

## A B S T R A C T

The review of the literature includes a discussion of factors affecting mastitis, including management techniques, age of cow and stage of lactation and heritable resistance to mastitis. Methods of control of the disease are given, with an indication of progress attained in other countries with eradication programmes. The relative merits of rapid tests for mastitis are discussed.

An investigation into mastitis levels of individual quarters over a period of 46 days was carried out using a rapid test for mastitis (SCHALM and NOORLANDER 1957): the Milk Quality Test (M.Q.T.). It was shown that the mastitis scores changed over 2 - 3 days periods. No significant correlation could be found between the total mastitis scores of the udder and the milk yield of the same cow during the day of testing. When the average scores for two herds were compared with the average milk yield per cow per week for the herd however, a highly significant negative correlation was found. Analysis of rainfall data and averaged herd mastitis suggests a positive correlation between them and analysis of rainfall data and herd yield suggests a negative correlation.

Statistical analysis indicates that the M.Q.T. scores of bucket samples of cows give a good indication of the level of mastitis in the udder when compared with the M.Q.T. scores for individual teats. A comparison of managerial practices and mastitis levels at four farms is given and indicates the effectiveness of the use of long acting antibiotics for dried off cows in the control of mastitis in subsequent lactations.

A preliminary study of the causative bacteria at the Dairy Demonstration Unit and the University Field Station indicates that 80 - 90% of the subclinical mastitis investigated in these herds is caused by *Strep. agalactiae*.