Thermal imaging cameras as an element of prevention of lameness

Summary

Increasing the productivity of dairy cattle has increased their susceptibility to disease, including lameness, which has become a global problem in dairy herds. It causes considerable losses for dairy farmers and discomfort and pain in animals. Numerous health problems reduce the productive life of dairy cows and increase culling rates associated with lameness. Decreases in milk yield, deterioration of the chemical composition of milk, and reduced fertility are noted as well, which also reduces the profitability of dairy farming. Measures facilitating rapid detection of lameness are very important. One of the tools that may be used in prophylaxis is thermal imaging. This is a technique enabling remote, contactless evaluation of the temperature distribution on an animal's body. The technology involves imaging of infrared radiation, which provides information on the processes taking place in the body. This study presents the latest reports on the use of thermal imaging cameras as a tool in the prevention of lameness in dairy cattle. Thermal imaging can be especially useful on farms that are less technically advanced and lack other measurement devices.

KEY WORDS: dairy cows, lameness, lameness prevention, thermography, thermal imaging