CROSS SECTIONAL STUDY ON BOVINE LAMENESS IN NORTHERN ITALY DAIRY HERDS

Very few data on lameness prevalence in Italian dairy herds are available. To contribute to fill this gap, a cross-sectional study was planned in Northern Italy dairy herds. About 75% of the Italian cows are located in this area and 80% of the milk is produced.

Data were collected by a trained veterinary team specialized in lameness prevention and cure for one year. Overall, 46 herds and 3559 cows were involved in the study. The range of cows/herd was 9-253. The practitioners classified lesions based on clinical signs at herd trimming visits. Prior to trimming, locomotion score was assessed on all animals. Clinical data were collected in a database which includes also information of herd floor type (slatted concrete or solid concrete), month of the year, type of visit (routine or on demand). Data were analyzed with FREQ procedure of SAS 9.2.

Overall locomotion score distribution was LS 1: 47.63%, LS 2: 22.37%, LS 3: 19.27%, LS 4: 9.49% and LS 5: 1.24%. The data showed as digital dermatitis (DD) has a frequency of 19.93%, sole ulcer 10.82 (SU), white line separation 9.83% (WLS), interdigital phlegmon 0.73% (IP) and interdigital hyperplasia 18.90 % (IH). Numerical difference were observed for floor types, indeed cows in slatted floor has a higher frequency for all diseases out of IP, but none of these differences was significant.

A significant association was observed between IH and SU when both type of visit and type of floor were considered. Indeed the common prevalence ratio were respectively 7.68 (6.64-8.89) and 7.9 (6.83-9.14) for IH positive cows vs. IH negative cows and this significant association was confirmed when data were stratified by floor type and type of visit. This association could be useful for improving preventive measure at herd and cow level.