

The use of phytobiotics in the prevention and treatment of sub-clinical mastitis in cows in organic production conditions

Summary

The study described strategies for preventing sub-clinical mastitis in cows in organic production conditions. Plant-based additives obtained from organic production, i.e. onion extract, garlic, mixtures of oregano, cumin and rosemary, and bee pollen, were used for prevention and treatment of mastitis in cows in organic production conditions. The results contribute to existing knowledge on the subject and have confirmed the effectiveness of these feed supplements in sub-clinical mastitis and in improving the health condition of cows on organic dairy farms. In addition, the use of phytobiotics to increase the concentration of nutrients with antioxidant properties in the feed ration is a natural way to stimulate the immune system of cows, making it possible to limit the use of chemotherapeutic agents. The high concentration of bioactive components resulting from natural supplementation can significantly stimulate antioxidant protection against reactive oxygen species, which in the case of disturbed homeostasis cause a decrease in the activity of biologically active macromolecules, such as immunoglobulins or enzymes. Further research is necessary to investigate this subject.

KEY WORDS: alternative antibiotics, sub-clinical mastitis prevention, organic farm