

## **Amino acids and biogenic amines determination in *Mystus nemurus*.**

### **Abstract**

The concentration of biogenic amines, i.e., histamine, putrescine, and cadaverine were studied as indicators of *Mystus nemurus* muscle quality under different storage conditions, namely, ambient ( $28\pm 2^{\circ}\text{C}$ ), chilled ( $10\pm 2^{\circ}\text{C}$ ) and in iced ( $2\pm 1^{\circ}\text{C}$ ) temperature. The biogenic amine contents were found to correlate with the free amino acids contents. The level of biogenic amines increased in accordance with decreasing free amino acids during storage ( $P < 0.05$ ). The cadaverine level reached a peak, 186.24mg/g, after 24h at ambient temperature, 371.98mg/g after 10 days at  $10^{\circ}\text{C}$ , and 385.49mg/g after 20 days at iced temperature. Unacceptable levels were reached after 12h at ambient, 8 days at  $10^{\circ}\text{C}$  and 16 days at  $2^{\circ}\text{C}$ . Putrescine increased at a slower rate than histamine and cadaverine. The present study demonstrated the potential of cadaverine production as a quality indicator of *M. nemurus* during storage.

**Keyword:** Amino acids; Biogenic amines; *Mystus nemurus*.