

EVALUATION OF TENAZYME™ FOR THE TREATMENT OF MASTITIS IN BUFFALOES AND A COW

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Case No. 1

A Nili-Ravi diary buffalo aged approximately 8 years in the 5th month of her third lactation. Left rear (LR) quarter is blind since the last lactation. Left front (LF) quarter is clinically mastitic since 4 days and was voiding flaky but non-odorous milk, which necessitated extra hand pressure during milking. A moderate degree of fibrosis (cord) was palpable in this teat with quarter still of normal consistency. Quarter foremilk samples were taken from all the patent teats e.g., left front (LF), right rear (RR) and right front (RF) and cultured on Blood agar containing 5% sheep RBCs and MacConkey's agar (National Mastitis Council Inc., 1990) which yielded β -hemolytic colonies of *Staphylococcus aureus* from LF. The other two quarters were negative. After complete milking, left front teat end was sanitized with alcohol swab and the quarter then infused with Tenazym™ (Veyx-Pharma, D-34639 Schwarzenborn, Germany). Treatment was repeated daily for six consecutive days. Post treatment samples from all the three patent quarters taken on day 14 and day 21 were negative for bacterial growth. On these post treatment sampling days, a noticeable diminution in fibrosis and an increase in quarter yield was recorded, although, mild degree of fibrosis and about 25% deficit of quarter yield was still present.

Case No. 2

The subject was an indigenous cow in the 3rd week of her fourth lactation. Right rear (RR) quarter was clinically mastitic and was voiding flaky milk for the last 4 days. Palpation revealed a moderate degree of fibrosis in this quarter as well as its teat. The other three quarters e.g., LF, LR and RF were clinically normal. Pre-treatment quarter foremilk samples cultured on Blood agar and MacConkey's agar yielded *S. aureus* growth in RR quarter only. The quarter was infused with Tenazym™ for six consecutive days. Post treatment samples taken on day 14 and 21 were negative for bacterial growth. Fibrosis had disappeared

and about 90% recovery of the lost quarter yield was registered on these post treatment days.

Case No. 3

A Nili-Ravi buffalo aged about 7 years in the third month of her 3rd lactation. The animal had been suffering from clinical mastitis in LF quarter for the last two days when our professional assistance was sought. Palpation of this teat revealed an easily palpable cord all along its length with corresponding quarter of normal consistency. The secretion was flaky and drastically reduced in amount. The other three quarters e.g., LR, RF and RR although not grossly swollen tested positive to Surf Field Mastitis Test (Muhammad *et al.*, 1995). Culture of the milk sample from LF yielded innumerable tiny hemolytic colonies of *Streptococcus agalactiae*. After complete milking, the LF teat end was sanitized with alcohol swab and the quarter infused with Tenazym™ for six consecutive days. Post treatment samples taken on days 14 and 21 were negative for bacterial growth. On these post treatment days restoration of about 50% of the lost quarter yield was recorded. Palpation of affected teat revealed a significant reduction in fibrosis. Examination conducted one week after 4th calving revealed normally palpating quarters with full restoration of milk yield from the LF quarter during the 3rd lactation.

REFERENCES

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