

Title Quality attributes of farmed eel (*Anguilla anguilla*) stored under air, vacuum and modified atmosphere packaging at 0 °C

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Abstract

The shelf life of fresh eel in various packaging conditions of atmospheric air, vacuum and modified atmosphere packaging (MAP) (40% CO₂, 30% N₂ and 30% O₂) at 0 °C was investigated. All raw eel samples received acceptable sensory scores during the first 11±1 days of storage in atmospheric air, 11±1 days of storage in vacuum and finally 18±1 days of storage in MAP conditions. Using the microbial quality indicators the shelf life of eel packed in air, vacuum and MAP was estimated to be more than 18, 28 and 34 days, respectively. The main spoilage microorganisms under MAP conditions were lactic acid producing bacteria followed by *Shewanella* spp., pseudomonads, *Enterobacteriaceae* and yeasts. Chemical data revealed that pH, ammonia, glucose and lactate examinations might not be useful for monitoring eel quality differences.