Specific tissue colonization of *Argopecten purpuratus* (Northern scallop) by a clinical strain of *Vibrio parahaemolyticus* and it response to environmental variables. MB Hengst, M Cáceres, M Apablaza, JC Leiva, C Riquelme. Microbial Ecology Laboratory, Facultad de Recursos del Mar & Bioinnovation Center of Antofagasta, Universidad de Antofagasta, Antofagasta, Chile. email: mbhengst@gmail.com.

Vibrio parahaemolyticus (RIMD1022633) was registered for first time in Chile during summer season (1997-1998), in Antofagasta city (23°39'S, 70°24'W), and up today close to 400 clinical cases have been identified by intoxication with raw or undercooked seafood, by this pathogen.

This work assess the colonization of *Argopecten purpuratus* (northern scallop) by a *V. parahaemolyticus* clinical strain marked with green fluorescent protein (Vp-GFP), done in laboratory bioassays. The abundance of Vp-GFP in different tissues of scallop was obtained by total direct count (TDC) by fluorescent microscopy. The cultivability of Vp-GFP and total Vp were obtained by culture in plates with chromogenic medium. Additionally, the effect of salinity and temperature on Vp-GFP growth was evaluated. The results showed that Vp-GFP accumulates principally in digestive system and gonadic tissues at 8 h of incubation, and that a re-infection of gills takes place due to heces from 12 h of incubation. The optimum growth of Vp-GFP was obtained with salinity of 3% and a temperature of 37°C.

Vibrio parahaemolyticus are accumulated principally in digestive system and in gonadic tissues of *Argopecten purpuratus*.