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Klasifikacija školjki na osnovu sadržaja esencijalnih elemenata i hemometrije

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Cilj ove studije je klasifikacija biološki različitih vrsta školjki na osnovu sadržaja esencijalnih elemenata primenom hemometrije. Sadržaj esencijalnih elemenata kao što su Co, Cr, Cu, Mn, Ni, Se, Zn, i Fe je određen u četiri biološki različite vrste školjki *Ruditapes philippinarum* (Manila clam, MC), *Yesso scallop* (YS), *Tegillarca granosa* (TG) i *Anadara broughtonii* (AB). Analizirani uzorci su kupljeni u Incheonu, Koreja. Sadržaj esencijalnih elemenata je određen primenom induktivno spregnute plazme kuplovane sa masenom spektrometrijom (ICP-MS) nakon mikrotalasne digestije. Hemometrijske tehnike pokazuju grupisanje ispitivanih uzoraka školjki prema sadržaju esencijalnih elemenata i identifikuju elemente najvažnije za klasifikaciju.

Chemometric characterization of shellfish according to their element composition

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The main aim of current study was classification of four biologically different shellfish species such as bivalve molluscs *Ruditapes philippinarum* (Manila clam, MC), *Yesso scallop* (YS), *Tegillarca granosa* (TG) and *Anadara broughtonii* (AB) bought in the Incheon, South Korea. Content of essential elements such as Co, Cr, Cu, Mn, Ni, Se, Zn, and Fe were determined by using inductively coupled plasma mass spectrometry (ICP-MS) after closed-vessel microwave digestion. Chemometrics techniques showed classification of shellfish samples based on biological species and identified elements most important for classification.

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