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Meat Yield and Proximate Composition Relations of Seabream (Sparus aurata) and Seabass (Dicentrarchus labrax) in Different Sizes

Authors: Mehmet Celik, Celal Erbas, Mehtap Baykal, Aygül Kucukgulmez, Mahmut Ali Gokce, Bilge Kaan Tekelioglu Abstract: In this study, determination of differences in fresh meat yield and proximate compositions of different weight groups of sea bream and sea bass grown in cages in Izmir region of the Aegean Sea were aimed. For this purpose, the length and weight of five different weight groups of sea bass (I: 175.8±5.2, II: 227.3±10.2, III: 293.3±21.3, IV: 404±9.9, V: 508.7±46 g) and sea bream (I: 146.6±13.6, II: 239.8±21.7, III: 279.2±20.8, IV: 400.9±10.5, V: 546.8±0.8 g) were measured and the amount of edible and non-edible parts were determined. Besides this, protein, lipid, dry matter, ash, condition factor, HSI and VSI values were compared according to different weight groups for each species. According to the results of analysis, while the absolute meat yields of sea bream was between 69-294 g, it was between 71-252 g for the sea bass and the highest meat yields were found in fifth (V) weight groups of fish for both species. The relative meat yield (%) was determined in weight group II for sea bass and in the IV. group in sea bream with 51.9%. However, the amount of muscle tissue lipids in I. and V. weight groups of sea bream ranged between 3.6 to 11.9 % and ranged between 6.2 to 9.0 % for sea bass respectively. Protein, fillet and ash content increased in direct proportion to the weight. As a result, it can be speculated that when the meat yield and lipid rates were considered, IV. group in sea bream and II. group in sea bass are the most advantageous groups for the consumers. Acknowledgement: This work was supported by the Scientific Research Project Unit of the University of Cukurova, Turkey under grant no FBA-2015-3830.

Keywords: sea bream, sea bass, meat yield, proximate composition, different weight

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