

研究業績 英文表記

和文	
表題	長崎近海で漁獲されたマアジ筋肉の死後変化に及ぼす保存温度と致死条件の影響
著者名	三嶋敏雄 ¹⁾ , 野中武 ²⁾ , 岡本昭 ²⁾ , 槌本六秀 ¹⁾ , 石矢智子 ¹⁾ , 橘勝康 ¹⁾ , 槌本六良 ¹⁾
所属	長崎大学水産学部水産栄養学研究室 ¹⁾ , 長崎県総合水産試験場 ²⁾
英文	
Title	Influence of storage temperatures and killing procedures on post-mortem changes in the muscle of horse mackerel caught near Nagasaki Prefecture, Japan
Author	TOSHIO MISHIMA ¹⁾ , TAKESHI NONAKA ²⁾ , AKIRA OKAMOTO ²⁾ , MUTSUHIDE TSUCHIMOTO ¹⁾ , TOMOKO ISHIYA ¹⁾ , KATSUYASU TACHIBANA ¹⁾ , AND MUTSUYOSI TSUCHIMOTO ¹⁾
Affiliation	¹⁾ Laboratory of Fishery Nutritional Science, Faculty of Fisheries, Nagasaki University, Bunkyo, Nagasaki 852-8521 and ²⁾ Nagasaki Prefectural Institute of Fisheries, Taira, Nagasaki 851-2213, Japan.
Abstract	The effect of storage temperature (0, 5, 10, and 15°C) and killing procedure (instant, struggled, temperature shocked, and spinal cord destruction killing) on post-mortem changes in the muscle of the horse mackerel caught near Nagasaki, Japan, was investigated. Temporal changes in adenosine triphosphate (ATP), inosine monophosphate (IMP), and lactic acid concentrations were slowest at 10°C storage temperature. The increase in K-values was slower at 10°C and below than at 15°C storage temperature. In addition, 10°C storage temperature was most suitable for maintaining a constant breaking strength value of the muscle. Regarding the effect of killing procedure, temporal changes in ATP, IMP and lactic acid concentrations were slowest when killed by spinal cord destruction. The increase in K-value and the decrease in breaking strength were also slowest in the spinal cord destruction group. From these results, it was considered that storage at 10°C temperature and spinal cord destruction killing procedure were most effective in delaying post-mortem change in the horse mackerel.
keyword	freshness, horse mackerel, killing procedure, post-mortem change, spinal cord destruction, storage temperature.

※本データの英文表記は実際の論文上の表記とは異なります。