

## New approaches in prevention cow mastitis diseases and improving quality of milk production

At the moment more than ever topical is the question about increasing export. Its important component is milk production. It can be competitive provided it corresponds international standards. At the same time, as Federal Service for Veterinary and Phytosanitary Surveillance checks have shown milk production produced in the Republic by a number of indicators does not correspond the established norms. This first of all is discrepancy to veterinary-sanitary requirements by such indicators as concentration of bacteria, number of somatic cells, content of remnants of washing and disinfecting agents in milk production.

In this connection Veterinary Administration of Committee for Agriculture and Food of Minsk District Executive Committee has developed a programme for ensuring veterinary-sanitary norms for producing „Extra” class milk. There was offered fundamentally new complex of washing agents and veterinary preparations, which ensure high quality of milking and disinfection of manufacturing premises and milk equipment, suppress development of pathogenic micro flora, preventing emergence of a number of diseases, in particular, the most widespread – disease of cow mastitis.

The basis of action of preparation for aerosol processing of stock-breeding premises, processing cow feet and teat, are antagonistic relationship among pathogenic micro-organisms and cultures of Probiotics, which are contained in used preparations.

Under normal disinfection useful and pathogenic bacteria are destroyed, though this is a short-term effect. Pathogenic flora is restored quickly enough.

In case of usage preparations on the basis of Probiotics disinfecting effect is achieved by colonizing processed surfaces with Probiotal bacteria cultures, which creating new microbiocensis suppress the development of pathogenic micro flora according to the principle of antagonism, competing for food and habitat.

Already the first months of usage in the range of households in Minsk District – Uzdensky, Kopilsky, Berezinsky, Minsk regions gave positive results. In such a way during processing cows' udder teats immediately after milking by spraying or with the help of veterinary glasses during 1,5-2 months in milk-commercial farms Agricultural Production Plant „Uzdensky”, Agricultural Production Plant „Vanelevichy”, Agricultural Unitary Enterprise „Shtotz Agro-Service”, Agricultural Production Plant „Litvyany”, Branch of „Oma”, Ltd no case of mastitis diseases was found. The number of subclinical mastitis has decreased for 74-100% without pharmacological intervention. Efficiency of treatment of clinical mastitis significantly increased. External improvements of udder condition were observed from the first days of using Probiotics – skin of teats became softer, scratches, micro cracks, sores disappeared.

The main advantages of our recommended washing agents in comparison with traditionally used acid and alkaline agents are:

First, high penetrating ability, which ensures penetration in the most smallest micro pores at great depth.;

Second, these washing agents do not start chemical reaction neither with dirt, no with processed surface, physical separation of dirt on molecular level happens, which is easily removed by washout. Any other acid-alkaline agents are aggressive enough and as a result of occurring chemical reactions affect the processed surface and can lead to premature wear and tear of equipment.

Usage of new washing agents for washing milking equipment on farms Agricultural Production Plant „Uzdensky”, Agricultural Production Plant „Polochany” and other, and also for washing milk equipment on Public Corporation „Kopilsky creamery” has shown that this agents ensure high quality of washing milking systems, let easily wash any, even the most dirty surfaces, remove milk stone and prevent its further formation.

Herewith there are no remnants of washing agents and disinfectants in milk production. Their regular usage greatly reduces and in future practically excludes bacterial concentration, and as a result let to get milk production relevant to veterinary-sanitary requirements, presented to milk of the highest quality.

It should be pointed out that these agents despite the acid (pH=1-3) or alkaline (pH=11-13) qualities, are neither acids, nor alkali, are safe for people (when it gets on skin and mucosa do not cause any changes), processed surfaces and environment. They are fully biodegradable.

„Bikrask”, Ltd

Yours respectfully,

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