PRELIMINARY ASSESSMENT OF THE POTENTIAL TO PARTIALLY SUBSTITUTE FISH MEAL IN THE DIET OF CATFISH (SILURUS GLANIS LINNAEUS, 1758)

L.B. Athanasopoulos*, F.M. Dima, M. Tenciu, V. Nistor, I. Bejenariu, V. Savin, E. Sîrbu, D.M. Stroe

Institute of Research and Development in Aquatic Ecology, Fishing and Aquaculture, 54 Portului Street, 800211 Galati, Romania
*e-mail: lilianablondina@yahoo.com

Abstract

In the context of demographic growth, aquaculture provides high-quality proteins for human consumption. The main costs in fish farming are related to feed expenses, which depend on the fish meal content. This study aims to explore solutions for partially replacing fish meal (30%) in existing diet formulas for European catfish, using insect meal (V1) or soybean meal (V2). The experiment lasted 45 days. Biometry and gravimetry analyses were performed, along with blood samples to assess blood biochemistry, hemoglobin, and hematocrit. Erythrocyte counts were also conducted under a microscope. The weight gain in the control group was Vc=368±3.84g, in the insect meal-fed group V1 was 387±11.81g, and in the soybean meal-fed group V2 was 245±7.51g. Results indicate that insect meal can successfully reduce the amount of fish meal in the diet of Silurus glanis.

Key words: catfish feeding, insect meal, soybean meal