

Title Influence of modified atmosphere packaging on the chilled shelf life of gutted farmed bass  
(*Dicentrarchus labrax*)

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### Abstract

The effect of MAP on quality changes of gutted farmed bass when stored at 3 °C were investigated for up to 9 days. Gutted farmed bass was packed with six different atmospheres (0%O<sub>2</sub>-70%CO<sub>2</sub>; 20%O<sub>2</sub>-70%CO<sub>2</sub>; 30%O<sub>2</sub>-60%CO<sub>2</sub>; 40%O<sub>2</sub>-60%CO<sub>2</sub>; 30%O<sub>2</sub>-50%CO<sub>2</sub>; 21%O<sub>2</sub>-0%CO<sub>2</sub>). Headspace gas composition (O<sub>2</sub>%; CO<sub>2</sub>%), *aerobic mesophilic bacteria* (AMB) and *Enterobacteriaceae*, pH, water loss, flesh moisture content, colour, stiffness, odour and eyes appearance were assessed by means of instrumental and sensory analysis after 0, 2, 5, 7 and 9 days of storage. Atmosphere composed of 30% of O<sub>2</sub> and 50% of CO<sub>2</sub> was the best one to preserve the quality of the gutted farmed bass. PCA was an effectively instrument to classify gutted bass samples on the bases of quality changes. The effect of the time was explained by the factor 1, whereas the fish were clearly classified along factor 2 in relation to storage atmosphere.