

Study of the reineta protein modifications (*Brama australis*), put under freezing and storage to -18°C and -30°C Estudio de las modificaciones en proteínas de reineta (*Brama australis*), sometidas a congelación y almacenamiento a -18°C y -30°C

Abugoch, Lilian

Quitral, Vilma

Larraín, Ma. Angélica

Vinagre, Julia

Kriukov, Andrei

Chávez, Gloria

The objective of the present work was to study functional and thermal properties of reineta (*Brama australis*) frozen meat, analysed by water retention capacity (WRC), gel forming capacity (GFC), texture, emulsifying capacity and differential scanning calorimetry (DSC). For this study, reineta fillets were obtained and extracted by the same conditions, and cutted, packaged, frozen and stored at -18°C and - 30°C for 7 months. The results obtained, showed that there were no significant differences in the responses to thermal treatment for all the specimens. For samples frozen at -18°C and -30°C, the protein contents were 23.5 ± 0.0 and $25.4 \pm 1.0\%$, respectively. The WRC values were 0.45 ± 0.1 and 1.59 ± 0.0 g water/ g protein, respectively. The gel forming capacity was only present in the fresh samples, whereas the frozen stored ones only form protein aggregates. The emulsifying capacity was between 960 and 1400 g oil / g protein, and the storage time increased this value. The miosin den