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ORGANOLEPTIC AND MICROBIOLOGICAL STUDY OF PLANT AND WATER FEED ON LIVESTOCK FARMS OF THE ROSTOV REGION

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ABSTRACT.

Organoleptic and microbiological examination of feed of plant origin and centralized water was carried out in two farms of Neklinovsky district, Rostov region. Samples were taken according to the "Guidelines for sanitary and mycological assessment and improvement of feed quality" dated February 25, 1985, as well as FLOUR 4.2.964-00 "Sanitary and parasitological study of water for domestic and drinking use." from 01.06.2000 g, FLOUR 4.2.1018-01, SanPiN 2.1.4.1074-01, GOST R 57164 -2016 drinking water. Methods for determining odor, taste and turbidity.

Key words: silage, silage, forage, water, E. coli, microbiological testing, sensory research, Endo agar.

For laboratory analysis feed samples were taken according to the " guidelines for sampling food products of animal and vegetable origin, feed and feed additives with the purpose of laboratory quality control and security, (app. Federal service for veterinary and phytosanitary surveillance (21 may 2009)". Samples were sent to the Rostov regional veterinary laboratory.

For the organoleptic assessment of haylage, silage and fodder set, that the food is of good quality; haylage has a moisture content in the range of 43% and a pH of 4.9, the color green, fragrant smell, silage has a moisture content of 54%, light green colour, pleasant fruity odor, and pH regulated in the range of 3.9, slight traces of butyric acid; fodder, is characterized by a sour smell, grain moisture 13%, the acidity of the feed grain 4%, has almost no impurities(ergot and a mixture of poisonous seeds) and mineral impurities(sand, stones, of the earth). In assessing the quality of grain took into account the impact of barn pests. From above indications it is possible to tell that in collective farms on organoleptic indicators of a forage of a vegetable origin correspond to indications according to GOST and are safe

for feeding of animals. As a result of laboratory research of a forage of a vegetable origin from the second economy it is established: at bacteriological research from a forage of a vegetable origin (haylage) allocated an intestinal stick that does not correspond to indicators of sanitary and hygienic quality of a forage. Selected 40 samples of centralized water for organoleptic and bacteriological studies in two farms Neklinovsky district and sent to the Rostov regional veterinary laboratory. Thus, according to the results of the organoleptic evaluation of water, it can be concluded that 15 samples of the studied water from the first farm and 13 samples of water from the second farm by smell and turbidity does not correspond to GOST, since the high concentration of iron increases its turbidity and color. According to the results of laboratory studies of centralized water in two farms found that 29 samples of 40 found common coliform bacteria(number of bacteria in 100 ml according to 4.2.1018-01 flour), and found thermotolerant coliform bacteria (number of bacteria in 100 ml according to 4.2.1018-01 flour).

Thus, on bacteriological researches of water it is possible to draw a conclusion that in two farms the centralized water does not correspond to microbiological indicators of FLOURS 4.2.1018-01 therefore it is not recommended for watering of animals. In parallel with the laboratory studies, conducted their own using Express test "biocontrol".

14 testers were sent to the Interdistrict veterinary laboratory of Taganrog to confirm the species of the microbe in the water

The grown colonies on the agar test was reseeded at MPA and incubated at a temperature of 37°C 24 hours. On agar colonies grew gray-white color. To confirm the belonging of microorganisms grown in liquid media, *Escherichia coli* was transplanted to the surface of the differential diagnostic medium Endo. Crops incubated at a temperature of 36°C 24 hours. After incubation, cups were scanned and the growth of characteristic colonies was noted. On Endo agar *Escherichia coli* forms colonies of dark red color with metallic luster. Thus, the results of studies by laboratory method and in parallel with the rapid test "biocontrol" coincide, which allows you to use the rapid test in livestock complexes for rapid microbiological control of water.

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