

Curcumin Compound against mastitis in cattle

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In news– Researchers of the Transdisciplinary University of Health Sciences & Technology (TDU), Bengaluru, have successfully validated immunity-boosting ability of ‘curcumin compound’ against mastitis in cattle.

Key highlights of the study

- Research findings revealed that the natural product offers immunity in dairy cattle against infectious diseases including mastitis by increasing complementary protein, Interferon, Immunoglobulin (IgM), lymphocytes and monocytes.
- Antibiotics have been used to manage various infections in cattle. However, it has been noticed that the uncontrolled use of antibiotics results in increased antibiotic resistance.
- The irrational use of antibiotics for treating mastitis resulted in inter-species and inter-genus transfer of antibiotic resistance and creation of various multi-drug resistant microorganisms in the environment, which affects immunity of livestock and human health as well.
- Ethnoveterinary practices based on the Ayurveda concepts were found to be very effective in managing infections without using synthetic antibiotics and thereby help in reducing antibiotic residues in animal products.
- The compound with curcumin can be used to control mastitis as a prophylactic measure during pre-partum and post-partum stage along with cattle feed under scientific management practices.
- This will create appropriate immunity against mastitis and facilitate increased milk production by 10 percent.
- There is no vaccination available against mastitis.

- For the states like Kerala where more than 96 % cattle are crossbreds, control of mastitis assumes more significance.

What is Mastitis disease?

- It is an infectious disease of dairy cattle.
- Bovine mastitis is a condition typified by the persistent and inflammatory reaction of the udder tissue due to either physical trauma or infections caused by microorganisms.
- The most obvious symptoms of clinical mastitis are abnormalities in: The udder such as swelling, heat, hardness, redness, or pain.
- The milk has a watery appearance, flakes, clots, or pus.