Possibilities influencing the meat quality parameters of carp raised in accordance with the requirements of organic aquaculture in the European Union

Summary

This article presents general information on organic aquaculture and its development. In Poland, pond carp production seems to be in some sense predestined to conversion into organic farming, as conventional standards in carp farming are very similar to regulations for organic aquaculture in EU countries. However, carp farmers show little willingness to make this transition, due to their lack of knowledge about organic aquaculture. The paper discusses the influence of feeds (typical organic cereals, commercial organic formulated feed, and organic pelleted grain feeds produced on-farm) on the growth, production results and economic efficiency of food carp. In terms of fish growth, total production, and meat quality, commercial organic feedstuffs were the most effective. However, the price of commercial organic feed, 10-15 times higher than that of ordinary organic cereals, eliminates this fodder from use in practice. Among typical cereals, triticale, barley and maize seem to be the most effective for fish growth. The effectiveness of feeding could be increased by on-farm pelleting, as organic carp fed with pelleted cereals had better individual growth and lower FCR. In terms of flesh quality, carp fed triticale and barley had the lowest fat content and a healthy fatty acid profile, in accordance with the demands of modern consumers.

KEY WORDS: organic aquaculture, carp, growth, production, flesh quality