

## STUDY OF COAGULASE-NEGATIVE STAPHYLOCOCCAL MASTITIS IN DAIRY HERDS IN SWEDEN

Thorberg B.-M.<sup>1</sup>

*Ten herds were selected for milk sampling and concurrent recording of health and production data. The herds were selected on the basis of an apparently elevated prevalence of coagulase-negative staphylococci (CNS). The objective of this study was to identify important species of coagulase-negative staphylococci associated with subclinical mastitis and characterise infected cows in terms of lactation status, age, and somatic cell count (SCC). All available cows in the herds were sampled twice with a four week interval. Subclinical CNS mastitis were defined by repeated isolation of a CNS species together with inflammatory reaction from the udder quarter, CMT  $\geq 3$ , on at least one of the two sampling occasions.*

Twelve different species of CNS were identified, three of these species were commonly associated with subclinical mastitis ; *S. epidermidis*, *S. chromogenes* and *S. simulans*. These three species were isolated in 90% of the CNS mastitis. The most common infection pattern found in the herds were presence of two predominating CNS species, *S. epidermidis* and *S. simulans* or *S. chromogenes* and *S. simulans*. Significant differences in lactation number were evident, cows infected by *S. simulans* or *S. chromogenes* were to a large extent primiparous whereas *S. epidermidis* infection could be found mostly in multiparous cows. The largest variation in among these cows ; 500.000 cells/ml. Mean SCC for *S. chromogenes* and *S. simulans* infected cows was 300.000 cells/ml and 250.000 cells/ml respectively.

<sup>1</sup> Department of Veterinary Microbiology, Swedish University of Agricultural Sciences, S-750 07 Uppsala, Sweden  
President adress : The National Veterinary institute, P.O. Box 7073, 750 07 Uppsala, Sweden