

## EVALUATION OF EFFICACY OF FORMIC ACID AS A POST MILKING TEAT DIP

D. D. Wanasinghe and A. Ramakrishnaswamy

(Veterinary Research Institute, Peradeniya)

The efficacy of formic acid as a post milking teat dip was evaluated. The factors studied were (a) the efficacy in reducing the bacterial number on teat surfaces (around teat orifice) (b) the ability to kill mastitis pathogens (*Str. agalactiae* and *S. aureus*) invitro and (c) the physical effects on the mammary gland and on the hands of the milkers.

It was found that when the teats were dipped in 1.6% formic acid after milking, the residential bacterial population on the teat apices were killed. The bacterial population on the teats of the undipped control halves of the glands (2 diagonally opposite teats) consisted of large numbers of *S. aureus*, streptococcal species, *Micrococci*, and gram positive and negative bacilli.

When 105 organisms of *S. aureus* and *Str. agalactiae* respectively were suspended in 1.6% formic acid invitro for 10 minutes, all the organisms were found to be killed.

No adverse physical effects such as, teat cracking or sores were observed during a period of 6 months. None of the milkers complained of any adverse effects on themselves.

These results showed that formic acid at a concentration of 1.6% could be used as a safe and effective post milking teat dip.