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## Compound feeds for sturgeon species of fish with use of the probiotic and waste of processing industries

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The fodder value of forages for fishes is defined by a set of the components which are its part and can be considerably increased, thanks to its rational selection. The selection of components which is carried out by us provided the balanced compound feed on nutritiousness meeting physiological requirements of sturgeon species of fish. When developing recipes of compound feeds the main attention was paid to improvement of their productional properties, reduction in cost, replacement scarce, expensive and sanitary-unsafe components (tankage and blood flour) on non-conventional secondary raw materials of processing industries (a corn and wheaten germ, corn gluten, sub-standard eggs). For the treatment-and-prophylactic purposes in recipes of compound feeds the probiotic on the basis of consortium of lactic acid bacteria *Lactobacillus brevis-67*, *Lactobacillus casei var. alactosus-22*, *Lactobacillus fermentum-104*, *Lactobacillus plantarum-2* was used. The accepted ratio of components in recipes allowed to create the full-fledged biological complex balanced on exchange energy-16.39-16.84 MJ/kg to a protein-49.71-51.02%, fat-13.05-15.7%, celluloses-0.69-0.88%, ashes-8.05-8.6% to the limiting amino acids (a lysine-2.22-2.87%, methionine+cystine-1.2-1.65%), to separate vitamins and mineral substances. The compound feeds developed according to recipes, represent dry well loose middlings or granules from light-till dark-brown color, passed production tests-fodder coefficient 1.18-1.31. Inclusion of the probiotic in starting and productional forages and its use in a daily diet significantly lowered costs of forages on production due to decrease in death of fish.

## **Biography**

Valentina Sidorova has graduated from Dzhambulsky Institute of Technology in 1982. She is the leading Researcher of Laboratory of Technology of Grain Products and Compound Feeds. She has published more than 40 papers and 12 patents.

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