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The probiotic proteinaceous-fatty feed additive of high power value for farm animals, birds and fishes

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Strengthening of the food supply by saturation its various concentrating additives is one of the main conditions of intensive and healthy development of farm animals, birds and fishes, saturations of domestic market of the Republic of Kazakhstan produces high-quality domestic dairy and meat products. In KazSRIPFI the technology of receiving the fluid and dry form of probiotic on the basis of consortium *Lactobacillus pontis* 67, *Lb. casei* 22, *Lb. paracasei* 104 (with the titer of LAB 10^{11} CFU/ml) and the evaporated filtrate of postspirit grain stillage for introduction to structure of feed additives is developed. Bactericide activity of LAB consortium is caused by synthesis of thermo stable low-molecular peptides with molecular mass 10000 and 5000 Da, having antagonistic activity concerning *Bacillus subtilis* ATCC 6633, *Escherichia coli*-1257, *Staphylococcus sp.* 209-P, *Salmonella* Typhimurum. 6 recipes of proteinaceous-fatty feed additive of high power value for farm animals, birds and fishes are developed. Probiotic, solvent cakes, cakes, sludge etc. are their part. The technology of receiving of granulated proteinaceous-fatty probiotic feed additive with a titer of LAB 109 CFU/ml by way of the wet molding is developed. Feed additive is the protein source (19.86-29.56%), fat (3.76-16.02%), energies (8.34-12.3 MJ/kg), irreplaceable amino acids, vitamins and live probiotic microorganisms, falls into categories of light-end products (411-435 kg/m³). At storage of feed additive within 4 months its nutritional value and high quality of proteinaceous-fatty fraction substantially remains. Three scientifically based compoundings of compound feeds are developed for farm animals (calves), birds (broilers) and fishes (trout) from wastage or secondary raw materials of processing industries. Norms of input of probiotic proteinaceous-fatty feed additive in composition of compound feeds for replacement of grain raw materials, ensuring improvement of quality, biological value and a sanitary condition of the forage are proved.

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