Dried manure solids as alternative bedding for dairy cattle

Summary

The study was conducted on the effect of dried manure solids (DMS) used as bedding material on milk quality. Cows were housed in a loose barn in cubicles bedded with DMS with 40% solid content. Analyses were conducted on 242 primiparous PHF cows with mean milk yield of 9,520 kg. Somatic cell counts (SCC), daily milk yield and the chemical composition of the milk were analysed in 2,324 milk samples. The somatic cell count in 93.3% of samples was found to be less than 400,000 per ml milk. The SCC was indicative of subclinical mastitis in approximately 4.3% of milk samples and of clinical mastitis in 2.4%. The incidence of both forms of mastitis was similar at the beginning and at the

end of lactation. The mean daily milk yield of cows producing milk assigned quality (SCC) grades 1 and 2 was statistically significantly greater

than the yield of other cows. The chemical composition of milk was not related to its quality as expressed by SCC. The analyses showed that DMS as bedding in cow cubicles had no effect on somatic cell counts in the milk of primiparous cows.

KEY WORDS: cow, milk, somatic cells, bedding, dried manure solids