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On the issue of standardization of dry extract "Glyzyrrhiza 7" Biochemical study of insects used in fish feed for antioxidant activity

© **Anatoly A. Lapin**,[1]*+ **Matvey S. Talan**,[2] and **Irina S. Dokuchaeva**[3]
[1] *Department of "Aquatic Bioresources and Aquaculture". Kazan State Energy University. Krasnoselskaya St., 51. Kazan, 420066. Tatarstan Republic. Russia.*
Phone: +7 (843) 519-42-67. E-mail: lapinanatol@mail.ru
[2] *Kazan State Medical University. Butlerov St., 49. Kazan, 420012. Tatarstan Republic. Russia.*
[3] *Kazan National Research Technological University. K. Marx St., 68. Kazan, 420015. Tatarstan Republic. Russia.*

*Supervising author; +Corresponding author

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Abstract

The article presents the results of biotechnological studies of insects used in fish feed by antioxidant activity. The problem of raw materials of animal origin for feeding fish is an urgent problem of our time. It is aggravated by the shortage, high cost and unstable quality of substrates that are made on the basis of fish meal, meat and bone meal, blood meal, etc. Recently, there has been an increase in research around the world in the search for substitutes for animal feed when growing aquaculture. Orthopteran insects of the cricket species *Acheta domesticus* are of considerable practical interest as a source of protein and biologically active components necessary for the growth and development of valuable species of fish. Most of the issues related to the technology of growing crickets in artificial conditions and the production of high-quality fodder based on them, remain open today. We chose an optimal diet and identified the most favorable conditions for the breeding of insects in a mini-farm. Studied the qualitative composition of the substrate on the basis of crickets. In order to select the optimal technological regimes for the processing of raw materials on the basis of insects, the total antioxidant activity of aqueous extracts of dried crickets, *Daphnia magna Straus* crustaceans and *Gammarus pulex* was determined. For crickets, the activity was 6.288 g of rutin, for daphnia 4.219 g of rutin and for gamarus 6.519 g of rutin per 100 g of absolutely dry sample. It was established that all samples, upon drying dry samples to constant weight at 105 °C, lose the total antioxidant activity.

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