



## Bio management of mastitis by using some medicinal plant

M B Navale, R J Sawant

Department of Botany, Vinayakrao Patil College, Vaijapur, Maharashtra, India

### Abstract

The present communication gives details about Mastitis disease of cow or milk giving animal. Which is the microorganism interaction or mammary gland infection. so milk giving animal mostly infected by this Mastitis disease so we are do the useful plant material to control this infection. Mastitis is a one of the major bacterial disease attacks on the milk canal of Cow. Due to the development of this disease the quality & quantity of milk are Decrease. These disease Cause due to the bacteria *Pseudomonas aeruginosa* Due to the development of these disease the quality & quantity of milk are Decrease. Due to the development of these disease the quality & quantity of milk are these diseases cause harmful effect on cattle. These diseases are cosmopolitan in distribution.

**Keywords:** mastitis, microorganism, medicinal plant

### Introduction

Mastitis is inflammation of mammary gland affecting all the species of domestic animals and is of great concern to dairy industry. Mastitis is very common in cows of both developed and developing countries Mastitis is a bacterial disease which Cause harmful effect on cattle and It is a one of the oldest disease These disease also Recover by chemical or clinical medicine but some time these medicine are non-suitable to cattle & cause harmful effect. These diseases also control by using biological medicine These-medicine Prepare by medicinal plant which is easily available. These medicine apply on affected area for 2-3 time in day- for each day take a fresh material for prepare the medicine- Disease recover within 7-8 day after use of biomedicine.

### Materials and methods

#### a. Preparation of Biomedicine

Following ingredient are require

1. Aloe-Vera-1 leaf 100 gm
2. Turmeric Powder 2-3 spoon
3. Lemon one half lemon juice
4. Castor oil 2 Spoon

Remove the jelly from aloe-leaf the add the castor oil turmeric powder lemon juice & Prepare the pest These pest apply on affected area for 3 time in day 7-8 day require to recover the disease. Treatment of turmeric+ Aloe gel + Chuna these Pest also use to recover the disease Sometime give the treatment of half lemon through mouth at a 1 time in day. These treatments apply 3 time in day

### Objective

- Prevention of cattle from weak ness
- To avoid the clinical medicine
- To prevent the excess economic loss of farmer
- To prevent cattle from harmful disease
- To improve the quality of milk

### How to identify the disease

- Take a strips of litmus paper on which full the milk then changes the color of strip from yellow to blue
- Milk is look like as a fermented milk
- Decrease the quantity and of milk
- sometime secretion of blood from milk canal
- swelling of milk canal

### Management

Wash the milk canal by potassium permanganate before or after removing of milk from canal

Take the cleanness in cow shade

Wash the hand particularly before or after milking

Do not seat the cow on land after milking

Remove the all milk from milk canal after milking.

### Properties of ingredient use in preparation of medicine

#### a. Tumeric

Anti-fungal,

Anti-bacterial,

Anti-viral

Anti-carcinogenic,

Anti-Allergic

### Mastitis disease causing bacteria

*Pseudomonas aeruginosa* is a common Gram-negative bacteria, rod-shaped bacterium that can cause disease in animals including humans. A species of considerable medical importance, *P. aeruginosa* is a multidrug resistant pathogen recognized for its ubiquity, its intrinsically advanced antibiotic resistance mechanisms, and its association with serious illnesses – hospital-acquired infections such as ventilator-associated pneumonia and various sepsis syndromes. The organism is considered opportunistic insofar as serious infection often occurs during existing diseases or conditions – most notably cystic fibrosis and traumatic burns. It generally affects the immuno compromised but can also infect the immune competent as in hot tub folliculitis. Treatment of *P. aeruginosa* infections can be difficult due to its natural resistance to antibiotics. When more advanced antibiotic drug regimens are needed adverse effects may result.

**b. Aloe- Vera**

Anti- Cancer  
 Anti- aging  
 To treatment on skin alignment  
 To treat the Sunburn  
 To give cold fever

**c. Lemon**

To treat the Sunburn  
 To control blood Pressure  
 To stop internal Bleeding  
 To remove wrinkles  
 Anti-bacterial

**d. Castor Oil**

To treat the skin disease  
 Stimulate the secretion of milk  
 To protect body from microbial infection

**e. Chuna**

Give the cooling Fever to affected area.

**Results and discussion**

The medicinal activity of some plants was evaluated in this work this all plant is use to stop the development activity of mastitis we can suggest to local farmer to control. but this plant validated the popular use of medicinal plants in the management of the disease.



**Fig 1:** Before treatment



**Fig 2:** After treatment

**References**

1. Dua K. Incidence, aetiology and estimated loss due to mastitis in India-Anupdate. Indian Dairyman,2001:53:41-48.
2. Ghazi K, Niar A. Incidence of mastitis in various bovine breeding in Tiaret area (Algeria). Assiut Vet. Med.J,2006:52:198.
3. Giesecke WH, Van den Heever LW. The diagnosis of bovine mastitis with particular reference to subclinical mastitis. A critical review of relevant literature. Onderstepoort J,1974:41:169-212.
4. Karimuribo ED, Fitzpatrick JL, Swai ES, Bell C, Bryant MJ, Ogden NH, 5

5. Kambarage DM, French NP. Prevalence of subclinical mastitis and associated, 2008. risk factors in smallholder dairy cows in Tanzania. *Vet.Rec*,2008:163:16-21.
6. Natzke, R.P., Everett, R.W. and Postal, D. S. (1972). Normal milk somatic cell counts. *J. Milk Fed Tech*.35: 261-263.
7. Quinn PJ, Carter ME, Markey BK, Carter GR. *Clinical Veterinary Microbiology*. (3rdedn.), 1999, 109-126.
8. In: *Staphylococcus, Streptococcus, Corynebacterium and Mastitis*. Mosby Pvt. Ltd. (Wolfe Publishing, London) Saluja, P.S., Gupta, S.L, Kapur, M.P. and Sharma, A. Prevalence of the bovine mastitis in an organized dairy herd. *Indian Vet. J.*,2004:84:1404-1405.