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## Survey of ethno-veterinary medicinal plants in Namakkal district, Tamil Nadu, India

**Bhuvanewari R, Ramanathan R, Mathumathi TK, Madheswaran A, Dhandapani R**

#### **Abstract**

Survey of ethno-veterinary medicinal plants in Namakkal district, Tamilnadu was carried out between October-2011 to February 2012. Plant information and medicinal uses were collected from different ethnic groups, villagers, mattu vaithiyar and folklore. A total of 75 species of ethno-veterinary medicinal plants used by the leaves, bark, and stem were used parts followed by whole plant/stem/bark/latex (20%) seed and fruit, (18.6%), rhizome/root/tubers (10.6%) and leaves and stem/bulbs/flower (6.6%). Several plants were found to be effect in treatment of animal diseases. Species of plants are used by humans for as food, medicine fiber, fuel, oils, shelter, poisons, ornamentals and other purposes. The most common forms of ethno-veterinary preparations are powders, poultice, decoction, infusion, extracts and juice. The 75 plant species belonging to 36 families are gathered and explained its exact botanical name with family, local name and ethno-veterinary medicinal use for number of diseases. Conservation and cultivation of these plants is essential for sustaining the ethno-veterinary medicinal and cultural resource of mankind.

**Keywords:** Ethno-Veterinary, Medicinal plants, Folklore, Namakkal district, Tamil Nadu.

#### **Introduction**

India has one of the sophisticated medical cultures with a tradition of over 5000 years. The livestock owners in India have been using traditional medicine based on plant formulations since time immemorial. Livestock raisers and healers everywhere have traditional ways to classifying, diagnosing, preventing and treating common animal diseases. Many of these "Ethno-Veterinary" practices offer viable alternatives or complements to conventional, western style veterinary medicine especially where the latter is unavailable or inappropriate. The unique advantage is that India is one of the world's 12 Mega diversity countries accounting for 8% global plant genetic resources and higher share of microorganisms. The veterinary science in India can be classified into codified traditions and folk medicine and has a documentary history of around 5000 years. The codified knowledge exists in the form of the texts manuscripts on various aspects on veterinary care of the livestock. The folk health practices largely remain undocumented and are passed on from one generation to other by word of mouth. There is rich and an efficient ethno-veterinary tradition exists in the villages of India which form integral part of the family and place an important social, religious and economic role. The comprise of belief, knowledge, practices and skills pertaining to healthcare and management of livestock. There are local healers who are knowledgeable and experienced in traditional veterinary healthcare. They use the locally available medicinal plants for the treatment of animals. According to the world health organization, at least 80% of people in developing countries depend largely on indigenous practices for the control and treatment of various diseases affecting both human being and their animals. These traditional healing practices are called "Ethno-veterinary" medicine. Ethno-veterinary medicine is cost effective and also dynamic (warren, 1991) [1]. The present work was carried out to explore documentation of ethno-veterinary medicinal plants used by local traditional medicinal men for remedial measures against various diseases in this study area.

#### **2. Materials and Methods**

A survey of ethno veterinary medicinal plants in Namakkal district, Tamilnadu was carried out between October-2011 to February-2012. The methodology as proposed by (Jain, 2000) [2]. Namakkal district is bounded on the north by Salem district, on the east by Perambalur district,

on the south by Karur district and on the west by Erode district. The administrative headquarters of this district is located at Namakkal town. The district lies between 11° 09' - 11° 65' north latitude and 78° 23' - 79° 45' east longitude. Namakkal district consist of four taluks, Namakkal, Rasipuram, Paramathi velur and Tiruchengode. The total geographical area of the district is 4, 376, 57 sq.km. 75 species of plants belonging to 36 families used by traditional people and folklore people. The information about the all plants were collected from different mattu vaithiyars, folklore and survey of carried out for cross checking information on the ethno-veterinary medicinal uses of plants in Namakkal district, Tamil Nadu.

Medicinal plants survey were conducted mainly in Palayapalayam, Vettampadi, Periyapatti, Nallipalayam, Ariyur, Pillur, Oviyampalayam, Suriyampalayam, Pandamangalam, Kurusamipalayam, Kavundampalayam, Namagiripettai, Morepalayam, Rayarpalayam and Unjanai. About plant information and medicinal uses were different ethnic groups, villagers, mattu vaidhiyar and folklore who use the plants for ethno-veterinary. All the species of plants were identified with help of local flora (Kirthikar and Bosu 1999, Mathew 1983) [3,4].

### 3. Results and Discussion

Ethno-veterinary medicinal plants are arranged in alphabetical order with their binomial name, family name, family parts, used, medicinal uses and animal (Table 1). In present studies, all the medicinal plant about part of uses made of administration and medicinal uses were collected from mattu vathiyars in study area. A total of 75 species of ethno-veterinary medicinal plants, distributed among 68 genera belonging to 36 families (Table 4) were recorded (Plate 1-9 and Table 1) among the families, most of the species were belong to Apiaceae, Malvaceae (5 species each) followed by Caesalpiniaceae, Euphorbiaceae, Liliaceae, Moracea, Solanaceae (4 species each). Amaranthaceae, Cucurbitaceae, (3 species each). Acanthaceae, Asclepiadaceae, Arecaceae, Aristolochiaceae, Fabaceae, Lamiaceae, Meliaceae,

Myrtaceae, Poaceae, Pedaliaceae, Rutaceae, Zingiberaceae, (2 species each). Remaining 15 families were given by single species (Table 2). Among the survey of ethno veterinary medicinal plants. The leaves / bark and leaves /stem were used parts (44%) followed by whole plant / stem bark / latex ( 20% ) seed / fruit / inside fruit (18.6%), rhizome / root / tubers (10.6%) and leaves and stem / bulbs / flower (6.6%) (Table-3). Ethno-Veterinary Medicine (EVM) includes the indigenous beliefs, knowledge, skills, methods and practices pertaining to the health care of animals (Bhatt 2001) [5, 15]. Many of the EVM practices and preparations are apparently time tested, readily available, location specific and are environment friendly, making the poor livestock farmers dependable on them. Ethno- veterinary practices are widely accepted globally as complementary to the existing modern practices (Buch *et al.*, 1973) [5]. The indigenous treatment for various diseases and ointments of livestock are documented through interdisciplinary collaboration with the government and non-governmental organizations. The people of rural India by the large are still dependent on traditional medicines for their health care and treatment of diseases. These medicines have been developed through the experience of many generations assimilating the knowledge, in course of time, from fragments of Siddha, Ayurvedic, Yunani as well as Tribal systems of medicine. These may be called "Folk medicines" folklore people utilize plant resource to meet their requirements, including Ethno- Veterinary herbal medicines. Notable Ethno-veterinary studies have been made in the by Buch *et al.* (1973) [6], Mathew (1984) [7] Sebastian and Bhandari (1984) [8], Jain (1991) [9], Avani (1991) [10], Sikarwar *et al.* (1994) [11], Varghese (1996) [12], Shastri (1996) [13], Anonymous (1999) [14], Bhatt (2001) [15], and Jain, (1999) [16]. Therefore, an urgent need was felt to document this precious knowledge of the tribes of Namakkal district. There is need to raise awareness' and cultivation of above medicinal plants to the local people of that area to meet their own needs as well as for providing then income. This information may be helpful to further research work.

Plate I



*Abrus precatorius* L. (Fabaceae)



*Abutilon indicum* G. Don. (Malvaceae)



*Acalypha indica* L. (Euphorbiaceae)



*Achyranthes aspera* L. (Amaranthaceae)



*Acorus calamus* L. (Araceae)



*Adhatoda vasica* Nees. (Acanthaceae)

**Plate II**



*Aegle marmelos* (L.) Corr. (Rutaceae)



*Allium cepa* L. (Liliaceae)



*Allium sativum* L. (Liliaceae)



*Aloe vera* (L.) Burm. f (Liliaceae)



*Alternanthera sessilis* (L.) R.Br. (Amaranthaceae)



*Andrographis paniculata* Nees. (Acanthaceae)

**Plate III**



*Annona squamosa* L. (Annonaceae)



*Artocarpus heterophyllus* Lam. (Moraceae)



*Asparagus recemosus* Willd. (Liliaceae)



*Azadirachta indica* A. Juss. (Meliaceae)



*Azolla pinnata* R.Br. (Azollaceae)



*Bambusa arundinacea* Willd. (Poaceae)

Plate IV



*Capsicum annuum* L. (Solanaceae)



*Cardiospermum halicacabum* L. (Sapindaceae)



*Carum capticum* B. & H. (Apiaceae)



*Cassia auriculata* L. (Caesalpiniaceae)



*Cassia obtusa* Roxb. (Caesalpiniaceae)



*Cissus quadrangularis* L. (Vitaceae)

Plate V



*Citrus limon* (L.) Burm. f (Rutaceae)



*Coccinia grandis* (L.) Voigt. (Cucurbitaceae)



*Cocos nucifera* L. (Areaceae)



*Curcuma longa* L. (Zingiberaceae)



*Pergularia daemia*. R.Br. (Asclepiadaceae)



*Datura metel* L. (Solanaceae)

**Plate VI**



*Delonix elata* (L.) Gamble. (Caesalpinaceae)



*Echinochloa crus-galli* (L.)P. Beauv. (Poaceae)



*Enicostemma littorale* Blume. (Gentianaceae)



*Ervatamia divaricata* (L.) Burkill. (Apocynaceae)



*Euphorbia hirta* L. (Euphorbiaceae)



*Ficus benghalensis* L. (Moraceae)

**Plate VII**



*Ficus glomerata* Roxb. (Moraceae)



*Ficus religiosa* L. (Moraceae)



*Leucas aspera* Spreng. (Lamiaceae)



*Mimosa pudica* L. (Meliaceae)



*Mirabilis jalapa* L. (Nyctaginaceae)



*Mukia maderaspatana* (L.)M. Roemer. (Cucurbitaceae)

Plate VIII



*Musa paradisiaca* L. (Musaceae)



*Ocimum sanctum* L. (Lamiaceae)



*Oxalis corniculata* L. (Oxalidaceae)



*Piper nigrum* L. (Piperaceae)



*Pistia stratiotes* L. (Araceae)



*Ricinus communis* L. (Euphorbiaceae)

Plate IX



*Solanum nigrum* L. (Solanaceae)



*Solanum xanthocarpum* Schrad.& Wendl. (Solanaceae)



*Syzygium cumini* (DC) w. & A. (Myrtaceae)



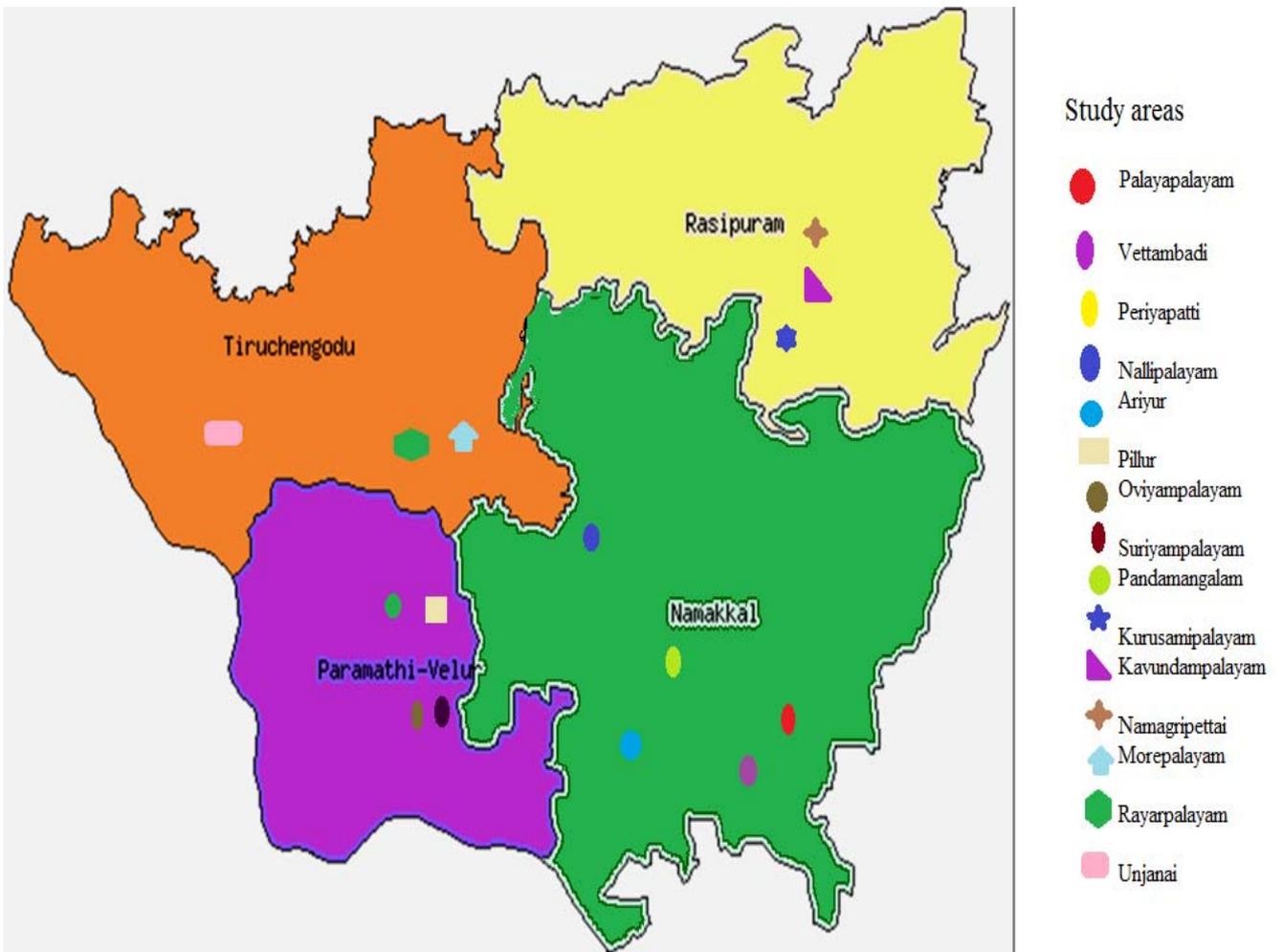
*Tamarindus indica* L. (Leguminosae)



*Tephrosia purpurea* Pers. (Fabaceae)



*Vitex negundo* L. (Verbenaceae)



**Fig 1:** Study area map of Namakkal district, Tamil Nadu.

**Table1:** Survey of ethno-veterinary medicinal plants in Namakkal district,

S. No	Botanical Name	Tamil Name	Family	Parts used	Uses	Animals
1.	<i>Abrus precatorius</i> L.	Kundumani	Fabaceae	Whole plant	Whole plant is given orally to dysentery.	Sheep and bull.
2.	<i>Abutilon indicum</i> G. Don.	Thuthi	Malvaceae	Leaves	Leaves are given orally to dysentery and anorexia.	Sheep and bull.
3.	<i>Acalypha indica</i> L.	Kuppaimeni	Euphorbiaceae	Leaves	Handful leaves and squeeze out the juice; add 5 g of in guva in it for get relief from constipation.	Sheep and bull.
4.	<i>Achyranthes aspera</i> L.	Nayuruvi	Amaranthaceae	Leaves	Leaves extract is used for retention of placenta and eye ailments.	Sheep and bull.
5.	<i>Acorus calamus</i> L.	Vasambu	Araceae	Rhizome	20 ml rhizome extract mixed with lukewarm water is given to animals to remove internal parasites.	Sheep and bull.
6.	<i>Adhatoda vasica</i> Nees.	Adathodai	Acanthaceae	Leaves and stem	The leaves and stem is used to cure fever. Leaves extract is externally used for ectoparasites and skin diseases.	Cow and bull.
7.	<i>Aegle marmelos</i> (L.) Corr.	Vilvam	Rutaceae	Leaves	Decoction of leaves are given once a day for 4 days to retention of urine disorders.	Sheep and bull.
8.	<i>Aerva lanata</i> (L.) Juss.	Serupoolapu	Amaranthaceae	Leaves	Whole plants are taken orally 3 times a day to treat hemorrhagic gastroenteritis, dysentery and poisonous bite.	Sheep and bull.
9.	<i>Allium cepa</i> L.	Onion	Liliaceae	Bulbs	The bulbs are ground mixed with half a litre of cow's milk or fermented rice water oral administration to treat the gastroenteritis.	Sheep and bull.
10.	<i>Allium sativum</i> L.	Poondur	Liliaceae	Bulbs	Bulbs 10g, castor oil 100 ml, neem oil 100 ml are mixed in the grain and the equal small heat and apply to treat the disease fowl box, and anorexia.	Fowl and Sheep.
11.	<i>Aloe vera</i> (L.) Burm. f	Sotru katralai	Liliaceae	Whole plant	Plant is used for wound healing and skin diseases.	Sheep and bull.
12.	<i>Alternanthera sessilis</i> (L.) R.Br.	Ponnanganni	Amaranthaceae	Whole plant	Paste prepared from the whole plant is applied to an infected part of mastitis.	Sheep and bull.
13.	<i>Andrographis paniculata</i> Nees.	Siriyangai	Acanthaceae	Whole plant	Decoction of whole plant is used for fever and cough.	Sheep and bull.
14.	<i>Annona squamosa</i> L.	Seethapalam	Annonaceae	Leaves	Paste of leaves is applied on wounds and tick and lice infestation.	Sheep and bull.
15.	<i>Aristolochia bracteata</i> Retz.	Aadu Thinna palai	Aristolochiaceae	Leaves	50 g of leaves are ground into a paste and taken orally along with honey to treat intestinal worms, and skin diseases	Bull.
16.	<i>Aristolochia indica</i> L.	Eswara mooligai	Aristolochiaceae	Leaves	Decoction of leaves are given orally for poisonous bite and anorexia.	Sheep and bull.
17.	<i>Artocarpus heterophyllus</i> Lam.	Palamaram	Moraceae	Inside fruit	The paste of inner part of the fruit is applied to the infected part of mastitis.	Sheep and bull.
18.	<i>Asparagus recemosus</i> Willd.	Thaneer vetan kilangu	Liliaceae	Root	Root of the plant is cleaned with water and sliced. About 1kg of the slices is cooled with about two liters water for about half an hour. About half a liter is fed to animals to increase lactation. The paste prepared from root is applied twice a day, at morning and evening to treat mastitis.	Sheep and bull.
19.	<i>Azadirachta indica</i> A. Juss.	Vembu	Meliaceae	seed	Neem oil is used for wound healing.	Fowl, Sheep and bull.
20.	<i>Azolla pinnata</i> R.Br.	Azolla	Azollaceae	Whole plant	Whole plant is feed to animals to treat production of milk.	Cow, sheep and bull.
21.	<i>Bambusa arundinacea</i> Willd.	Moongil	Poaceae	Leaves	Extract of the fresh leaves extract are used to feed cure the dysentery.	Bull.
22.	<i>Capsicum annuum</i> L.	Milagai	Solanaceae	Fruits	Grind 5 fried dry fruits by adding 1 g salt and mix it into 200ml water. Given twice daily for two days to cure anorexia.	Bull.
23.	<i>Cardiospermum</i>	Mudukathan	Sapindaceae	Leaves	Leaves are ground with hot water and taken orally twice a day for two days to febrile	Sheep and

	<i>halicacabum</i> L.				seizures/high fever and bloat (Tympany).	bull.
24.	<i>Carum capticum</i> B.& H.	Omam	Apiaceae	Seeds	Boil handful quantity of seeds in 200 ml to make a decoction, add 10g sweet soda. Drench it once cure bloat.	Sheep and bull.
25.	<i>Cassia auriculata</i> L.	Avarai	Caesalpiniaceae	Root	Collect 200ml of root juice are administer orally twice daily for three days to cure diarrhea.	Sheep and bull.
26.	<i>Cassia obtusa</i> Roxb.	Nilavaagai	Caesalpiniaceae	Whole plant	Whole plant is used as a constipation and impaction.	Sheep and bull.
27.	<i>Centella asiatica</i> (L.) Urban.	Vallarai	Apiaceae	Whole plant	Whole plant is feed to animals to treat urinary disorders.	Bull.
28.	<i>Cissus quadrangularis</i> L.	Pirandai	Vitaceae	Stem	Paste of stem paste is applied on wounds.	Sheep and bull.
29.	<i>Citrullus colocynthis</i> (L.) Schard.	Peaikumutti	Cucurbitaceae	Leaves.	Collect the juice from the leaves and apply on affected part twice daily for 3 day to cure yoke gall.	Sheep and bull.
30.	<i>Citrus limon</i> L. Burm. f	Elumichai	Rutaceae	Fruit	10 ml of fruit juice is diluted in about 250mlwater and fed to animal with the help of bamboo cylinder.	Sheep and bull.
31.	<i>Coccinia grandis</i> (L.) Voigt.	Kovai	Cucurbitaceae	Leaves	Paste prepared from the leaves is applied to an infected part of mastitis.	Bull and cow.
32.	<i>Cocos nucifera</i> L.	Thennai	Arecaceae	Seed oil	Tender pods are used to cure dysentery. Seed oil is applied on wounds and skin diseases.	Bull and cow.
33.	<i>Coriandrum sativum</i> L.	Kothamalli	Apiaceae	Leaves	250g of fresh leaves are feed to mouth disease.	Sheep and bull.
34.	<i>Cuminum cyminum</i> L.	Seeragam	Apiaceae	Seed	20g of seed powder with 100-250 ml of water and drench once a day for three day to treat fowl, ranikhet disease, and constipation and impaction.	Fowl, Sheep and bull.
35.	<i>Curcuma longa</i> L.	Manjal	Zingiberaceae	Rhizomes	Fresh rhizome extract is applied externally on the affected eyes to cure eye diseases, fowl ranikhet disease and anorexia.	Fowl, Sheep and bull.
36.	<i>Pergularia daemia</i> . R.Br	Veliparuthi	Asclepiadaceae	Leaves.	50 g of leaves are ground into a paste and taken orally along with honey to treat intestinal worms and ranikhet diseases.	Sheep and bull.
37.	<i>Datura metel</i> L.	Oomathai	Solanaceae	Leaves	The 5 fresh leaves twice daily for three days to cure diarrhoea.	Sheep and bull.
38.	<i>Delonix elata</i> (L.) Gamble.	Vatha narayanan	Fabaceae	Stem bark	Grind 50 g stem bark and put it in boil water (200 ml) for10 minutes. Administer this mixture orally twice daily morning and evening for 2 days to cure colic.	Sheep and bull.
39.	<i>Echinochloa crus-galli</i> (L.) Beauv.	Kanthapullu	Poaceae	Seed	Boiled seeds are fed to the animal for increasing lactation.	Bull.
40.	<i>Enicostemma littorale</i> Blume.	Vellarugu	Gentianaceae	Whole plant	The whole plant are ground well and given in the morning and evening for three days to cure the intestinal worms anoestrus.	Sheep and bull.
41.	<i>Ervatamia divaricata</i> (L.) Burkill.	Nanthiyavattai	Apocynaceae	Flowers	Juice of flowers is applied to eye inflammation.	Sheep and bull.
42.	<i>Euphorbia hirta</i> L.	Amman pacharisi	Euphorbiaceae	Latex	Latex is applied on wounds.	Sheep and bull.
43.	<i>Ficus benghalensis</i> L.	Aalamaram	Moraceae	Stem bark	50 g of fresh stem bark add same quantity of neem stem bark grind together and make bolus twice daily for 3 days to cure diarrhoea.	Bull and cow.
44.	<i>Ficus glomerata</i> Roxb.	Athimaram	Moraceae	Stem bark	200 g of stem barks are boiled in 3000 ml of water until it becomes half and 200 g jaggery (vellam) is mixed and given once to treat the gastroenteritis and retention of placenta.	Sheep and bull.
45.	<i>Ficus religiosa</i> L.	Arasamaram	Moraceae	Stem bark	Bark of the stem is crushed to yield 200 ml of extract and mix 500 ml of water and given orally to treat the swelling, and retention of placenta.	Sheep and bull.
46.	<i>Foeniculum vulgare</i> Gaertn.	Sombu	Umbelliferae	Fruit	The fruit are taken 10 g each and ground well to treat the anorexia.	Bull and cow.
47.	<i>Gymnema</i>	Sirukurinjan	Asclepiadaceae	Leaves	Grind 50 g fresh leaves and add 5 g sugar. Boil	Bull and

	<i>sylvestre</i> R.Br.				it in 500 ml water filtered and cool it. Given orally twice daily for 3 days to cure blood in urine.	cow.
48.	<i>Leucas aspera</i> Spreng.	Thumbai	Lamiaceae	Leaves	The leaves are mixed with hot milk to get relief from fever. The leaves paste is used in headache.	Sheep and bull.
49.	<i>Melia azedarach</i> L.	Malai vembu	Meliaceae	Bark and Leaves.	The juice of (200 ml) obtained by pounding leaves and bark is used to fever.	Sheep and bull.
50.	<i>Mimosa pudica</i> L.	Thottal sinungi	Mimosoideae	Whole plant	The whole plant two handfuls ground with 200 ml goat's milk to be given for 3 times to intestinal worms. (Morning, evening and next day morning).	Bull.
51.	<i>Mirabilis jalapa</i> L.	Andhimandharai	Nyctaginaceae	Root	Juice from roots is 200 ml given orally to treat urinary disorder.	Sheep and bull.
52.	<i>Moringa oleifera</i> Lamk.	Murungai	Moringaceae	Leaves	Decoction of leaves is administered alone with 1 liter fermented rice water to treat the dysentery.	Bull and cattle.
53.	<i>Mukia maderaspatana</i> (L.)M. Roemer.	Musumusukkai	Cucurbitaceae	Leaves	Fresh leaves are made into a paste and taken orally to cure throat infection and intestinal worms.	Sheep and bull.
54.	<i>Musa paradisiaca</i> L.	Valai	Musaceae	Fruits	Young fruits mixing with castor oil twice daily for 2 days to get relief from constipation.	Sheep and bull.
55.	<i>Ocimum sanctum</i> L.	Thulasi	Lamiaceae	Leaves	The juice prepared from 25 g of fresh leaves with 100 ml hot water is taken orally as remedy for antipyretic.	Fowl, Sheep and bull.
56.	<i>Oxalis corniculata</i> L.	Puliyarai	Oxalidaceae	Whole plant	Juice mixed with vellam (jaggery) is ground and fed 3 times morning to treat the poisonous bits.	Sheep and bull.
57.	<i>Pavonia zeylanica</i> Cav.	Perammuty	Malvaceae	Leaves	The leaves 50 g are ground and fed once to treat the constipation.	Sheep and bull.
58.	<i>Papaver somniferum</i> L.	Kasakasa	Papaveraceae	Seeds	Paste of seeds (100 g) is administrated to treat the enteritis and gastroenteritis.	Fowl, Sheep and bull.
59.	<i>Pedaliium murex</i> L.	Yanainerunji	Pedaliaceae	Leaves and stem	Fresh plants are fed to the animal daily in morning for improving ovulation.	Sheep and bull.
60.	<i>Phyllanthus niruri</i> L.	Kilaneli	Euphorbiaceae	Leaves	The leaves are grain and water mixed the fed to treat the ranikhet disease.	Fowl.
61.	<i>Piper nigrum</i> L.	Pepper	Piperaceae	Seeds	Grind 20 g seeds and mixed with 500 ml warm water and drench once to ranikhet disease and bloat.	Fowl, Sheep and bull.
62.	<i>Pistia stratiotes</i> L.	Aagaya thamarai	Araceae	Roots.	The tender twigs (root less) 6 numbers and cumin seeds 5 g are ground in 250 ml of water and given only in the morning for two days to treat the hemorrhagic and gastroenteritis.	Bull.
63.	<i>Psidium guajava</i> L.	Koiya	Myrtaceae	Stem bark	Juice of fresh stem bark is given orally twice daily for 2-3 days to control diarrhoea.	Bull.
64.	<i>Ricinus communis</i> L.	Amanakku	Euphorbiaceae	Leaves	The leaves is mixed salt is applied for eye complaints in live stock.	Sheep and bull.
65.	<i>Sesamum indicum</i> L.	Ellu	Pedaliaceae	Leaves	Decoctions of leaves were given orally to treat the constipation haematinic.	Bull and cattle.
66.	<i>Sida acuta</i> Burm.	Arivalmanai poondu.	Malvaceae	Leaves	The leaves two hand fuls is ground and the juice is mixed with 100 ml of castor oil to treat the intestinal worms and gastroenteritis.	Sheep and bull.
67.	<i>Sida rhombifolia</i> L.	Kurunthotti	Malvaceae	Leaves	Paste of leaves is applied for throat swellings.	Bull.
68.	<i>Solanum nigrum</i> L.	Manathakkali	Solanaceae	Leaves	The fresh leaves are taken orally early in the morning for two months of treat cough.	Bull.
69.	<i>Solanum xanthocarpum</i> Schrad & Wendl.	Kandankathiri	Solanaceae	Fruits	Juice from fruits and apply 2-3 drops on affected eye, twice daily for two days to cure eye infection.	Sheep and bull.
70.	<i>Syzygium cumini</i> (DC) w.& A.	Naval	Myrtaceae	Fruits	The fruit is a good source of calcium and fair source of iron to treat tonic.	Sheep and bull.
71.	<i>Tamarindus indica</i> L.	Puliamaram	Leguminosae	Leaves	Paste of leaves is applied to reduce wound swellings and relieve pain.	Sheep and bull.
72.	<i>Tephrosia purpurea</i> Pers.	Kolunchi	Fabaceae	Leaves	Juice of leaves are taken in twice day to treat the anorexia.	Bull.

73.	<i>Urena lobata</i> L.	Otitatti	Malvaceae	Leaves	Paste of leaves is applied on wounds.	Bull.
74.	<i>Vitex negundo</i> L.	Nochi	Verbenaceae	Leaves	The leaves are used as an antibacterial and snake bite.	Sheep and bull.
75.	<i>Zingiber officinale</i> Rosc.	Ingi	Zingiberaceae	Rhizome	The crushed rhizome is given to constipation.	Sheep and bull.

**Table 2:** List of plant families with number of ethno- veterinary medicinal plants species collected from Namakkal district.

S. No	Family	Number of species
1.	Acanthaceae	2 species
2.	Amaranthaceae	3 species
3.	Annonaceae	1 species
4.	Apiaceae	5 species
5.	Apocynaceae	1 species
6.	Araceae	2 species
7.	Arecaceae	1 species
8.	Aristolochiaceae	2 species
9.	Asclepiadaceae	2 species
10.	Azollaceae	1 species
11.	Caesalpinaceae	4 species
12.	Cucurbitaceae	3 species
13.	Euphorbiaceae	4 species
14.	Fabaceae	2 species
15.	Gentianaceae	1 species
16.	Lamiaceae	2 species
17.	Liliaceae	4 species
18.	Malvaceae	5 species
19.	Meliaceae	2 species
20.	Mimosoideae	1 species
21.	Moraceae	4 species
22.	Moringaceae	1 species
23.	Musaceae	1 species
24.	Myrtaceae	2 species
25.	Nyctaginaceae	1 species
26.	Oxalidaceae	1 species
27.	Papaveraceae	1 species
28.	Pedaliaceae	2 species
29.	Piperaceae	1 species
30.	Poaceae	2 species
31.	Rutaceae	2 species
32.	Sapindaceae	1 species
33.	Solanaceae	4 species
34.	Verbenaceae	1 species
35.	Vitaceae	1 species
36.	Zingiberaceae	2 species
	Total	75 species

**Table 3:** Percentage of useful parts in ethno-veterinary medicinal plants

S. No	Parts Used	Percentage
1.	Leaves/Bark and Leaves/Stem	44%
2.	Whole plant/Stem bark/Latex	20%
3.	Seed/Fruit/Inside fruit	18.6%
4.	Rhizome/Root/Tubers	10.6%
5.	Leaves and Stem/Bulbs/Flower	6.6%

**Table 4:** Ethno-veterinary medicinal plants of family, genus, species in Namakkal district

S. No	Ethno-veterinary medicinal plants	Total
1.	No. of Family	36
2.	No. of Genus	8
3.	No. of Species	75

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