

Original Research Article

Plants Used as Galactagogue in Nimar Region of M.P.

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ABSTRACT

Keywords

Korku, Gond,
Nihal, Bhil,
Bhilala, lactation,
Madhya Pradesh

The Nimar region is situated in the southern western part of Madhya Pradesh and covering four districts namely Khargone, Barwani, Khandwa and Burhanpur. The chief tribes of the Nimar regions are Korku, Gond, Nihal, Bhil and Bhilala. Present study deals 35 galactagogue plants species belongs to 19 families and 35 genera used for increasing lactation in cattle.

Introduction

India is primarily an agricultural country and the rural economy and social welfare depends upon agriculture. Cows, Goats and buffaloes are the major livestock in India. The tribals are basically agriculturist and raised domesticated animals such as oxen, cows, buffaloes for milk and agriculture. Tribals treat their live- stock with herbal medicine on the basis of their empiric knowledge. Nimar is located in the South - West part of Madhya Pradesh and lies between 21°35' - 22°> 6' N Latitude and > 4°25' - 76 °14'E longitude. Topographically the area is situated centrally and its northern part covered with Vindhyan range and in southern part with Satpura ranges. It has an area of 22474 sq. km. of which forest cover is 4709sq. km.

Materials and Methods

A survey of plants used in veterinary medicine was conducted during 2012 - 2016. Weekly markets held regularly in villages

were also visited for the same purpose. The area selected for study were those where the concentration of the ethnic group is believed to be intense. After establishing good rapport, the data was collected from informants such as live stock owners, local and traditional healers and elderly persons who were willing to share their indigenous knowledge. Information about the plants used as galactagogue gathered from the different resource persons including Bhumka, Badwas, Bhagat, Vaidya who have much knowledge on medicinal plants by interviewing and semi-structured questionnaires were prepared. Plants are collected with the help of local medicine men and identified with the help of flora (Hooker 1872-1897; Haines 1924; Jain and Rao 1977, Ray 1984; Verma, *et al.*, 1993; Mudgal *et al.*, 1997; Singh *et al.*, 2001)

Observation table

1. *Abutilon indicum* (L.) Sweet, Hort.

Family: Malvaceae

Local name: Kanghi

Plant Part Used: Roots.

Use: Roots are mixed in fodder to fed milching animals as galactagogue.

2. *Albizia lebeck* (L.) Benth.

Family: Leguminosae

Local name: Siris, Sarsdo.

Plant Part Used: Fruits

Use: Fruits are given orally to increase milk production.

3. *Alternanthera sessilis* (L.) R.

Family: Amaranthaceae

Local name: Jaljamni, Garundi

Plant Part Used: Whole plant

Use: Whole plant or 100 ml of fresh leaves extract is given twice a day to cattle as galactagogue

4. *Amarathus spinosus* L.

Family: Amaranthaceae

Local name: Kanteli Chauli.

Plant Part Used: Whole plant.

Use: Entire plant is chopped and mixed with fodder is given to cows after delivery for increasing lactation.

5. *Amorphophallus konkanensis* Hett.

Family: Araceae

Local name: Jangali suran.

Plant Part Used: Corm.

Use: Corm paste (50 gm) mixed in flour of *Triticum aestivum* (Wheat) or *Sorghum vulgare* (Jowar) to prepared chapattis. These are fed to milching animals to increase milk yield.

6. *Ampelocissus latifolia* (Roxb.) Planch.

Family: Vitaceae

Local name: Dokarbel, Nardel, Panibel.

Plant Part Used: Roots

Use: 50 gm root powdered is mixed with flour of *Sorghum vulgare* (Jowar) and made into chapatti and fed in early morning daily for 3 days to cattle for increase secretion of milk.

Root paste with jaggery is given to cows and buffaloes for lactation.

7. *Asparagus racemosus* Willd.

Family: Asparagaceae

Local name: Shatavari, Sevariya, Khargosh ki grass, Shatmul, Musli

Plant Part Used: Roots.

Use: Roots mixed with fodder given to the milching animals to increase lactation.

8. *Bauhinia purpurea* L.

Family: Leguminosae

Local name: Kachnar, Kanchan.

Plant Part Used: Leaves

Use: Fresh leaves fed to cattle as galactagogue.

9. *Biophytum sensitivum* (L.) DC.

Family: Oxalidaceae

Local name: Lajwanti, Chui mui.

Plant Part Used: Whole plant

Use: Fresh plants are fed to lactating cow's as galactagogue.

10. *Bothriochloa pertusa* (L.) A.

Family: Poaceae

Local name: Kandhi, Seroti, Phulera.

Plant Part Used: Whole plant.

Use: Plants are fed to cattle to cure general debility and increase yield of milk.

11. *Chlorophytum tuberosum* (Roxb.) Baker.

Family: Asparagaceae

Local name: Safed musli, Dhuali musli.

Plant Part Used: Roots

Use: Fleshy roots are mixed with fodder and given to cattle to increase secretion of milk.

12. *Colocasia esculenta* (L.) Schott.

Family: Araceae

Local name: Jangliarbi.

Plant Part Used: Corm.

Use: Corm is crushed and mixed with animal feed is given to increase milk yield.

13. *Curcuma pseudomontana* J.

Family: Zinziberaceae

Local name: Kali musli.

Plant Part Used: Rhizome

Use: Rhizome paste with jaggery (3:2) is given to cattle to increase milk yield.

14. *Desmodium gangeticum* (L.) DC.

Family: Leguminosae

Local name: Chakulia, Rinzado.

Plant Part Used: Whole plant.

Plants used as fodder for secretion of milk in cows.

15. *Echinops echinatus* Roxb.

Family: Compositae.

Local name: Untkatara, Goma Gokhru.

Plant Part Used: Whole plant

Use: Whole plant is chopped fine and mixed with fodder is given to cows and buffaloes for improving milk yield.

16. *Euphorbia fusiformis* Buch. Syn. *Euphorbia acaulis* Roxb.

Family: Euphorbiaceae

Local name: Dudhia kand.

Plant Part Used: Rootstock.

Use: Root stock is crushed and given to cattle as galactagogue.

17. *Euphorbia hirta* L.

Family: Euphorbiaceae

Local name: Thaur, Dudhai.

Plant Part Used: Leaves

Use: Crushed leaves mixed with fodder given to cattle to increase lactation in cattle.

18. *Euphorbia thymifolia* L.Sp. Pl. 454. 1753; Fl. MP. 2:555. 1997.

Family: Euphorbiaceae

Local name: Laldudhi.

Plant Part Used: Whole plant

Use: Whole plant mixed with *Asparagus racemosus* (Shatawari) and *Triticum aestivum* (Wheat) flour with (2:1) ratio to prepare chapatti is given as lactagogue.

19. *Ficus hispida* L.

Family: Moraceae

Local name: Bhuigoolar, Katumbar.

Plant Part Used: Roots.

Use: Roots are soaked in water over night, then crushed and fed to cow for 7 days after delivery for secretion of milk.

20. *Gossypium herbaceum* L.

Family: Malvaceae

Local name: Kapas.

Plant Part Used: Seeds.

Use: Seed cake, *Triticum aestivum* (Wheat) husk and *Pennisetum glaucum* (Bajara) mixed with jaggery given to animal after parturition to increase milk.

21. *Hardwickia binata* Roxb.

Family: Leguminosae

Local name: Anjan.

Plant Part Used: Leaves.

Use: Leaves are fed to milching animals to increase milk yield.

22. *Hemidesmus indicus* (L.) R.

Family: Apocynaceae

Local name: Anantmool.

Plant Part Used: Roots

Use: Crushed roots are fed to milching animals to increase milk.

23. *Macrotyloma uniflorum* (Lamk.) Verdc.

Family: Leguminosae.

Local name: Kulthi.

Part Used: Seeds.

Use: Seeds are mixed with pulp of *Aegle marmelos* (Bel) are given to lactating animals to increase milk yield.

24. *Marsdenia tenacissima* (Roxb.) Moon.

Family: Apocynaceae

Local name: Kalipali.

Plant Part used: Stem.

Use: Stem crushed in water and given to milching animals to increase milk yield.

25. *Moringa oleifera* Lamk.

Family: Moringaceae

Local name: Surjana, Sahjan and Munga.

Plant Part Used: Leaves

Use: Paste of leaves and stem bark powder is fed with sugar to increase lactation.

26. *Musa paradisiaca* L.

Family: Musaceae

Local name: Kela.

Plant Part Used: Fruits.

Use: 5-6 ripe banana fruits after infesting a piece of *Cinnamomum camphora* (Kapoor) are fed to increase milk production.

27. *Oxystelma esculentum* (L.f.) Smith.

Family: Apocynaceae

Local name: Hiran khuri, Dudhialata.

Plant Part Used: Leaves.

Use: 5-6 Leaves are mixed with 400gms of coarsely grounded grain (Daliya) of *Triticum aestivum* (Wheat) are given to cattle as a galactagogue.

28. *Phyllanthus fraternus* Websterin Contrib.

Family: Phyllanthaceae

Local name: Bhui amla.

Plant Part Used: Whole plant.

Use: Whole plant is crushed and given as lactagogue.

29. *Pueraria tuberosa* (Roxb. ex Willd.) DC.

Family: Leguminosae

Local name: Bhui kola, Bidari kand, Gajua.

Plant Part Use: Tubers

Use: Tubers are fed to cows and buffaloes with fodder to increase secretion of milk.

30. *Saccharum spontaneum* L.

Family: Poaceae

Local name: Kans, Kansi, Kansa.

Plant Part Used: whole plant.

Use: Plant mixed with fodder given to cattle as galactagogue.

31. *Senna tora* (L.) Roxb.

Family: Leguminosae

Local name: Puadia, Chirota, Ashapur.

Plant Part Used: Seeds.

Use: Seed powder mixed with cattle feed is fed to cow once a day for a month to increase milk yield.

32. *Sesamum indicum* L.

Family: Pedaliaceae

Local name: Til.

Plant Part Used: Seeds.

Use: Seeds with jaggery (20 mg) are given to cows and buffaloes to increase lactation.

33. *Terminalia bellirica* (Gaertn.) Roxb..

Family: Combretaceae

Local name: Bahera, Beher.

Plant Part Used: Bark and fruits.

Use: Bark powder with *Triticum aestivum* (Wheat) chapatti is fed to milching animals daily for increasing milk production.

34. *Tinospora sinensis* (Willd.)

Family: Menispermaceae

Local name: Gudvel, Giloy.

Plant Part Used: Leaves.

Use: Fresh leaves given to cow and goat as a galactagogue to increase milk yield.

35. *Trigonella foenum-graceum* L.

Family: Leguminosae

Local name: Meithi.

Plant Part Used: Seeds

Use:

Results and Discussions

The present study provides the information on galactagogue plants which increase the lactation in cattle. These 35 plant species found in the study area belong to 19 families and 35 genera used in increasing yield of milk giving livestock. The tribals and gawlis of this region specially use 35 plants for increasing the milk quantity. Nearly all plant

part are used whole plant (9), roots(8),leaves (7),seeds (3),fruits and corm (2), rhizomes,stem,tuber (1),generally fed to milching animals as galactagogue.

Fig.1 Dominant families used as lactagogue

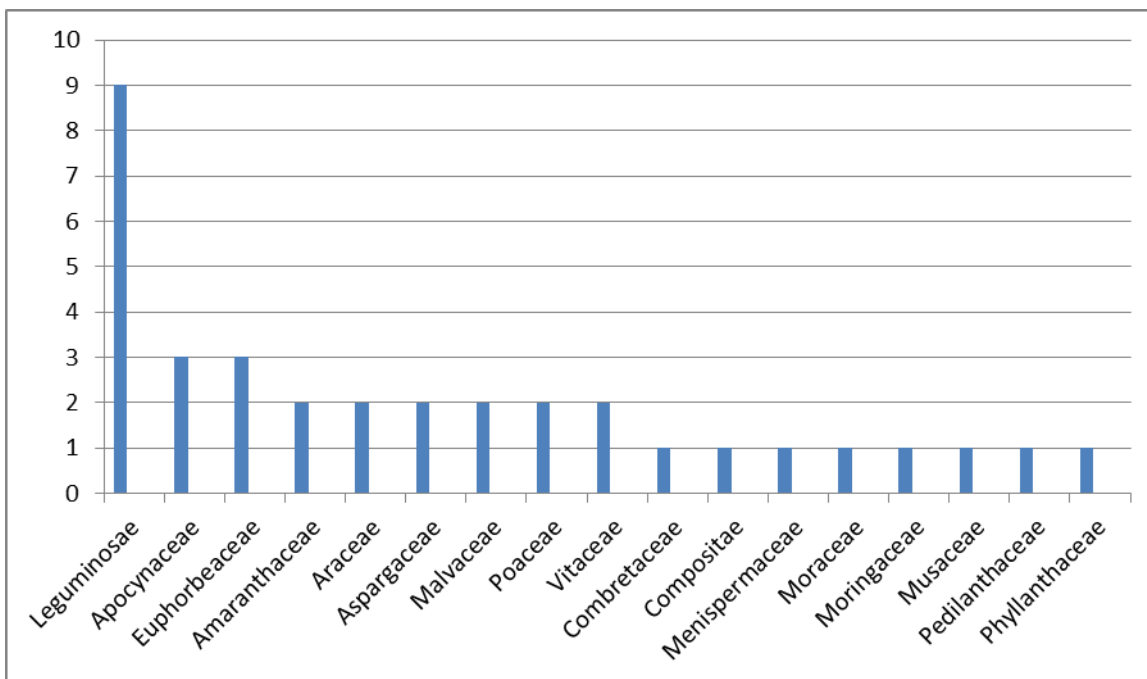
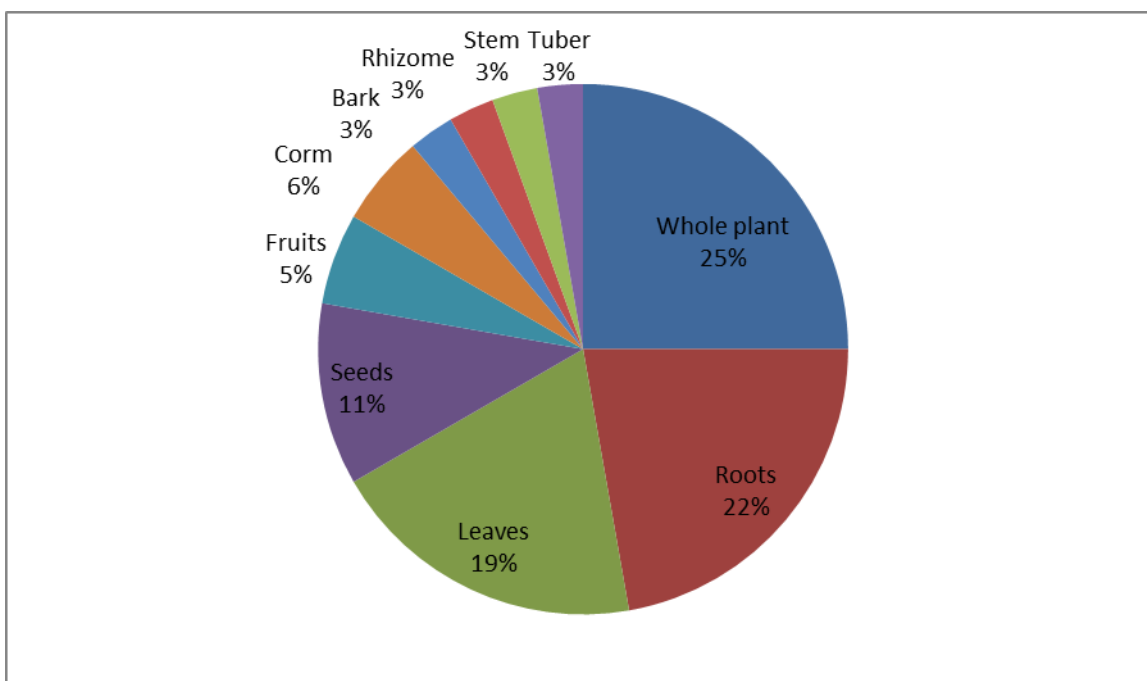


Fig.2 Plant part used as lactagogue



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