (Madhya Pradesh and Chhattisgarh states) is about 4,43,446 sq. km. Out of which about 36% area is covered by the forests. Mainly 4 types of forests are found in Central India such as Tropical semi-evergreen forests, Tropical moist deciduous forests, Tropical dry deciduous forests and Tropical thorn forests. The climate is Indian monsoon with maximum rain falling in rainy season, i.e., between the end of June to September.

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The average annual rainfall in the central India varies from 700 mm to 2000 mm. The highest temperature recorded as 47°C in the month of May and June and lowest as 1°C in the month of December and January.

The central Indian region is very rich in tribal population. According to 2011 census, the various tribal communities such as Abujhmaria, Baiga, Bhil, Bhilala, Gond, Kol, Korku, Korwa, Oraon, Sahariya comprise about 24% population of these both states Madhya Pradesh and Chhattisgarh. The tribal communities reside in and around the forest areas and utilize forest resources for fulfillment of their daily needs such as for food, fodder, fibre, medicine, dyes, gum, resins, hunting and fishing, household and agricultural implements, totems, taboos, worship, etc. They are mostly landless and very poor. The forest alone is unable to fulfil their daily requirements. Therefore, they raise domestic animals such as buffaloes, cows, dogs, goats, hen, oxen, pigs, sheeps, etc. for milk production, agriculture and commercial purposes.

As per the livestock population 2012⁴, the total livestock population of Madhya Pradesh and Chhattisgarh is about 36332627 and 15043943 excluding stray cattle (6339364 in MP & 138122 in CG) and stray dogs (1208539 in MP & 343622 in C.G) respectively. The Madhya Pradesh occupy first position in India in respect of cattle population (10.27%) and fifth position in buffaloes population (7.53%). The details of the population of Madhya Pradesh and Chhattisgarh are given in (Table 1).

As the modern medicine is either not available or not affordable for the poor tribals therefore, they use traditional veterinary practices to prevent and treat common animal ailments and diseases with the help of locally available medicinal herbs.

During study, it has been observed that the younger generation of the tribal communities is not interested to hold on these traditional practices. Therefore, it is necessary that before this valuable traditional knowledge is lost forever it must be properly documented from old and experienced tribal medicine men.

Review of literature

A scrutiny of literature reveals that several research papers on ethnoveterinary medicines of various regions and districts of Central India have published such as Madhya Pradesh⁵⁻⁶ and Central India⁷, Morena district⁸, Jhabua district⁹ Achanakmar-Amarkantak Biosphere Reserves¹⁰, Ratlam district¹¹, West Nimar district¹², Satna district¹³⁻¹⁴, Jhansi district of Uttar Pradesh¹⁵, Alirajpur district¹⁶, Gwalior district¹⁷, Shivpuri district¹⁸, Tikamgarh district¹⁹, Narsinghpur²⁰, Betul district²¹, Bundelkhand²² and Northeast region of Chhattisgarh²³

The aforesaid literature reveals that the maximum work on ethnoveterinary medicines has been carried out in Madhya Pradesh and in comparison a single paper has so far been published from Chhattisgarh²³ which is rich in cultural and biological diversity. Except Sikarwar *et al.*,⁵ and Sikarwar⁸, all research papers published on ethnoveterinary medicine of Central India after the publication of well known book *Dictionary of Ethnoveterinary Plants of India*²⁴.

Enumeration

The plants used in veterinary medicine are enumerated alphabetically by botanical names, followed by family (in parenthesis); local names of different districts (district name written in parenthesis) are given in (Table 2).

Table 1 — List of livestock population in Madhya Pradesh, Chhattisgarh and Central India

| S.N. | Livestock | Madhya Pradesh | Chhattisgarh | Combined M P & C G (Central India) |
|------|-----------------|----------------|--------------|------------------------------------|
| 1 | Domestic Cattle | 5973720 | 2500915 | 8474635 |
| 2 | Buffaloes | 2652346 | 447528 | 3099874 |
| 3 | Goats | 1790784 | 609475 | 2400259 |
| 4 | Sheep | 19323 | 20080 | 39403 |
| 5 | Pigs | 28110 | 92032 | 120142 |
| 6 | Horses & Ponies | 18803 | 2963 | 21766 |
| 7 | Mules & Donkeys | 14916 | 263563 | 278479 |
| 8 | Camel | 3422 | 645 | 4067 |
| 9 | Dogs | 433367 | 263563 | 696930 |
| 10 | Elephants | 1045 | 919 | 1964 |
| 11 | Poultry | 11904710 | 23102158 | 35006868 |

Source: 19th Livestock census 2012, Ministry of Agriculture, Govt. of India

Table 2 — List of Plants used as veterinary medicine in Central India

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|---|---|--|
| 1 | <i>Abrus precatorius</i> L. (Fabaceae) L.N.: Gongchi (Gwalior), Chirmu (Shivpuri), Gumchi, Ratti (Narsinghpur), Gunj (Jaspur & Surguja), Gunchi (Betul) | Seeds+ flour of <i>Pennisetum typhoides</i> ; Leaves, root; Leaf paste; Crushed roots | Rhinitis ¹⁷ ; Acute colic, ephemeral fever, skin allergy ¹⁸ ; Swelling ^{20,23} ; Cough, cold & pneumonia ²¹ |
| 2 | <i>Abutilon indicum</i> (L.) Sweet (Malvaceae) L.N.: Kanghi (Amarkantak, Chitrakoot, Shivpuri, Jaspur & Surguja), Petari (Betul) | Leaf powder; Leaves; Leaf paste+buttermilk; Leaf decoction+whey | Diarrhoea ¹⁰ ; Arthritis ¹³ ; Dysentery ¹⁸ ; Dysentery & diarrhoea ^{21,23} |
| 3 | <i>Acacia catechu</i> (L.f.) Brandis (Mimosaceae) L.N.: Katha (Chitrakoot), Kattha (Bundelkhand) | Stem bark paste; Wood powder | Wound ¹³ ; Growing of papillae ²² |
| 4 | <i>Acacia leucophloea</i> (Roxb.) Willd. (Mimosaceae) L.N.: Ramja (Morena) | Stem bark paste | Dislocated bones ⁸ |
| 5 | <i>Acacia nilotica</i> (L.) Delile subsp. <i>Indica</i> (Benth.) Brenan (Mimosaceae) L.N.: Babool (Morena, Gwalior, Narsinghpur) | Spines decoction; Leaves +leaves of Nimbu (<i>Citrus lemon</i>) + baking soda; Leaves and bark powder; Flower paste, bark extract | Colic pain ⁸ ; Bloat (Tympantitis) ¹⁷ ; Maggot wounds ²⁰ ; Jaundice, dysentery ¹⁹ |
| 6 | <i>Acalypha indica</i> L. (Euphorbiaceae) L.N.: Dudhiya | Leaf paste | Wound ²³ |
| 7 | <i>Acanthospermum hispidum</i> DC. (Asteraceae) L.N.: Gokharu (West Nimar) | Leaves | General tonic ¹² |
| 8 | <i>Achyranthes aspera</i> L. (Amaranthaceae) L.N.: Addajhara (Morena), Latjira (Shivpuri), Chirchiri (Vindhyan region), Andhijhada (West Nimar), Chirchitha (Jaspur & Surguja) | Root paste + <i>Ferulasafoetida</i> +paste of <i>Calotropis procera</i> leaves; Leaf juice+ saffron; Roasted seeds | Bronchitis ^{6,8} ; Watering in eyes ¹⁸ ; Appetizer ¹² ; Get relief from watering ²³ |
| 9 | <i>Acorus calamus</i> L. (Araceae) L.N.: Bach (Chitrakoot) | Leaf paste, rhizome | Wounds ¹⁴ |
| 10 | <i>Adiantum capillus-veneris</i> L. (Adiantaceae) L.N.: Hansraj (Amarkantak) | Plant paste+mustard oil | Skin diseases ¹⁰ |
| 11 | <i>Aegle marmelos</i> (L.) Corrêa (Rutaceae) L.N.: Bel (Jhabua, Chitrakoot, Shivpuri, Tikamgarh), Bael (Narsinghpur) | Fruit paste; Fruit pulp; Fruit; Leaf paste+turmeric, fruits; Leaf paste+ seed oil of <i>Ricinus communis</i> | Abortion ⁹ ; Injury, constipation ¹³ ; Flatulence, gastric problem ¹⁸ ; Wounds, gastric problem ²⁰ ; Sun burn ¹⁹ |
| 12 | <i>Ageratum conyzoides</i> (L.) L. (Asteraceae) L.N.: Kubbi, Khar (Bilaspur), Gangarigera (Baster, Amarkantak), | Whole plant paste; Leaf juice | Healing of wounds ⁷ ; Cut & wounds ¹⁰ |
| 13 | <i>Ailanthus excels</i> Roxb. (Simaroubaceae) L.N.: Lohagal (West Nimar), Maharukh (Betul) | Crushed bark; Leaf decoction | Appetizer ¹² ; Remove maggots from wounds ²¹ |
| 14 | <i>Alangium salvifolium</i> (L.f.) Wangerin (Cornaceae) L.N.: Akol (West Nimar) | Plant powder | Antidote against poisonous herbs ¹² |
| 15 | <i>Allium cepa</i> L. (Amaryllidaceae) L.N.: Piyaj (Jhabua, Jhansi, Tikamgarh), Kanda (Alirajpur, West Nimar), Kando (Ratlam), | Fruit paste, bulb pieces; Bulb paste; Bulb paste+mustard oil; Bulb paste+jaggery; Bulb extract; Bulb paste+leaf ash of <i>Musa paradisiaca</i> +mustard oil | Indigestion, bad taste of mouth cavity (Dandki disease) ⁹ ; Remove maggots from wounds ¹⁶ ; Hoof diseases ¹¹ ; Nasal Secretion ¹² ; Expel the insect from eyes ¹⁵ ; Ectoparasites ¹⁹ |
| 16 | <i>Allium sativum</i> L. (Amaryllidaceae) L.N.: Lasun (Jhabua, Chitrakoot), Lahsun (Gwalior, Shivpuri), Lehson (Jhansi) | Bulbs; Bulb juice; Bulbs+ mustard oil, bulbs+mustard oil+ash of cow dung cake+ curd; Bulb paste+bees wax, milk+cooking oil+bulb paste; Seeds+bulb paste of <i>Allium cepa</i> | Brain disease, Earache ⁹ ; Cough & Cold ¹³ ; Indigestion ²² ; Diarrhoea, food poisoning ¹⁷ ; Injuries, Snake bite ¹⁸ ; Bronchitis ¹⁵ |
| 17 | <i>Aloe vera</i> L. (Asphodelaceae) L.N.: Gwarpatha (Jhabua), Gheekuwar (Chitrakoot), Gubarpatha (Shivpuri), Gheekumari (Vindhyan region), Gheegwar (West Nimar), Ghikumari (Jhansi), Ghrikumari (Jaspur & Surguja) | Leaf pulp; Leaf pulp+curd; Leaf paste; Leaf mucilage; Leaves+leaves of <i>Jatropha curcas</i> ; Leaf pulp+soremilk+water | Mastitis (Thanela disease) ^{6,9} ; Injuries ¹³ ; Unconsciousness (Drooping head) ^{18,23} ; Swelling of udder ¹² ; Burns ¹⁵ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|---|---|
| 18 | <i>Amaranthus spinosus</i> L. (Amaranthaceae) L.N.: Kantamarish (Amarkantak), Cholai (Alirajpur) | Whole plant, plant decoction; Whole plant paste | Lactation, delivery complaints ¹⁰ ; Wounds ¹⁶ |
| 19 | <i>Amaranthus viridis</i> L. (Amaranthaceae) L.N.: Chaulai (Jhansi) | Seeds+water | Tympany ¹⁵ |
| 20 | <i>Ammannia baccifera</i> L. (Lythraceae) L.N.: Akasia (Ratlam) | Plant extract | Induce fertility ¹¹ |
| 21 | <i>Amorphophallus paeonii folius</i> (Dennst.) Nicolson (Araceae) L.N.: Bhabdi (Jhabua), Jangli Suran, Bahlua Kand (Chhindwara) | Corm decoction and paste | body pain ⁷ |
| 22 | <i>Ampelocissus latifolia</i> (Roxb.) Planch. (Vitaceae) L.N.: Emlosa (Tikamgarh), Eamlaua (Panna), Emlaura (Morena), Dokarbel (West Nimar) | Root paste; Root paste+jaggery | As a tonic, lactation ^{7,8} ; Blood dysentery ¹² |
| 23 | <i>Andrographis paniculata</i> (Burm. f.) Nees (Acanthaceae) L.N.: Kalmegh (Shivpuri), Bhuineem (Jaspur & Surguja) | Whole plant decoction | Fever and cough ^{18,23} |
| 24 | <i>Anisomeles indica</i> (L.) Kuntze (Lamiaceae) L.N.: Kuschor (Jhabua), Bonrmlal (Bilaspur) | Leaf decoction | body inflammation ⁷ |
| 25 | <i>Annona squamosa</i> L. (Annonaceae) L.N.: Sitaphal (Bastar, Jhabua, Alirajpur), Sarifa (Amarkantak), Sitafal (Vindhyan region), Seetaphal (West Nimar), Sharifa (Jhansi) | Leaf paste, juice of unripe fruits, leaf decoction, seed paste; Leaf paste; Seed powder; Leaf juice+ asafoetida; Leaf paste+lime | Cut and wounds ⁷ , Worms in stomach ⁹ ; Lice, house flies, mosquitoes and snails, Bone fracture ¹⁰ ; Wounds ¹⁶ ; Ectoparasites ⁶ ; Kill maggots ¹² ; Foot disease ¹⁵ |
| 26 | <i>Arachis hypogaea</i> L. (Fabaceae) L.N.: Mungphali (Jhansi) | Seed oil+salt | Twitching ¹⁵ |
| 27 | <i>Ardisia solanacea</i> (Poir.) Roxb. (Primulaceae) Amarkantak | Tender shoot paste+bambooleaves+sugar+hen's egg | Bone fracture ¹⁰ |
| 28 | <i>Argemone mexicana</i> L. (Papaveraceae) Amarkantak, Tikamgarh | Root paste; Leaf and fruit juice | Eczema ¹⁰ ; Foot infection, rheumatism ¹⁹ |
| 29 | <i>Arisaema tortuosum</i> (Wall.) Schott (Araceae) L.N.: Dhei (Panna), Safed teliakand (Shahdol), Jhattawan (Betul), Sampbhutta (Bilaspur) | Tuber paste; Tuber paste +salt+chili paste | As tonic ⁷ ; Throat swellings ⁵ |
| 30 | <i>Aristolochia bracteolata</i> Lam. (Aristolochiaceae) L.N.: Girdhan (West Nimar), Acchho (Jaspur & Surguja) | Leaf juice; Leaves heated on til oil | Wounds ¹² ; Skin infection and wounds ²³ |
| 31 | <i>Aristolochia indica</i> L. (Aristolochiaceae) L.N.: Acchho (Jaspur & Surguja) | Leaf paste+pepper | Insect bites ²³ |
| 32 | <i>Asparagus adscendens</i> Roxb. (Asparagaceae) L.N.: Satavari (Narsinghpur) | Root paste | Lactation ²⁰ |
| 33 | <i>Asparagus racemosus</i> Willd. (Asparagaceae) L.N.: Satawar (Jhabua), Satavari (Chitrakoot), Shatavari (West Nimar, Tikamgarh, Betul) | Root powder; Root paste+sugar; Root powder or whole plant; Root juice | Increase lactation ^{9,12,13} ; Arthritis ¹⁹ ; Increase milk ²¹ |
| 34 | <i>Azadirachta indica</i> A. Juss. (Meliaceae) L.N.: Neem (Jhabua, Amarkantak, Chitrakoot, Gwalior, Vindhyan region, West Nimar, Jhansi, Narsinghpur, Tikamgarh, Jaspur & Surguja) | Leaf decoction; Bark decoction; Leaf paste+turmeric+ajwain seeds powder+ black salt, leaf paste+salt; Leaf infusion; Leaf paste; Leaf paste+lime, Leaf paste+Citruslimon juice, Leaves+salt, leaf paste; Leaves; Leaf poultice, Seed oil; Leaf decoction+salt; Leaf paste +caster oil; Bark paste +bark paste of <i>Acacia nilotica</i> | Foot & mouth disease ^{9,12} , ecto-parasites ¹³ (lice and bugs on skin), skin diseases ^{6,9,18} ; (Khoridisease), earache ⁹ ; Wounds ^{9,12,16,17,19,23} ; Intestinal worms ^{6,10} ; Constipation, immunity, indigestion ¹³ ; Bovicolosis, injury, scabies, volvulus ¹⁷ ; Antipyretic, thrust, nausea, vomiting, ulcer ¹⁸ ; Cut, injury ⁶ , Remove insect from the eyes ¹⁵ ; Insect bites ²⁰ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|--|---|
| 35 | <i>Azanza lampas</i> (Cav.) Alef. (Malvaceae) L.N.: Jangli bhindi (Raigarh) | Root paste | Paralysis ⁵ |
| 36 | <i>Balanites aegyptiaca</i> (L.) Delile (Simaroubaceae) L.N.: Hingot (Morena), Hingota (Jhansi, Tikamgarh) | Fruit stone paste+chili, leaf paste; seed paste+water | Constipation, eye conjunctivitis ⁸ ; Neck inflammation ¹⁵ |
| 37 | <i>Bambusa bambos</i> (L.) Voss (= <i>Bambusa arundinacea</i> (Retz.) Willd.) (Poaceae) L.N.: Bans (Jhansi, Tikamgarh) | Dried leaves+lukewarm water; Leaves, rhizome and leaf paste | Retard placenta ¹⁵ ; Easy delivery, diarrhoea ¹⁹ |
| 38 | <i>Bauhinia racemosa</i> Lam. (Caesalpiniaceae) L.N.: Astu (Sehore, Dewas), Koinar (Amarkantak) | Root decoction; Leaf paste | Stop abortion ⁷ ; Dysentery ¹⁰ |
| 39 | <i>Bauhinia variegata</i> L. (Caesalpiniaceae) L.N.: Kachnal (Surguja), Kachnar (Jhansi) | Root paste; Root paste+black cow urine | Expel placenta after delivery ⁵ ; Blindness ¹⁵ |
| 40 | <i>Begonia picta</i> Sm. (Begoniaceae) L.N.: Bahari (Mandla) | Leaf paste | Kill lice of body ⁵ |
| 41 | <i>Biophytum sensitivum</i> (L.) DC. (Oxalidaceae) L.N.: Rajarani (Dhar) | Leaf paste | Cuts ⁵ |
| 42 | <i>Boerhavia diffusa</i> L. (Nyctaginaceae) L.N.: Punarnava (Chitrakoot), Patharchatta (Gwalior), Pattharchatta (West Nimar) | Root powder; Leaves+bark paste of <i>Moringa oleifera</i> +bulbs of <i>Allium sativum</i> ; Root juice | Black quarter, liver diseases ¹⁴ ; Rheumatism ¹⁷ ; Diarrhoea & dysentery ¹² |
| 43 | <i>Bombax ceiba</i> L. (Bombacaceae) L.N.: Semra (Morena), Semal (Jhabua, Satna), Semal (Vindhyan region), Katsawar (Betul) | Stem bark paste+ turmeric powder; Leaf paste, flower juice; Stem bark; Bark paste+water | Dislocated bones ^{8,14} ; Wounds, prolapse of uterus ⁹ ; Flatulence, Indigestion ⁶ ; Dysentery ²¹ |
| 44 | <i>Brassica campestris</i> L. (Brassicaceae) L.N.: Sarson (Jhabua, Gwalior) | Seed oil, seed paste; Ash of cycle tyre+mustard oil | Skin disease, mastitis (Thanela disease), brain disease, earache, falling of tail, wounds ⁹ ; Foot rot ¹⁷ |
| 45 | <i>Brassica rapa</i> L. (= <i>Brassica rapa</i> L. ssp. <i>campestris</i> (L.) Clapham) (Brassicaceae) L.N.: Sarso (Alirajpur), Sarsu (Ratlam) | Seed oil+paste of bulb of <i>Allium cepa</i> ; Mustard oil+ <i>Curcuma longa</i> | Wounds ¹⁶ ; Indigestion (Afra disease) ¹¹ |
| 46 | <i>Bridelia retusa</i> (L.) A. Juss. (Phyllanthaceae) L.N.: Palati (Amarkantak) | Stem bark paste | Prevent abortion ¹⁰ |
| 47 | <i>Buchanania lanzan</i> Spreng. (Anacardiaceae) L.N.: Char (Chitrakoot), Chironji (Gwalior, Jhansi), Charoli (Betul) | Bark extract; Kernels; Root bark powder+cow milk; Gum resin | Washing wounds ¹⁴ ; Hyperthermia ¹⁷ ; Backbone fracture ¹⁵ ; Bone fracture ²¹ |
| 48 | <i>Butea monosperma</i> (Lam.) Taub. (Fabaceae) L.N.: Chhiula (Tikamgarh), Chhola (Raigarh, Seoni), Tesu (Chhindwara), Palash (Jhabua, Chitrakoot, West Nimar), Dhak (Bundelkhand, Tikamgarh), Palas (Betul) | Bark decoction; Bark paste; Seed paste+turmeric; Warmed leaves; Seed paste; Seed powder+salt+ water; Seed oil+ seed oil of Mango; Flower decoction | Swelling ⁷ ; Dysentery ⁹ ; Foot & mouth disease (Khurpaka) ¹³ ; Expel intestinal worms ¹⁴ ; Deworming ¹⁵ ; Skin inflammation ¹² ; Dysurea, paralysis ¹⁹ ; Haematuria ²¹ |
| 49 | <i>Caesalpinia bonduc</i> (L.) Roxb. (Caesalpiniaceae) L.N.: Gataran (Bastar) | Seed paste | Kill worms ⁷ |
| 50 | <i>Caesalpinia crista</i> L. (Caesalpiniaceae) L.N.: Kali gather (West Nimar) | Seeds + leaves of <i>Vitex negundo</i> , seed powder | Fever, as an anthelmintic ¹² |
| 51 | <i>Cajanus cajanus</i> (L.) Huth. (Fabaceae) L.N.: Arhar (Gwalior) | Leaf paste | Wounds ¹⁷ |
| 52 | <i>Cajanus scarabaeoides</i> (L.) du Petit-Thou (= <i>Atylosia scarabaeoides</i> Benth.) (Fabaceae) L.N.: Gonj (Morena), Bankulthi (Amarkantak) | Leaf paste; Whole plant paste | Diarrhoea ⁸ ; Estrus ¹⁰ ; Diarrhoea ²² |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|---|--|--|
| 53 | <i>Calotropis gigantea</i> (L.) Dryand. (Apocynaceae) L.N.: Safed Aak (Baster, Bundelkhand, Shivpuri), Safed Akaua (Morena), Safed Ankuru (Ratlam), Aak (Narsinghpur), Safedmadar (Vindhyan region), Madar (Jaspur & Surguja) | Leaf and root paste; Burnt root powder+sesame oil; Warm leaves; Root; Latex; Flower buds, burnt root; Root paste+pepper+garlic | Wounds ⁷ ; Shoulder wounds caused by yoke ^{5,8} ; Foot and mouth disease ²² ; Running nose ¹⁸ ; Boils, cuts, injury, wounds, blisters, dogbite ¹¹ ; Swelleng ²⁰ ; Diarrhoea, dysentery, shoulder wounds ⁶ ; Fever ²³ |
| 54 | <i>Calotropis procera</i> (Aiton) Dryand. (Apocynaceae) L.N.: Madar (Jhabua, Malva region), Akwan (Chitrakoot), Akda (Alirajpur), Aak (Gwalior, Shivpuri), Akkaua (Jhansi, Tikamgarh) | Leaf juice, latex; Leaves, leaves warmed with mustard oil; Leaf paste; Root powder+ milk; Leaves; Latex+ seedoil of <i>Arachyshypoaea</i> + red lead; Warmed leaves; Flower paste +jaggery | Earache, conjunctivitis, falling of tail ⁹ ; Swelling, indigestion ¹³ ; Healing of wounds ¹⁶ ; Bone fracture, skin diseases ²² ; Urine retention ¹⁷ ; Diarrhoea and dysentery ¹⁸ ; Stomachache ⁶ ; Tumour ¹⁵ ; Easy delivery, snake bite ¹⁹ |
| 55 | <i>Cannabis sativa</i> L. (Cannabinaceae) L.N.: Bhang (Jhansi) | Leaf powder+ whey+water | Loose motion ¹⁵ |
| 56 | <i>Capparis decidua</i> (Forsk.) Edgew. (Capparaceae) L.N.: Kareel (Morena), Karil (West Nimar) | Root paste; Whole plant paste | Conjunctivitis ⁸ ; Inflamed shoulders ¹² |
| 57 | <i>Capparis zeylanica</i> L. (Capparaceae) L.N.: Waghata (Betul) | Leaf paste+oil | Bone fracture ²¹ |
| 58 | <i>Capsicum annum</i> L. (= <i>Capsicum frutescens</i> L.) (Solanaceae) L.N. Shimla mirch (Shivpuri), Mirch, Lal mirach (Jhansi) | Fruits; Fruit paste+seeds of <i>Alliumsativum</i> +seedsof <i>Pipernigrum</i> +seeds of <i>Cuminumcyminum</i> +alum+water; Fruit powder+ rock salt+ Jaggery | Cattle castrated ¹⁸ ; Dulness, lunacy ¹⁵ |
| 59 | <i>Cardiospermum halicacabum</i> L. (Sapindaceae) L.N.: Nagad Gomchi (Morena) | Leaf paste+whey | Filariasis, diarrhoea ⁸ |
| 60 | <i>Careya arborea</i> Roxb. (Lecythidaceae) L.N. Kumbhi, (Jhabua, Jabalpur, Jaspur & Surguja), Kumodi, Kumbhi (Bastar), | Leaf paste, stem bark paste; Ripe fruits | Wounds ⁷ ; Diarrhoea ⁵ ; Dysentery ²³ |
| 61 | <i>Carissa carandas</i> L. (Apocynaceae) L.N.: Karonda (Jhansi, West Nimar) | Rootpaste+coconut oil; Root paste | Maggots of wounds ^{1,2,15} |
| 62 | <i>Carissa spinarum</i> L. (Apocynaceae) L.N.: Jangli karonda (Raigarh) | Root paste | Wounds ⁵ |
| 63 | <i>Carum carvi</i> L. (Apiaceae) L.N.: Ajwain (Vindhyan region) | Seed powder | Flatulence, Indigestion ⁶ |
| 64 | <i>Cassia fistula</i> L. (Fabaceae) L.N.: Barron (Morena), Amaltas (Amarkantak, Bundelkhand, Shivpuri, Narsinghpur, Tikamgarh, Betul), Garmalo (Ratlam), Germala (West Nimar), Bandarlouri (Jaspur & Surguja) | Fruit paste, stem bark paste with cold water; Stem bark powder; Seed paste; Leaves, fruits; Fruit extract; Fruit pulp+ water, fruit decoction; Leaf paste, bark paste +pepper; Pod paste+wheat bread, Leaf paste+mstard oil, leaves and ripe poded paste; Root paste; Flower decoction | Anthrax ⁸ , diarrhoea ^{5,10} ; Antiinflammatory ¹⁰ ; Dysentery ²² ; Insect bite, swelling, rheumatism, facial paralysis ¹⁸ ; Indigestion (Afra disease) ¹¹ ; Gas, acidity, cold, throat infection ¹² ; Rheumatism, fever ²⁰ ; Indigestion, improve appetite, as purgative, severe constipation ¹⁹ ; Snakebites ²³ ; Cough & cold ²¹ |
| 65 | <i>Catharanthus roseus</i> (L.) G. Don (Apocynaceae) L.N.: Sadabhar (Alirajpur) | Whole plant extract | Wounds ¹⁶ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|---|--|
| 66 | <i>Cayratia trifolia</i> (L.) Domin (Vitaceae) L.N.: Ramcharan (Morena), Khersiliya (Dhar), Chotigurbel (Ratlam), Tifankand (Betul) | Root paste + turmeric paste; Root extract; Warm tuber psate | Foot and mouth disease ⁸ ; Throat swelling ⁵ ; Dog bite ¹¹ ; Yoke sores ²¹ |
| 67 | <i>Ceiba pentandra</i> (L.) Gaertn. (Bombacaceae) L.N.: Semal (Alirajpur) | Stem bark paste | Wounds ¹⁶ |
| 68 | <i>Chamaerops humilis</i> L. (= <i>Phoenix humilis</i> Royle) (Arecaceae) L.N.: Chhind (Baster) | Leaf decoction | Wounds ⁷ |
| 69 | <i>Chenopodium album</i> L. (Chenopodiaceae) L.N.: Bathua (Satna) | Leaf powder | Sore and wounds ¹⁴ |
| 70 | <i>Chlorophytum tuberosum</i> (Roxb.) Baker (Asparagaceae) L.N.: Musli (Jhabua) | Leaves | Brain disease ⁹ |
| 71 | <i>Chloroxylon swietenia</i> DC. (Rutaceae) L.N.: Bharhi, (Surguja) | Leaf paste | Swelling ⁷ |
| 72 | <i>Chrozophora rotleri</i> (Geiseler) A. Juss. ex Spreng. (Euphorbiaceae) L.N.: Kala Dhatura (Morena, Vindhyan region) | Leaf paste + whey; Leaf paste | Kill wound worms ⁸ ; Maggots of wounds ⁶ |
| 73 | <i>Cicer arietinum</i> L. (Fabaceae) L.N.: Gram (Gwalior) | Gram flour + butter milk | Dysentery ¹⁷ |
| 74 | <i>Cissus quadrangularis</i> L. (Vitaceae) L.N.: Harjod (Chitrakoot, Shivpuri), Arhand (Ratlam), Harjor (Vindhyan region), Harjori (West Nimar), Hadjor (Narsinghpur), Harjor (Jaspur & Surguja), Hadjod (Betul) | Leaf paste; Stem paste + Amarbel (<i>Cuscutta reflexa</i>); Leaf decoction + pepper + garlic; Stem extract + wheat bread; Fresh shoot; Tender stem juice, stem paste; Leaf & stem paste + turmeric + sesame oil; Leaf decoction + pepper + garlic; Stem paste | Bone fracture ^{6,11,12,13,14,20,21} ; Fever, ^{18,23} ; Diarrhoea ¹² |
| 75 | <i>Citrullus colocynthis</i> Schrad. (Cucurbitaceae) L.N.: Dimbo (Jaspur & Surguja) | Root decoction | Cough ²³ |
| 76 | <i>Citrus limon</i> (L.) Burm. f. (Rutaceae) L.N.: Nimbu (Gwalior, Jhansi) | Leaves + leaves of Babool (<i>Acacia nilotica spindica</i>), + baking soda, Fruit juice + leaf paste of <i>Azadirachta indica</i> ; Fruit juice | Bloat ¹⁷ (Tympanitis), Scabies ¹⁷ ; Blindness ¹⁵ |
| 77 | <i>Clematis brachiata</i> Thunb. (= <i>Clematis triloba</i> Heyne ex Roth) (Ranunculaceae) L.N.: Ran-mogra (Betul) | Leaf paste | Throat swelling ²¹ |
| 78 | <i>Cleome gynandra</i> L. (Cleomaceae) L.N.: Safed Hul-hul (Morena); Hulhul (Chitrakoot, Vindhyan region) | Leaf paste; Seed paste | Wounds ⁸ ; Skin diseases ⁶ |
| 79 | <i>Cleome simplicifolia</i> Hook. f. & Thoms. (Cleomaceae) L.N.: Hurera (West Nimar) | Whole plant ash + sesame oil, seed paste | Wounds ¹² , arthritis ¹² |
| 80 | <i>Cleome viscosa</i> L. (Cleomaceae) L.N.: Tilwan (Betul) | Leaf decoction, seed powder + water | Killing maggots in sores ²¹ , epilepsy ²¹ |
| 81 | <i>Cleistanthus collinus</i> (Roxb.) Benth. ex Hook. f. (Phyllanthaceae) L.N.: Kama, (Baster) | Bark decoction, fruit paste | Wounds ⁷ |
| 82 | <i>Clerodendrum phlomidis</i> L.f. (= <i>Clerodendrum multiflorum</i> Baker) (Verbenaceae) L.N.: Arni (West Nimar) | Plant juice | Kill lice ¹² , itchn ¹² |
| 83 | <i>Clitoria ternatea</i> L. (Fabaceae) L.N.: Gokarni (Betul) | Root powder | Scorpion sting ²¹ |
| 84 | <i>Coccinia grandis</i> (L.) Voigt (Cucurbitaceae) L.N.: Jangle Kundri (Jaspur & Surguja) | Leaf extract + ghee | Wounds ²³ |
| 85 | <i>Cocculus hirsutus</i> (L.) W. Theob. (Menispermaceae) L.N.: Chirenta (Morena) | Leaf paste | Diarrhoea ⁸ |
| 86 | <i>Cocos nucifera</i> L. (Arecaceae) L.N.: Nariyal (Alirajpur) | Seed oil | Wounds ¹⁶ |
| 87 | <i>Colocasia esculenta</i> (L.) Schott (Araceae) L.N.: Saru (Amarkantak), Jangli Arbi (West Nimar) | Crushed tubers; Corm paste | Increasing lactation ¹⁰ ; Wounds ¹² |
| 88 | <i>Corallocarpus epigaeus</i> (Rottler) Hook. f. (Cucurbitaceae) L.N.: Mirchiakand (West Nimar) | Bulppaste + mustard oil | Abdominal digestion ¹² |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|--|---|
| 89 | <i>Commelina suffruticosa</i> Blume (Commelinaceae) L.N.: Nagelgera (Baster, Morena) | Whole plant paste | Wounds to kill worms ^{7,8} |
| 90 | <i>Convolvulus arvensis</i> L. (Convolvulaceae) L.N.: Galobi (Ratlam) | Whole plant | Lactation ¹¹ |
| 91 | <i>Corchorus capsularis</i> L. (Tiliaceae) L.N.: Chaunch Bhaji (Baster) | Seed paste | Kill wound worms ⁷ |
| 92 | <i>Coriandrum sativum</i> L. (Apiaceae) L.N.: Dhania (Chitrakoot, Vindhyan region, Jhansi, Tikamgarh, Jaspur & Surguja) | Fruit paste+black salt; Leaf paste; Seed powder+leaves of <i>Lawsoniainermis</i> +water; Fruit powder | Indigestion ¹³ ; Mastitis ⁶ ; Loose motion ^{15,19} ; Facilitate conception ²³ |
| 93 | <i>Cheilocostus speciosus</i> (J.Koenig) C.D.Specht (= <i>Costus speciosus</i> (J.Koenig) Sm.) (Costaceae) L.N.: Kandua (Jhabua), Nalguj (Betul) | Root paste; Root stock | Fever ⁷ ; Rheumatic pain ²¹ |
| 94 | <i>Crinum latifolium</i> L. (Amaryllidaceae) L.N.: Barapungania (Jhabua) | The juice of bulbous root | Fever ⁷ |
| 95 | <i>Crinum lorifolium</i> Roxb. (= <i>Crinum pratense</i> Herb.) (Amaryllidaceae) L.N.: Jalsatawar (Baster) | Rootstock paste | Wounds ⁷ |
| 96 | <i>Crotalaria juncea</i> L. (Fabaceae) L.N.: San (Morena, Chitrakoot), | Leaf paste | Wounds ⁸ ; Cut & wounds ¹³ |
| 97 | <i>Cucumis melo</i> L. (Cucurbitaceae) L.N.: Phootkachari (West Nimar) | Fruit | Abdominal distention ¹² , appetizer ¹² , dysentery ¹² , abdominal disorders ¹² |
| 98 | <i>Cuminum cyminum</i> L. (Apiaceae) L.N.: Jeera (Jhabua, Gwalior, Vindhyan region) | Seed powder; Seeds+jaggery; Fruit powder+seed powder of <i>Trigonella foenum-graecum</i> +fruit powder of <i>Trachyspermum ammi</i> +seed powder of <i>Cassia tora</i> +fruit powder of <i>Piper nigrum</i> + <i>Ferula asafetida</i> ; Seeds | Indigestion ⁹ ; Agalactia ¹⁷ , constipation ¹⁷ ; Mastitis ⁶ |
| 99 | <i>Curculigo orchoides</i> Gaertn. (Hypoxidaceae) L.N.: Kalimusli (Jhabua), Ran musli (West Nimar) | Stem paste; Root | Foot & Mouth disease ⁹ ; Maggots of wounds ¹² |
| 100 | <i>Curcuma angustifolia</i> Roxb. (Zingiberaceae) L.N.: Sapaini (Jaspur & Surguja) | Rhizome extract+ghee | Running nose ²³ |
| 101 | <i>Curcuma longa</i> L. (Zingiberaceae) L.N.: Haldi (Jhabua, Alirajpur, Jhansi) | Rhizome paste, Leaf juice; Rhizome powder; Rhizome powder+rocksalt+pure ghee | Bad taste of mouth cavity ⁹ (Dandki disease), Conjunctivitis ⁹ ; Wounds ¹⁶ ; Swelling of teats ¹⁵ |
| 102 | <i>Curcuma pseudomontana</i> J.Graham (Zingiberaceae) L.N.: Ran Halad (Betul) | Leaf decoction+salt | Tympany ²¹ |
| 103 | <i>Cuscuta reflexa</i> Roxb. (Convolvulaceae) L.N.: Amerbel (Satna, West Nimar) | Stem; Plant paste | Skin diseases ¹⁴ ; Uterine prolapsed ¹² |
| 104 | <i>Cynodon dactylon</i> (L.) Pers. (Poaceae) L.N.: Duba (Jhabua, Tikamgarh) | Plant; Aerial plant, leaf juice | Increase lactation ⁹ ; Conjunctivitis ¹⁹ |
| 105 | <i>Cyperus rotundus</i> L. (Cyperaceae) L.N.: Montha (Bundelkhand), Dongli (West Nimar) | Root powder; Plant | Intestinal worms ²² ; Tonsillitis ¹² , stomach disorders ¹² |
| 106 | <i>Dalbergia latifolia</i> Roxb. (Fabaceae) L.N.: Shisham (Jabalpur, Satna, Jaspur & Surguja), Kalashisham (Shivpuri) | Stem bark decoction; Leaf juice; Stem bark paste+garlic +pepper | Hoop diseases ⁵ ; Skin eruptions ¹⁴ , indigestion ¹⁴ ; Lazy in grazing ^{18,23} |
| 107 | <i>Dalbergia sissoo</i> DC. (Fabaceae) L.N.: Shisham (Jhansi, Tikamgarh) | Leaf paste+ water; Leaf juice | Blisters and leg sore ¹⁵ ; Stop bleeding ¹⁹ |
| 108 | <i>Datura innoxia</i> Mill. (Solanaceae) L.N.: Dhatura (Jhabua) | Root paste | Fever ⁹ |
| 109 | <i>Datura metel</i> L. (Solanaceae) L.N.: Dhatura (Alirajpur), Dhatura (Shivpuri, Jhansi, Tikamgarh, Jaspur & Surguja) | Leaf paste; Roasted fruits; Root powder; Ripe fruit paste, leaf and root paste; Roasted fruits | Wounds ¹⁶ , Dysentery & cough ^{18,23} ; Bleeding ¹⁵ ; Cold &, wound healing ¹⁹ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|---|--|
| 110 | <i>Datura stramonium</i> L. (Solanaceae) L.N.: Kala dhatura (Chitrakoot), Dhturo (Ratlam) | Leaf paste with ghee; Seed extract | Kill wound worms ¹³ ; Appetizer ¹⁸ |
| 111 | <i>Delonix regia</i> (Hook.) Raf. (Caesalpinaceae) (Tikamgarh) | Bark extract+black pepper+ garlic | Fever ¹⁹ |
| 112 | <i>Dendrocalamus strictus</i> (Roxb.) Nees (Poaceae) L.N.: Bans (Amarkantak, Shivpuri) | Leaf decoction; Roasted fruits | Dysentery ^{10,18} ; Cough ¹⁸ |
| 113 | <i>Desmodium triflorum</i> (L.) DC. (Fabaceae) L.N.: Tinpatiya (Satna) | Leaves, whole plant | Wounds & galactagogue ¹⁴ |
| 114 | <i>Dicliptera paniculata</i> (Forssk.) I.Darbysh. (= <i>Peristrophe paniculata</i> (Forssk.) Brummitt) (Acanthaceae) L.N.: Kuljeera (West Nimar) | Plant ash+ghee+oil or paraffin jelly | Wounds ¹² |
| 115 | <i>Dioscorea bulbifera</i> L. (Dioscoreaceae) L.N.: Gethikanda (Surguja) | Tuber paste | Wounds ⁵ |
| 116 | <i>Diospyros melanoxylon</i> Roxb. (Ebenaceae) L.N.: Tendu (Satna) | Stem bark extract, unripe fruits | Diarrhoea & lactation ¹⁴ |
| 117 | <i>Diplocyclos palmatus</i> (L.) C. Jeffery (Cucurbitaceae) L.N.: Rowa (Amarkantak), Shivlingi (Satna, Betul) | Fruit paste; Unripe fruits, seeds; Leaves or fruits crushed+buttermilk | Kill pest ¹⁰ ; Fever ^{14,21} ; Ccolitis ¹⁴ |
| 118 | <i>Dregea volubilis</i> (L.f.) Benth. ex Hook.f. (= <i>Wattakaka volubilis</i> (L.f.) Stapf) (Asclepiadaceae) L.N.: Morash (West Nimar) | Plant paste | Inflamed shoulders ¹² |
| 119 | <i>Echinops echinatus</i> Roxb. (Asteraceae) L.N.: Kalthori (Shivpuri), Untkatara (West Nimar) | Root paste; Chopped plant | Wounds ⁷ ; Increasing lactation ¹² |
| 120 | <i>Eclipta prostrata</i> (L.) L. (= <i>E. alba</i> (L.) Hassk.) (Asteraceae) L.N.: Bhrangraj (Alirajpur), Ghamira (Vindhyan region), Bhringraj (Narsinghpur) | Whole plant poultice; Whole plant; Leaf juice; Leaf paste; Leaf decoction+mustard oil | Cut & wounds ¹⁴ ; Blindness & Bronchitis ¹⁸ ; Cut, injury ⁶ ; Swelling ²⁰ ; Wounds ¹⁹ |
| 121 | <i>Elephantopus scaber</i> L. (Asteraceae) L.N.: Kirmar, Janglibhilwa, (Baster) Chilbil (Raigarh), Manjurjhuti (Amarkantak), Minjurchunti (Jaspur & Surguja) | Root pastes; Leaf paste+sugar candy; Whole plant paste | Kill worms of wounds ⁷ ; Diarrhoea ¹⁰ ; Dysentery ²³ |
| 122 | <i>Embelia ribes</i> Burm. f. (Primulaceae) L.N.: Wawding (Betul) | Leaf decoction+whey, boiled fruits | Dysentery ²¹ |
| 123 | <i>Enicostema axillare</i> (Poir. ex Lam.) A. Raynal (Gentianaceae) L.N.: Naio (Jhabua), | Entire plant | Worms in stomach ⁹ |
| 124 | <i>Erythrina suberosa</i> Roxb. (Fabaceae) L.N.: Parabdo (Ratlam) | Stem bark ash+coconut oil | Blisters, wounds ¹¹ |
| 125 | <i>Erythrina variegata</i> L. (Fabaceae) L.N.: Pangara (West Nimar) | Bark | Anti-inflammatory ¹² |
| 126 | <i>Eucalyptus camaldulensis</i> Dehnh. (Myrtaceae) L.N.: Nilgiri (West Niamr) | Oil | Inflammation of foot ¹² |
| 127 | <i>Eulophia nuda</i> Lindl. (Orchidaceae) L.N.: Kukadikand (West Nimar) | Bulb paste+whey, bulb paste +hot water+soda | Acidity, inflammation, constipation, diuretic ¹² |
| 128 | <i>Euphorbia chamaesyce</i> L. (Euphorbiaceae) L.N.: Gudni (Morena) | Whole plant paste+coalpowder+whey | Wounds ⁸ |
| 129 | <i>Euphorbia dracunculoides</i> Lam. (Euphorbiaceae) L.N.: Jainti (Morena, Shivpuri) | Whole plant decoction | Kill lice of body ^{5,8} |
| 130 | <i>Euphorbia fusiformis</i> Buch. - Ham. ex D. Don (Euphorbiaceae) L.N.: Khagoni (Jhabua), Dudhiakand (West Nimar) | Root paste; Crusedroot+whey | Dysentery, fever ⁷ ; Lactagogue ¹² |
| 131 | <i>Euphorbia heterophylla</i> L. (Euphorbiaceae) L.N.: Dudhia (Mandla) | Whole plant paste | Increase lactation ⁵ |
| 132 | <i>Euphorbia hirta</i> L. (Euphorbiaceae) L.N.: Dudhi (Jhabua, Alirajpur, Shivpuri, Jaspur & Surguja), Bangenda (Amarkantak), Sahjana (West Nimar) | Leaf paste; Whole plant decoction+pepper; Latex; Milk; Plant paste | Abortion, antifertility ⁹ ; Cough & cold ¹⁰ ; Wounds ^{16,18,23} ; Increase lactation ¹² |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|---|---|--|
| 133 | <i>Euphorbia nerifolia</i> L. (Euphorbiaceae) L.N.: Kanti dudhi (Jhabua) | Root paste | Antifertility ⁹ |
| 134 | <i>Euphorbia nivulia</i> Buch.-Ham. (Euphorbiaceae) L.N.: Thuaar (Dhar) | Latex | Throat swellings ⁵ |
| 135 | <i>Euphorbia indica</i> Lam. (= <i>E. parviflora</i> L.) (Euphorbiaceae) L.N.: Chhoti dudhi (West Nimar) | Crused plant | Dissolve nails, iron pieces ¹² |
| 136 | <i>Euphorbia thymifolia</i> L. (Euphorbiaceae) L.N.: Chhoti dudhi, Lal dudhi (West Nimar) | Crushed plant+ <i>Asparagus racemosus</i> +wheat dough | Lactagogue ¹² |
| 137 | <i>Ferula assafoetida</i> L. (Apiaceae) L.N.: Hing (Jhabua), Heeng (Gwalior) | Exudes; Exudes+fruit powder of <i>Cuminum cyminum</i> +seed powder of <i>Trigonella foenum-graecum</i> +fruit powder of <i>Trachyspermum ammi</i> +seed powder of <i>Cassia tora</i> +fruit powder of <i>Piper nigrum</i> | Indigestion ⁹ ; Constipation, mastitis ¹⁷ |
| 138 | <i>Ficus benghalensis</i> L. (Moraceae) L.N.: Bargad (Alirajpur, Narsinghpur, Tikamgarh), Vadlo (Ratlam) | Latex; Leaf ash+water; Root juice | Maggot infested wounds ¹⁶ ; Indigestion ¹¹ (Afra disease); Maggot wounds ²⁰ ; Stomachache ¹⁹ |
| 139 | <i>Ficus hispida</i> L.f. (Moraceae) L.N.: Ottelawa (Betul), Bhugular (West Nimar) | Root paste; Crushed fruits+warm water | Weakness ⁷ ; Lactagogue ¹² |
| 140 | <i>Ficus racemosa</i> L. (= <i>F. glomerata</i> Roxb.) (Moraceae) L.N.: Gular (Shivpuri, Jhansi, Narsinghpur) | Fruits, leaves; Fruits; Bark decoction+buttermilk | Renal problems, dermatitis, diarrhea, ulcer, anthelmintic ¹⁸ ; Removal of placenta after delivery ¹⁵ ; Diarrhoea ²⁰ |
| 141 | <i>Ficus religiosa</i> L. (Moraceae) L.N.: Peepal (Morena, Chitrakoot, Gwalior, Vindhyan region, Tikamgarh) | Stem bark paste; Smashed fruits; Fofleaves+jaggery; Bark decoction; Leaf juice | Constipation ⁸ ; Inducing fertility ¹³ ; Fracture ¹⁷ ; Footh& mouth disease ⁶ ; Tonsils ¹⁹ |
| 142 | <i>Gardenia latifolia</i> Aiton (Rubiaceae) L.N.: Phetra (West Nimar) | Oil | Foot & mouth disease ¹² |
| 143 | <i>Gloriosa superba</i> L. (Colchicaceae) L.N.: Kaliharikand (Chhindwara, West Nimar), Kalihari (Shivpuri) | Root paste; Leaves; Crushed bulb | Wounds to kill worms ⁵ ; Swelling, chronic ulcer, colic pain ¹⁸ ; Wounds to kill maggots ¹² |
| 144 | <i>Glossocardia bosvalea</i> (L.f.) DC. (Astereceae) L.N.: Pittpara (Betul) | Leaf powder | Lameness ⁷ |
| 145 | <i>Grewia hirsute</i> Vahl (Tiliaceae) L.N.: Gudsakri (West Nimar) | Root powder+water | Bone fracture ¹² |
| 147 | <i>Hedychium coronarium</i> J. König (Zingiberaceae) L.N.: Gulbakaoli (Shahdol) | Rhizome paste | Kill intestinal worms ⁵ |
| 148 | <i>Helianthus annuus</i> L. (Asteraceae) L.N.: Surajmukhi (Jhansi) | Seed powder+ coconut oil | Swelling of testis ¹⁵ |
| 149 | <i>Helicteres isora</i> L. (Malvaceae) L.N.: Marorphali (Vindhyan region, Jhansi) | Dried fruits; Fruit powder+seedpoder of <i>Cuminum cyminum</i> +whey | Stomachache ⁶ ; Dysentery ¹⁵ |
| 150 | <i>Hemidesmus indicus</i> (L.) R. Br. ex Schult. (Apocynaceae) L.N.: Dudhiyaparhi (Jaspur & Surguja) | Plant paste | Wounds ²³ |
| 151 | <i>Hibiscus rosa-sinensis</i> L. (Malvaceae) L.N.: Gudhal (Jhansi, Tikamgarh) | Bark decoction | Twitching ^{15,19} |
| 152 | <i>Holarrhena pubescens</i> Wall. ex Don (= <i>H. antidysenterica</i> Wall. ex DC) (Apocynaceae) L.N.: Kuretha (Morena), Korya (Jaspur & Surguja) | Stem bark paste+turmericpaste+alum+liquor; Stem bark decoction | Anthrax ⁸ ; Dysentery ²³ |
| 153 | <i>Holoptelea integrifolia</i> (Roxb.) Planch (Ulmaceae) L.N.: Ohla (Alirajpur) | Leaf paste; Leaf juice | Wounds ¹⁶ ; Ectoparasites ¹⁹ |
| 154 | <i>Hordeum vulgare</i> L. (Poaceae) L.N.: Jau (Ratlam) | Flour | Body weakness ¹¹ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|---|--|
| 155 | <i>Hygrophila schulli</i> (Buch.-Ham.) M.R.Almeida & S.M. Almeida (Acanthaceae) L.N.: Telmakhana (West Nimar) | Ash of whole plant+oil | Wound of shoulder ¹² |
| 156 | <i>Hyoscyamus niger</i> L. (Solanaceae) L.N.: KhurasaniAjwain (Jhansi) | Sed oil | Remove maggots of wounds ¹⁵ |
| 157 | <i>Hyptis suaveolens</i> (L.) Poit. (Lamiaceae) L.N.: Madhuban (Durg) | Leaf juice | Eye inflammation, conjunctivitis ^{7,8} |
| 158 | <i>Indigofera cassioides</i> DC. (Fabaceae) L.N.: Jhinni Patti (Chhindwara) | Leaf fumes | Body ache ⁷ |
| 159 | <i>Indigofera oblongifolia</i> Forsk. (Fabaceae) L.N.: Janglineel (West Nimar) | Leaves +leaves of <i>Momordica charantia</i> and <i>Momordica dioicca</i> +salt | Abdominal distention ¹² |
| 160 | <i>Indigofera tinctoria</i> L. (Fabaceae) L.N.: Neel (Gwalior, West Nimar) | Leaves; Plant powder | Mastitis ¹⁷ ; Boils ¹² |
| 161 | <i>Ipomoea carnea</i> Jacq. (Convolvulaceae) L.N.: Naseda (Alirajpur) | Warmed leaves | Wounds ¹⁶ |
| 162 | <i>Ipomoea turbinat</i> Lag. (Convolvulaceae) L.N.: Khotlaiya (Vindhyan region) | Seed powder | Constipation ⁶ |
| 163 | <i>Jatropha curcas</i> L. (Euphorbiaceae) L.N.: Ratanjot (Jhabua, Jhansi) | Latex; Milkysap | Wounds ⁹ ; Yolk sore ¹⁵ |
| 164 | <i>Kavalama urens</i> (Roxb.) Raf. (= <i>Sterculia urens</i> Roxb.) (Sterculiaceae) L.N.: Kurlu (Jaspur & Surguja) | Stem bark | Cut & wounds ²³ |
| 165 | <i>Justicia adhatoda</i> L. (= <i>Adhtoda vasica</i> Nees) (Acanthaceae) L.N.: Adusa (Morena, Chitrakoot, Alirajpur, Shivpuri, Vindhyan region, West Nimar, Tikamgarh, Jaspur & Surguja) | Leaf paste+jaggery; Leaf paste; Leaf poultice; Leaf decoction; Leaf powder; Crushed leaves; Leaf juice+bark juice of <i>Syzygiumciminii</i> ; Leaf and stem decoction | Bronchitis ^{6,8,13} ; Cough ⁵ ; Healing wounds and inflammatory swelling ¹⁶ ; Relieve abdominal affection and expel intestinal worms ¹² ; Diarrhoea& dysentery ¹⁹ ; Fever ¹⁸ |
| 166 | <i>Lantana camara</i> L. (Verbenaceae) L.N.:Kirmich (Alirajpur), Phulari (Shivpuri), Lailumri (West Nimar) | Leaf juice; Leaves, flowers; Leaves paste | Quic blood clotting ¹⁶ ; Skin itches, wounds, scabies ¹⁸ ; Cut & wounds ¹² |
| 167 | <i>Launaea procumbens</i> (Roxb.) Ramayya & Rajagopal (Asteraceae) L.N.: Kadvigalobi (Ratlam) | Plant | Increasing lactation ¹¹ |
| 168 | <i>Lawsonia inermis</i> L. (Lythraceae) L.N.: Mehadi (Morena, Vindhyan region), Mehendi (Jhansi), Mehendi (West Nimar) | Leaf paste; Leaf decoction; Leaf powder+water; Crushed leaves | Foot & mouth disease ⁸ ; Wounds ¹⁶ ; Foot & mouth disease ⁶ ; Haematuria ¹⁵ ; Acidity, diarrhea and other stomach disorder ¹² |
| 169 | <i>Leea macrophylla</i> Roxb. ex Hornem. (Vitaceae) L.N.: Antharunkand (Betul) | Root paste | Carbuncle ²¹ |
| 170 | <i>Lecanthus peduncularis</i> (Wall. ex Royle) Wedd. (Urticaceae) L.N.: Bicchu (Satna) | Fruit paste, leaf poultice | Eczema, ring worm, and sores ¹⁴ |
| 171 | <i>Lepidium sativum</i> L. (Brassicaceae) L.N.: Chansur (Vindhyan region) | Seed poultice | Mastitis ⁶ |
| 172 | <i>Leptadenia reticulata</i> (Retz.) Wight & Arn. (Apocynaceae) L.N.: Devdali (West Nimar) | Plant juice, plant paste | Worm infestation, wounds ¹² |
| 173 | <i>Leucas aspera</i> (Willd.) Link (Lamiaceae) L.N.: Gumma (Satna) | Leaf decoction | Cough, cold, respiratory diseases ¹⁴ |
| 174 | <i>Leucas cephalotes</i> (Roth) Spreng. (Lamiaceae) L.N.: Gumma (Vindhyan region) | Leaf juice | Flatulence, indigestion ⁶ |
| 175 | <i>Limonia acidissima</i> L. (= <i>Feroniaelephantum</i> Corrêa) (Rutaceae) L.N.: Kaviti (Jhabua), Kainth (Gwalior, Tikamgarh) | Fruit paste; Leafpaste+water | Abortion ⁹ ; Wounds ¹⁷ ; Kill intestinal worms ¹⁹ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|---|--|---|
| 176 | <i>Linum usitatissimum</i> L. (Linaceae) L.N.: Alsi (Jhansi, West Nimar) | Seed oil+gunpowder+lime water; Grinded seeds+wheat flour | Burns ¹⁵ ; General health tonic ¹² |
| 177 | <i>Lobelia alsinoides</i> Lam. (Lobeliaceae) L.N.: JangliTambakhu (West Nimar) | Leaves | Foot & mouth disease ¹² |
| 178 | <i>Luffa acutangula</i> (L.) Roxb. (Cucurbitaceae) L.N.: Kadvitaroi (Ratlam) | Seed extract+water | Appetizer ¹¹ |
| 179 | <i>Luffa cylindric</i> (L.) M. Roem. (Cucurbitaceae) L.N.: Turai, Phatkuli (Narsinghpur) | Leaf paste | Insect bites ²⁰ |
| 180 | <i>Macrotyloma uniflorum</i> (Lam.) Verdc. (Fabaceae) L.N.: Kulthi (West Nimar) | Seeds+ pulp of fruits of <i>Aegle marmelos</i> | Lactation ¹² |
| 181 | <i>Madhuca longifolia</i> (J.Koenig ex L.) J.F. Macbr. var. <i>latifolia</i> (Roxb.) A.Chev. (Sapotaceae) L.N.: Mahua (Jhabua, West Nimar, Tikamgarh), Moha (Betul) | Flower juice; Flower paste+ <i>Curcuma longa</i> +onion; Dried flowers; Boiled flowers; Bark paste+bark paste of <i>Soymida febrifuga</i> ; Flower paste+Jaggery+water; Leaf decoction, fruits | Cough & cold ⁹ ; Swelling due to injury ¹³ ; Malnutrition ¹⁴ ; Wounds ¹⁶ ; Sprain ¹² ; Fever, diarrhea, diphtheria ²¹ |
| 182 | <i>Mangifera indica</i> L. (Anacardiaceae) L.N.: Am (Morena, Jhabua, West Nimar, Tikamgarh), Ambo (Ratlam) | Pickled fruits; Flower paste+turmeric powder+onion paste; Three years pickled fruits; Pickled fruit paste+ <i>Curcumalonga</i> +mustard oil; Bark paste+lime; Fruit paste+wheat bread | Constipation ^{8,13} ; Swelling due to injury; Indigestion ^{9,11,19} (Afra disease); Diarrhoea& dysentery ¹² ; Cataract ¹⁵ ; Fever ²³ |
| 183 | <i>Marsdenia sylvestris</i> (Retz.) P.I. Forst (<i>Gymnema sylvestris</i> (Retz.) Schult.) (Apocynaceae) L.N.: Gudmar (Jhansi, Jaspur & Surguja) | Leaf paste; Leaf paste+pepper+garlic+common salt | |
| 184 | <i>Mentha arvensis</i> L. (Lamiaceae) L.N.: Podina (Tikamgarh) | Leaf paste+leaf paste of <i>Centella asiatica</i> | Fever ¹⁹ |
| 185 | <i>Milletia extensa</i> (Benth.) Baker (Fabaceae) L.N.: Golhar (Morena) | Root paste, leaf paste | Wounds to kill worms, kill lice of body ⁸ |
| 186 | <i>Mimosa pudica</i> L. (Mimosaceae) L.N.: Lajwanti (Jhabua, Shivpuri, Jhansi), Chuimui (Jaspur & Surguja) | Leaf extract; Leaf paste+pepper +garlic+onion+saffron; Leaf paste+chapaties; | Prolapse of uterus ⁹ ; Fever ^{18,23} ; Maggot wounds ¹⁵ |
| 187 | <i>Mimusops elengi</i> L. (Sapotaceae) L.N.: Bakul, Mollshri (Narsinghpur) | Bark decoction | Urinary infection ²⁰ |
| 188 | <i>Mitragyna parviflora</i> (Roxb.) Korth. (Rubiaceae) L.N.: Kaim (Morena) | Bark decoction | Filariasis ⁸ |
| 189 | <i>Momordica charantia</i> L. (Cucurbitaceae) L.N.: Karela (West Nimar) | Leaf paste | Thorny growth on tongue ¹² |
| 190 | <i>Moringa oleifera</i> Lam. (Moringaceae) L.N.: Sahajan (Seoni), Saunjana (Gwalior, Tikamgarh), Surajano (Ratlam) | Bark decoction; Bark paste +bulbs of <i>Allium sativum</i> + leaves of <i>Boerhaviadiffusa</i> : Root extract+water; Leaf paste, pod paste, root juice | Influenza ⁷ ; Rheumatism ¹⁷ ; Appetizer ¹¹ ; Diarrhoea& dysentery, rheumatism, ulcer ¹⁹ |
| 191 | <i>Mucuna pruriens</i> (L.) DC. (Fabaceae) L.N.: Kemuch (Ratlam), Khajkurari (Betul) | Fruit hairs; Tender leaf | Intestinal worms ¹¹ ; Lactation ²¹ |
| 192 | <i>Musa paradisiaca</i> L. (Musaceae) L.N.: Ker (Ratlam), Kela (Jhansi, Tikamgarh) | Spathe extract; Fruit paste+sugar candy; Leaf & root | Prolapse of uterus ¹¹ ; Blisters, hoof sore ¹⁵ ; Body heat ¹⁹ |
| 193 | <i>Nerium oleander</i> L. (Apocynaceae) L.N.: Kaner (Alirajpur) | Seed ash +mustard oil | Wounds ¹⁶ |
| 194 | <i>Nicotiana tabacum</i> L. (Solanaceae) L.N.: Tambaku (Bundelkhand, Vindhyan region) | Leaf fumes; Seeds; Leaf juice | Ticks and lice ²² ; Intestinal worms ¹⁴ ; Ectoparasites ⁶ |
| 195 | <i>Nyctanthes arbor-tristis</i> L. (Oleaceae) L.N.: Harsingar (Alirajpur, Vindhyan region) | Leaf decoction; | Maggot infested wounds ¹⁶ ; Fever ⁶ |
| 196 | <i>Ocimum gratissimum</i> L. (Lamiaceae) L.N.: 0 (Tikamgarh) | Leaf paste | Removal of ectoparasites ¹⁹ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|--|---|
| 197 | <i>Ocimum tenuiflorum</i> L. (= <i>O. sanctum</i> L.) (Lamiaceae) L.N.: Tulsi (Jhabua, Satna, Vindhyan region, Tikamgarh) | Leaf extract; Seed powder; Leaf decoction | Brain disease ⁹ ; Maggots & wounds ⁶ ; Cough & cold ¹⁹ |
| 198 | <i>Opuntia elatior</i> Mill. (Cactaceae) L.N.: Hatha thoohar (West Nimar), Nagphani (Betul) | Stem paste; Heated phyllodes | Bone fracture ¹² ; Swelling ²¹ |
| 199 | <i>Orobanche aegyptiaca</i> Pers. (Orobanchaceae) L.N.: Agia (Morena; Chitrakoot) | Whole plant | Increasing lactation ^{8,13} |
| 200 | <i>Oryza sativa</i> L. (Poaceae) L.N.: Dhan (Jhabua, Jhansi, Tikamgarh) | Powder; Bran+seeds of <i>Gossypium</i> sp.; Rice grains+blackgram+black salt+ black pepper | Prolapse of uterus ⁹ ; Cough ¹⁵ ; Increase lactation ¹⁹ |
| 201 | <i>Oxalis corniculata</i> L. (Oxalidaceae) L.N.: Tinpatia (Chitrakoot) | Leaf paste | Neck swelling ¹³ |
| 202 | <i>Pennisetum typhoides</i> (Burm. f.) Stapf. & C. E. Hubb. (Poaceae) L.N.: Bazra | Seed flour+seeds of <i>Abrus precatorius</i> | Rhinitis ¹⁷ |
| 203 | <i>Phoenix dactylifera</i> L. (Arecaceae) L.N.: Khajur (Jhabua) | Root paste | Worms in stomach ⁹ |
| 204 | <i>Phyllanthus amarus</i> Schumacher & Thonn. (Phyllanthaceae) L.N.: Buiawla (Alirajpur) | Leaf paste | Wounds ¹⁶ |
| 205 | <i>Phyllanthus emblica</i> L. (= <i>Emblica officinalis</i> Gaertn.) (Phyllanthaceae) L.N.: Amla (Chhindwara, Betul), Aonla (Surguja), Amla (Satna) | Bark paste; Fruit powder | Wounds ⁷ ; Abdominal disorder ¹⁴ |
| 206 | <i>Phyllanthus fraternus</i> G.L. Webster (Phyllanthaceae) L.N.: Bhuiamla (West Nimar) | Crushed whole plant | Lactagogue ¹² |
| 207 | <i>Physalis angulata</i> L. (= <i>Physalis minima</i> L.) (Solanaceae) L.N.: Badipopti (West Nimar) | Crushed seeds +oil cake, leaf paste | Appetizer, snake bite ¹² |
| 208 | <i>Piper nigrum</i> L. (Piperaceae) L.N.: Kalapeepar (Jhabua), Kalimirach (Gwalior) | Seeds; Seed paste; Fruit powder+seed powder of <i>Trigonella foenum-graecum</i> +fruit powder of <i>Trachyspermum ammi</i> + fruit powder of <i>Cuminum cyminum</i> + <i>Ferula asafoetida</i> | Cough & Cold ⁹ ; Constipation ¹⁷ |
| 209 | <i>Plectranthus amboinicus</i> (Lour.) Spreng. (= <i>Coleus amboinicus</i> Lour.) (Lamiaceae) L.N.: Konchi, (Mandla) | Root paste | Blood dysentery ⁷ |
| 210 | <i>Plumbago zeylanica</i> L. (Plumbaginaceae) L.N.: Chitawar (Morena, Shivpuri), Chitrak (Alirajpur) | Root paste+jaggery; Root paste | Stomach pain ⁵ ; Stomatitis, diarrhoea ⁸ ; Infested wounds to kill worms ¹⁶ |
| 211 | <i>Pongamia pinnata</i> (L.) Pierre (Fabaceae) L.N.: Kanji (Satna, Shivpuri), Karanja (Jhansi), Karanj (Narsinghpur), Koranjo (Jaspur & Surguja) | Leaves, seed oil; Leaf paste+pepper, stem bark decoction; Seed oil+phosphorus powder | Galactagogue ¹⁴ ; Skin diseases ^{14,18} ; Fever ^{18,20,23} ; Dysentery ²³ ; Ring worm ¹⁵ |
| 212 | <i>Porana paniculata</i> Roxb. (Convolvulaceae) L.N.: Masbandhi (Jaspur & Surguja) | Tuber paste | Bone fracture ²³ |
| 213 | <i>Psidium guajava</i> L. (Myrtaceae) L.N.: 0 (Tikamgarh) | Leaf decoction | Fever ¹⁹ |
| 214 | <i>Pueraria tuberosa</i> (Willd.) DC. (Fabaceae) L.N.: Gajua (Jhabua), Patalkumbra (Baster) | Tuber | Increasing secretion of milk ⁷ |
| 215 | <i>Radermachera xylocarpa</i> (Roxb.) Roxb. ex K. Schum. (Bignoniaceae) L.N.: Kharseng (West Nimar) | Crushed roots+water | Gas & acidity ¹² |
| 216 | <i>Ranunculus pulchellus</i> C.A. Mey. (Ranunculaceae) L.N.: Kush (Shivpuri) | Plant paste | Cuts & wounds ¹⁸ |
| 217 | <i>Ricinus communis</i> L. (Euphorbiaceae) L.N.: Arand (Jhabua), Andi (Chitrakoot, Narsinghpur), Arandi (Alirajpur, Narsinghpur), Arandi (Vindhyan region) | Ash of leaves; Seed oil; Leaf juice; Leaves; Seeds | Wounds ^{9,16} ; Constipation ^{6, 13,19} ; Diarrhoea & Dysentery ⁶ ; Intestinal worm ²⁰ |
| 218 | <i>Rivea hypocrateriformis</i> Choisy (Convolvulaceae) L.N.: Fang (West Nimar) | Crushed leaves | Anti-inflammatory ¹² |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|--|--|---|
| 219 | <i>Saccharum officinarum</i> L. (Poaceae) L.N.: Ganna (Jhansi) | Leaf | Retard placenta ¹⁵ |
| 220 | <i>Salvadora oleoides</i> Decne. (Salvadoraceae) L.N.: Pelu (Morena) | Leaf paste+turmeric+garlic paste | Haemorrhagic septicaemia ⁸ |
| 221 | <i>Salvadora persica</i> L. (Salvadoraceae) L.N.: Pala (West Nimar) | Burnt leaves+cow urine | Wounds to kill worms ¹² |
| 222 | <i>Sapindus laurifolius</i> Vahl (Sapindaceae) L.N.: Ritha (West Nimar) | Fruit powder | Snake bite ¹² |
| 223 | <i>Sarcostemma viminalis</i> (L.) R.Br. (Apocynaceae) L.N.: Bhurbel (West Nimar) | Crushed roots+water | Anti-inflammatory ¹² |
| 224 | <i>Schleichera oleosa</i> (Lour.) Oken (Sapindaceae) L.N.: Kusum (Raigarh, Chhindwara, Betul), Kusum phal (West Nimar) | Seed oil Fruit powder+sugar | Itching, leg swellings ⁷ ; Wounds to kill maggots ¹² |
| 225 | <i>Scindapsus officinalis</i> (Roxb.)Schott. (Araceae) L.N.: Gach papal (Jaspur & Surguja) | Whole plant paste | Bone fracture ²³ |
| 226 | <i>Semecarpus anacardium</i> L.f. (Anacardiaceae) L.N.: Bhilawa (West Nimar), Bibba (Betul) | Crushed seeds; Fruits | Cold ¹² ; Mouth disease ²¹ |
| 227 | <i>Senna auriculata</i> (L.) Roxb. (= <i>Cassia auriculata</i> L.) (Caesalpiniaceae) L.N.: Tarbad (West Nimar), Aval (Narsinghpur) | Leaf paste+coconut oil, leaf decoction, leaves+salt; Leaf paste | Sprain, gas, acidity, diarrhea ¹² ; Pox ²⁰ |
| 228 | <i>Senna tora</i> (L.) Roxb. (= <i>Cassia tora</i> L.) (Caesalpiniaceae) L.N.: Puwadiya (Alirajpur), Pamar (Gwalior), Pumar (Shivpuri), Chakoda (Jaspur & Surguja) | Seed paste; Seed powder+seed powder of <i>Trigonella foenum-graecum</i> +fruit powder of <i>Trachyspermum ammi</i> +fruit powder of <i>Piper nigrum</i> +fruit powder of <i>Cuminum cyminum</i> + <i>Ferula asafetida</i> ; Seed paste | Wounds ¹⁶ ; Constipation ¹⁷ ; Skin disease ^{18,23} |
| 229 | <i>Sida acuta</i> Burm. f. (Malvaceae) L.N.: Wala (Alirajpur) | Leaf juice | Wounds ¹⁶ |
| 230 | <i>Smilax wightii</i> DC. (Smilacaceae) L.N.: Ranpawan (Raigarh) | Leaf paste | Diarrhoea ⁵ |
| 231 | <i>Solanum americanum</i> Mill. (Solanaceae) L.N.: Buiregni (Alirajpur) | Fruit paste+leaf paste of <i>Heteropogon contortus</i> | Wounds ¹⁶ |
| 232 | <i>Solanum nigrum</i> L. (Solanaceae) L.N.: Lal Gongachi (Dhar) | Leaf paste | Body swelling ⁵ |
| 233 | <i>Sorghum bicolor</i> (L.) Moench (= <i>Sorghum vulgare</i> (L.) Pers.) (Poaceae) L.N.: Juwar (Ratlam), Jwar (Vindhyan region), Jawar (Jhansi) | Flour; Tender leaves; Seed flour+whey | Dysentery ¹¹ ; Intestinal worms of infants ⁶ ; Loose motion ¹⁵ |
| 234 | <i>Soymida febrifuga</i> (Roxb.) A. Juss (Meliaceae) L.N.: Rohan (Raigarh, Dewas, West Nimar) | Bark paste+whey; Crushed bark | Loose motions ⁷ ; Inflammation of foot ¹² |
| 235 | <i>Spondias pinnata</i> L. (Anacardiaceae) L.N.: Ambirlo (Jaspur & Surguja) | Fresh fruit juice | Dysentery ²³ |
| 236 | <i>Stereospermum chelonoides</i> (L.f.) DC. (Bignoniaceae) L.N.: Padal (West Nimar) | Crushed leaves | Wounds to prevent bleeding ¹² |
| 237 | <i>Syzygium cumini</i> (L.) Skeels (Myrtaceae) L.N.: Jamun (Jhabua, Jhansi, Tikamgarh, Jaspur & Surguja) | Bark paste; Seed powder; Bark powder+whey+water; Decoction of bark+bark of <i>Azadirachta indica</i> | Dysentery ^{9,23} ; Diarrhoea & dysentery ¹³ ; Haematuria ¹⁵ ; Joints pain ¹⁹ |
| 238 | <i>Syzygium heyneanum</i> (Duthie) Wall. ex Gamble (Myrtaceae) L.N.: Chhoti Jamun (Jabalpur) | Stem bark decoction+liquor made from Mahuwa (<i>Madhuca longifolia</i>) flowers | Constipation ⁵ |
| 239 | <i>Tamarindus indica</i> L. (Caesalpiniaceae) L.N.: Imli (Jhabua, Satna, Shivpuri, Tikamgarh) | Bark paste; Leaves; Fruits; Boiled leaves | Dysentery ⁹ ; Inflamed joints ¹⁴ ; As carminative, laxative, digestive ¹⁸ ; Swelling ¹⁹ |
| 240 | <i>Tectona grandis</i> L.f. (Verbenaceae) L.N.: Sagon (Jhabua) | Leaf paste | Wounds |
| 241 | <i>Tegetes erecta</i> L. (Asteraceae) L.N.: Gainda (Shivpuri, Jhansi, Tikamgarh), Genda (Narsinghpur) | Leaves; Flower powder+water; Plant paste; Leaf decoction | Cuts and wounds ¹⁸ ; Hydrophobia ¹⁵ ; Cut & wounds ²⁰ ; Hydrophobia ¹⁹ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|---|--|--|
| 242 | <i>Tephrosia purpurea</i> (L.) Pers. (Fabaceae) L.N.: Dhamasa (Morena), Sarponkha (West Nimar) | Leaf paste; Crushed leaves | Wounds ^{8,12} |
| 243 | <i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn. (Combretaceae) L.N.: Arjun sadada (Betul) | Stem bark paste | Bone fracture ²¹ |
| 244 | <i>Terminalia bellirica</i> (Gaertn.) Roxb. (Combretaceae) L.N.: Bahera (Satna) | Fruit powder | Indigestion, flatulence and stomach disorders ¹⁴ |
| 245 | <i>Terminalia chebula</i> Retz. (Combretaceae) L.N.: Harra (Satna, Shivpuri, Vindhyan region, Jaspur & Surguja) | Fruit powder; Stem bark paste +pepper+garlic; Seed powder | Anthrax ¹⁴ ; Fever ^{18,23} ; Cut & injury ⁶ |
| 246 | <i>Tinospora cordifolia</i> (Willd.) Miers (Menispermaceae) L.N.: Gorbil (Tikamgarh), Limbbel (Ratlam), Gulvel (Betul) | Stem pieces; Stem extract; Fresh leaves | Syphilis ⁷ ; Dog bite ¹¹ ; Increase flow of milk ²¹ |
| 247 | <i>Tribulus terrestris</i> L. (Zygophyllaceae) L.N.: 0 (Tikamgarh) | Leaf juice | Colic, cough ¹⁹ |
| 248 | <i>Trichodesma indicum</i> (L.) Lehm. (Boraginaceae) L.N.: Tarmudia (raigarh) | Root paste | Wounds to kill worms ⁵ |
| 249 | <i>Tridax procumbens</i> L. (Asteraceae) L.N.: Baramansi (Chhindwara), Kuradiya (Alirajpur), Ghamra (Shivpuri), Latti (Jaspur & Surguja) | Whole plant paste+whey; Leaf juice; Leaf paste | Cut & wounds ^{5,16,18,23} |
| 250 | <i>Trachyspermum ammi</i> (L.) Sprague (Apiaceae) L.N.: Ajwain (Jhabua, Bundelkhand, Gwalior) | Fruit powder; Fruit powder+ seeds powder of <i>Cassia tora</i> + seed powder of <i>Trigonella foenum-graecum</i> ; fruit powder of <i>Piper nigrum</i> +fruit powder of <i>Cuminum cyminum</i> + <i>Ferula asafetida</i> ; Fruits+bulbs of <i>Allium sativum</i> +jaggery | Indigestion ⁹ ; Cold & fever ²² ; Constipation, Pharyngitis ¹⁷ |
| 251 | <i>Tricholepis glaberrima</i> DC. (Asteraceae) L.N.: Tikatta (West Nimar) | Whole plant paste+whey | Abdominal distention, lack of appetite, diarrhoea ¹² |
| 252 | <i>Trigonella foenum-graecum</i> L. (Fabaceae) L.N.: Methi (Chitrakoot, Bundelkhand; Gwalior, Jhansi, Tikamgarh) | Seed paste; Seed powder; Seed powder+fruit powder of <i>Trachyspermum ammi</i> +seeds powder of <i>Cassia tora</i> +fruit powder of <i>Piper nigrum</i> +fruit powder of <i>Cuminum cyminum</i> + <i>Ferula asafetida</i> ; Seeds+seeds of <i>Trachyspermum ammi</i> +jaggery; Decoction of seed powder; Sprout seeds, seed powder | Respiratory problem ¹³ ; Cold & fever ²² ; Constipation, foot & mouth disease ¹⁷ ; Twitching ^{15,19} ; Easy delivery ¹⁹ |
| 253 | <i>Triticum aestivum</i> L. (Poaceae) L.N.: Genhu (Gwalior) | Poultice | Worms ¹⁷ |
| 254 | <i>Typhonium venosum</i> (Dryand. ex Aiton) Hett. & P.C. Boyce (= <i>Sauromatum venosum</i> (Dryand. ex Aiton) Kunth) (Araceae) L.N.: Bhasmakanda (Satna) | Tuber | Tonic ¹⁴ |
| 255 | <i>Vanda tessellata</i> (Roxb.) Hook. ex G. Don (Orchidaceae) L.N.: Banda (Shahdol) | Plant paste | Body swellings ⁵ |
| 256 | <i>Vernonia anthelmintica</i> (L.) Willd. (Asteraceae) L.N.: Garad (Ratlam), Kaljira (Vindhyan region) | Seed extract; Seed decoction | Gastric trouble ¹¹ ; Fever ⁶ |
| 257 | <i>Vigna radiata</i> (L.) R. Wilczek (Fabaceae) L.N.: Mug (Morena), Moong (Jhansi, Tikamgarh) | Leaf powder; Seed powder+ seed oil of <i>Arachis hypogaea</i> | Wounds ⁸ ; Cough ¹⁵ ; Cough & cold ¹⁹ |
| 258 | <i>Viscum articulatum</i> Burm.f. (Loranthaceae) L.N.: Vanda (West Nimar) | Leaves and flowers | Fracture ¹² |
| 259 | <i>Vitex negundo</i> L. (Verbenaceae) L.N.: Nirguri (Ratlam), Nirgur (Betul), Nirgundi (Shivpuri, West Nimar), Khonkhod (Jaspur & Surguja) | Leaf paste; Leaf paste+pepper +garlic; Dried leaves+fodder; Stem bark paste+curd | Wounds ⁷ ; Infectious diseases ¹⁸ ; Skin diseases ¹² ; Diarrhoea ¹⁹ ; Dysentery ²³ |
| 260 | <i>Wendlandia heynei</i> (Schult.) Santapau & Merchant (Rubiaceae) L.N.: Tilbad (Shahdol), Nirgundi (Vindhyan region) | Stem bark decoction; Leaf poultice | Skin diseases ⁵ ; Cut & injury ⁶ |

(Contd.)

Table 2 — List of Plants used as veterinary medicine in Central India (Contd.)

| S.No. | Botanical name/Family/Local name | Part (s) used and mode of administration | Diseases with References |
|-------|---|--|---|
| 261 | <i>Withania somnifera</i> (L.) Dunal (Solanaceae) L.N.: Ashwagandha (Jhansi) | Decoction of root powder+ seed powder of <i>Hyoscyamus niger</i> +leaf powder of <i>Bambusa arundinacea</i> + Jaggery+rhizome powder of <i>Zingiber officinale</i> +milk | Retard placenta ¹⁵ |
| 262 | <i>Woodfordia fruticosa</i> (L.) Kurz (= <i>W. floribunda</i> Salisb.) (Lythraceae) L.N.: Dhawai (Jaspur & Surguja) | Root paste+egg shell | Bone fracture ²³ |
| 263 | <i>Wrightia tinctoria</i> R.Br. (Apocynaceae) L.N.: Kalakuda (West Nimar) | Bark paste | Anti-inflammatory ¹² |
| 264 | <i>Xanthium strumarium</i> L. (Asteraceae) L.N.: Chirchita (Morena, Vindhyan region) | Leaf paste | Wounds ⁸ ; Shoulder wounds ⁶ |
| 265 | <i>Zea mays</i> L. (Poaceae) L.N.: Makka (Jhabua) | Grains decoction | Antifertility ⁹ |
| 266 | <i>Ziziphus jujuba</i> Mill. (= <i>Ziziphus mauritiana</i> Lam.) (Rhamnaceae) L.N.: Ber (Jhansi) | Leaf paste+seed oil of <i>Linum usitatissimum</i> | Burn, skin burn ^{15,19} |
| 267 | <i>Ziziphus nummularia</i> (Burm.f.) Wight & Arn. (Rhamnaceae) L.N.: Jhar (Morena) | Root decoction; Root paste | Yoke sore ⁸ ; Wounds ⁹ ; Shoulder wounds by yoke ⁶ |
| 268 | <i>Zingiber cernuum</i> Dalzell (Zingiberaceae) L.N.: Gaurasanth Rhizome (West Nimar) | | Lactation ¹² |
| 269 | <i>Zingiber officinale</i> Roscoe (Zingiberaceae) L.N.: Adrak (Chitrakoot, Shivpuri, Tikamgarh) | Rhizome juice; Rhizome; Rhizome boiled with milk | Fever ¹³ ; Cold & fever ²² ; Dyspepsia, flatulence, colic, diarrhea ¹⁸ ; Physically disability ¹⁹ |
| 270 | <i>Zingiber roseum</i> (Roxb.) Roscoe (Zingiberaceae) L.N.: Jangliada (Jhabua, Baster) | Rhizome paste | Bone fracture ⁷ |

Abbreviation-L.N.: Local name

Discussion

The analysis of the present study reveals that there are 270 plant species belonging to 218 genera and 84 families are used by tribal and rural people of Central India (Madhya Pradesh and Chhattisgarh) for the treatment of 139 different types of ailments, diseases and disorders. The 270 plant species used in the treatment of rhinitis, colic, ephemeral fever, skin allergy, swelling, diarrhoea, dysentery, blood dysentery, arthritis, healing wounds, growing pappilae, bone fracture, tympanitis, maggot wounds, general tonic, bronchitis, washing eyes, as appetizer, skin diseases, abortion, injury, constipation, as lactagogue, gastric problem, cut, antidot against poisonous herbs, indigestion, bad taste of mouth cavity, hoop disease, nasal secretion, expel insect from eyes, brain disease, earache, cough, cold, food poisoning, snake bite, mastitis, unconsciousness, burn, swelling of udder, lactation, delivery, induce fertility, body pain, body inflammation, kill intestinal worms, kill ectoparasites, foot disease, twitching, eczema, throat swelling, foot & mouth disease, immunity, bovocolosis, volvulus, as anti-pyretic, thrust, nausea, vomiting, ulcer, insect bites, paralysis, eye conjunctivitis, neck inflammation, retard placenta,

stop abortion, blindness, black quarter, liver disease, rheumatism, prolapse of uterus, falling of tail, foot rot, hyperthermia, backbone fracture, estrus, running nose, boils, blisters, urine retention, tumour, stomachache, inflamed shoulders, dullness, cataract, lunacy, filariasis, anthrax, gas, acidity, throat infection, dog bite, itching, abdominal distention, abdominal digestion, abdominal disorders, agalactia, awelling of testis, uterine prolapsed, tonsillitis, skin eruptions, lazy in grazing, leg sore, bleeding, colitis, as anti-inflammatory, diuretic, inflammation of foot, weakness, renal problem, dermatitis, lameness, cataract, yolk sore, haematuria, respiratory diseases, malnutrition, sprain, filariasis, thorny growth of tongue, influenza, ringworm, haemorrhagic septicaemia, pox, leg swelling, hydrophobia, inflamed joints, as carminative, laxative, digestive, syphilis, pharyngitis, anti-fertility, dyspepsia, physical debility, dysurea, sun burn and jaundice.

The Fabaceae is the largest family contributes 24 species in Ethnoveterinary medicines. This is followed by Euphorbiaceae (13), Asteraceae and Apocynaceae (12 each), Solanaceae and Poaceae (10 each), Caesalpinaceae (9), Lamiaceae (8),

Cucurbitaceae and Zingiberaceae (7 each), Araceae and Convolvulaceae (6 each), Apiaceae, Malvaceae and Phyllanthaceae (5 each), Mimosaceae, Rutaceae, Amaryllidaceae, Vitaceae, Acanthaceae, Anacardiaceae, Verbenaceae, Myrtaceae and Moraceae (4 each), Amaranthaceae, Asparagaceae, Brassicaceae, Sapindaceae, Arecaceae, Cleomaceae, Lythraceae, Combretaceae and Rubiaceae (3 each), Simaroubaceae, Primulaceae, Meliaceae, Oxalidaceae, Bombacaceae, Ranunculaceae, Menispermaceae, Tiliaceae, Orchidaceae, Sapotaceae, Bignoniaceae, Salvadoraceae, Aristolochiaceae, Capparaceae and Rhamnaceae (2 each) and remaining 36 families representing single species each.

The *Euphorbia* is the largest genus having 9 species, this is followed by *Ficus* (4), *Acacia*, *Cleome*, *Curcuma*, *Datura*, *Indigofera*, *Phyllanthus* and *Terminalia* (3 each), *Allium*, *Amaranthus*, *Aristolochia*, *Asparagus*, *Bauhinia*, *Brassica*, *Caesalpinia*, *Cajanus*, *Calotropis*, *Capparis*, *Carissa*, *Crinum*, *Dalbergia*, *Erythrina*, *Ipomoea*, *Leucas*, *Luffa*, *Ocimum*, *Salvadora*, *Senna*, *Solanum*, *Syzygium*, *Zingiber* and *Ziziphus* (2 each) and remaining 185 genus representing single species.

Azadirachta indica is the highly medicinal plants and used in treatment of 21 animal diseases, viz., foot and mouth disease, ecto-parasites (kill lice and bugs on skin), skin diseases (khori disease), earache, wounds (maggot wound, shoulder wound), intestinal worms, constipation, immunity, indigestion, boviculosis, injury, scabies, vulvulus, antipyretic, thrust, nausea, vomiting, ulcer, cut, remove insect from the eyes, insect bites. This is followed by *Cassia fistula* (19 diseases), *Calotropis procera* (15 diseases) and *Butea monosperma* (9 diseases) etc. *Cissus quadrangularis* is commonly in bone fracture in most of the parts of Central India. The very common diseases of domestic animals of Central India are wound, foot & mouth disease, diarrhoea, dysentery, bone fracture, skin diseases, hoof diseases, intestinal worms, gastric problem and fever.

Conclusion

The ethnoveterinary practices are prevalent in worldwide among the different tribal and folk communities since thousand of years. In the early 1980, an interest was developed among the scientific communities and they started to realize that ethnoveterinary knowledge was disappearing from the tribal and rural communities across the globe. The old and experienced medicine men holding this knowledge

were dying and younger generation is not interested to appreciate and use the beliefs and practices of their forefathers. Although the animal husbandry sub-system is well developed in tribal and rural areas but they do not use modern medical facilities and eludes them due to various reasons and still use age old traditional practices for the treatment of domestic animals through locally available herbs found in their vicinity. But due to various social, economic and political reasons this age-old tradition is facing the threat of rapid depletion. Therefore, before the complete erosion of vast traditional knowledge, this should be properly documented and scientifically validated. An effort has been made to document all published literature on ethnoveterinary medicines of central India and list of plants with ethnoveterinary uses has been provided. This list of plants should be screened scientifically in order to find out newer sources of ethnoveterinary drugs and need further intensive study for their pharmacological activity on the basis of ethnoveterinary medicine which is being practiced by the tribal and folk communities since ancient times. This will lead to development of new drugs of herbal origin for the benefit of human society.

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