EFFECT OF DIFFERENT EXTRUDED COMPOUND FEED ON AFRICAN CATFISH *(Clarias gariepinus)* PRODUCTIVITY, MEAT CHEMICAL AND TECHNOLOGICAL PARAMETERS

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Abstract. Feed quality as well as nutrition is one of the most important exogenous factors affecting the chemical composition of fish, so the aim of this study was to evaluate the effects of dietary levels of extruded compound feed on African catfish growing dynamic and meat chemical and technological properties. A trial was conducted with 70 of African catfish, aged 10 weeks. The fish were divided into two groups, 35 fish in each group and fed with extruded compound feed X (where hydrolyzed protein was got from feathers) in control group and extruded compound feed Y (the hydrolyzed protein was got from feathers and pig bristle meals) in experimental group for 3 months. During the trial were evaluated African catfish performance parameters and meat quality indexes, which are described by technological properties and meat chemical composition. Meat color were evaluated by CIE–LAB method, according lightness (L*), redness (a*), yellowness (b*). The results of conducted trial showed, that during 111 days of growing the weight of African catfish in control group was by 23.23% higher and feed conversion ration – by 27.26% lower in comparison with the experimental group. No significant difference between the meat lightness L * and yellowness (b*) were observed, however, the redness of the meat surfaces a *, who is more desirable to fish buyers, was by 1.52 point (P>0.05) higher in the control group than in experimental group. Although the pH value of the live freshwater fish varies from 6.9 to 7.3, but in this study the mention parameter was 5.88 in control group and 5.53 – in experimental. By analyzing the technological properties of fish meat, were determined, that fish from the control group distinguish by higher water holding capacity in comparison to the experimental group. Also were determined, that fish meat of the experimental group had higher protein, content by 0.93%, also were 0.92% fattier, compared to the Control group (P>0.05). Therefore, it can be concluded that African catfish fed with extruded compound feed having hydrolyzed feathers' protein were characterized by better production parameters compared to those African catfish who were fed with extruded compound feed with hydrolyzed feathers and pig bristle meals protein, which showed good technological properties and nutritional value.

Keywords: African catfish, chemical composition, technological parameters