Saxitoxins and okadaic acid group: accumulation and distribution in invertebrate marine vectors from Southern Chile



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© 2015, © 2015 Taylor & Francis. Harmful algae blooms (HABs) are the main source of marine toxins in the aquatic environment surrounding the austral fjords in Chile. Huichas Island (Aysén) has an history of HABs spanning more than 30 years, but there is limited investigation of the bioaccumulation of marine toxins in the bivalves and gastropods from the Region of Aysén. In this study, bivalves (Mytilus chilenses, Choromytilus chorus, Aulacomya ater, Gari solida, Tagelus dombeii and Venus antiqua) and carnivorous gastropods (Argobuccinum ranelliformes and Concholepas concholepas) were collected from 28 sites. Researchers analysed the accumulation of STX-group toxins using a LC with a derivatisation post column (LC-PCOX), while lipophilic toxins (OA-group, azapiracids, pectenotoxins and yessotoxins) were analysed using LC-MS/MS with electrospray ionisation (+/?) in visceral (hepatopancreas) and non-visceral tissues (mantle, adductor muscle, gills and foot). Levels of STX-group and OA-gro