

Pasture-associated influence on the udder health of dairy herds in Northern Germany

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Abstract

The purpose of this investigation was to compare herd-level udder health regarding the extend of access to pasture and other management factors associated with pasturing and to determine pasture-associated risk factors. Data were provided by monthly dairy herd improvement test and collected over a period of 3 years and 4 months from 60 commercial dairy farms located in Lower Saxony, Germany. Farms were separated into 4 pasture groups depending on the extend of access to pasture of lactating cows. The proportion of udder-healthy animals of all lactating cows, the new infection rate of lactating cows and the heifer mastitis rate were derived from cow-level somatic cell counts and used as herd-level udder health indicators. Linear mixed models were applied. The udder health indicators were significantly associated with the time of year dry cows were given access to pasture indicating that dry cows should not be pasturing from October to March. Pasturing young livestock was beneficial if the animals were not younger than 3 months. The results of the research indicate that hygiene and management of dry cows and young livestock have a major influence on udder health of dairy cattle. The climatic and hygienic conditions during pasturing contribute to whether access to pasture has a positive or negative effect on the udder health.

Key words: production groups, heifers, calves, mastitis, new infection rate