

Biochemistry and functional characterization of squid mantle meat (*Dosidicus gigas*)

Caracterización funcional y bioquímica de la carne del manto de jibia (*Dosidicus gigas*)

Abugoch, Lilian J.

Guarda, Abel M.

Pérez, Luz María R.

Donghi, M. Isabel V.

A study for the characterization of frozen giant squid mantle (meat) protein stored at -25°C for 8 month was started. In the present research, the following functional properties were investigated: emulsifying, water holding and gel forming capacities. Optimal conditions for the separation and differentiation of miofibrillar and sarcoplasmic proteins were also studied. It was found that the unfrozen giant squid mantle meat is capable of emulsifying 2.817,4 g of oil/g of protein and holding capacity was 3,64 g of water/g of protein. Related to the gel forming capacity, it was not obtained, probably due to excessive storage of the meat. With regard to miofibrillar protein obtention of the squid mantle meat, it was found that two low ionic strength washings ($I=0,05$), the sarcoplasmic proteins were practically eliminated from the protein matrix. The differentiation of miofibrillar and sarcoplasmic proteins was obtained by PAGE-SDS of the squid mantle meat extracted at two different ionic strengths.