DIGESTIBLE ENERGY IN DIETARY SORGHUM, WHEAT BRAN, AND RYE IN THE COMMON CARP (CYPRINUS CARPIO L.)

Gad Degani*

Faculty of Civil and Environmental Engineering, Technion – Israel Institute of Technology, Israel

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Abstract

The digestibility of protein, fats, carbohydrates, and energy in three feed ingredients (sorghum, wheat bran, and rye) in common carp, Cyprinus carpio, was studied using the chromic oxide method. Three experimental diets were tested. Each contained 52.5% of a basal diet and 47.5% of the test ingredient. The carbohydrate levels in the test ingredients ranged 65-83% and the protein levels ranged 11-18%. Therefore, carbohydrates were the main energy source. Results showed that the digestibility of protein in rye (91.89%) was significantly higher ($p<0.05$) than in sorghum (71.86%) and wheat bran (80.64%), producing 12.4, 6.7, and 9.3 kJ/g digestible energy, respectively. The lipid levels in the test ingredients were very low, 1-4%. Lipid digestibility was 79.84%, 76.71%, and 82.01% in rye meal, sorghum meal, and wheat bran, respectively.

* Tel.: +972-4-6953502; email: gad@migal.co.il