

Les mollusques invasifs des bassins conchyliques du littoral Manche-Atlantique : diversité et structure génétiques des populations invasives, compétition avec les taxons indigènes, gestion du risque pour les écosystèmes et la conchyliculture



Shellfish areas usually receive a large number of introduced species. During the present project, we specially focused on 4 marine benthic molluscs introduced in shellfish areas along the Channel and Atlantic coasts of France: the gastropods *Crepidula fornicata*, *Ocenebrellus inornatus* and *Cyclope neritea*, and the bivalve *Ruditapes philippinarum*. Our study was conducted according to three main axes: (i) the characterization of introduction and expansion patterns of species within their newly colonized area. In the three invasive gastropods *C. fornicata*, *C. neritea* and *O. inornatus*, a high level of genetic diversity was detected in the French populations which indicated a complex process of introduction (with multiple population sources or secondary introductions) and the absence of bottlenecks, whereas the life history traits of these species and their supposed dates of introduction are different ; (ii) the study of some life history traits potentially involved in the successful settlement of introduced species, compared with 'similar' indigenous species. In *C. neritea* and *R. philippinarum*, we found a much weaker parasite load than in the closely related native

species. In the three invasive gastropods studied, we also found some biological characters that gave them a reproductive or trophic competitive advantage over the similar natives; (iii) an inventory of introduced marine and brackish water species along the French Atlantic coasts confirmed the major role of shellfish farming areas (mainly through accidental release with commercial oyster industry) in the introduction of exotic species, together with maritime transport. These scientific results were applied to two cases in which invasive species endanger the stocks of commercial molluscs (oysters and scallops). For the oyster drill *O. inornatus*, we proposed an active control of the populations by burning deposited egg masses or collecting adult specimens. An analysis of the cost of eradicating *C. fornicata* in the Bay of Brest showed the financial and social interest of this project.

Auteurs du document : Bachelet, Pierre, De Montaudouin, Xavier, Desclaux, C., Mairesse, G., Raigne, H., Randriambao, K., Garcia Meunier, Pascale, Martel, C., Pascal, P. Y., Sauriau, Pierre-guy, Simon-bouhet, Benoît, Robert, Stephane, Geairon, Philippe, Gouletquer, Philippe, Grangere, Karine, Guilpain, Patrice, Le Moine, Olivier, Rossi, Nadege, Seugnet, Jean-luc, Soletchnik, Patrick

Obtenir le document : Actes du colloque, Moliets (Landes), 17-19 octobre 2006, pp 193-200

Mots clés : Recommandations, Transfert, Ecosystèmes marins, Insularité, Expansion, Introduction espèces, Invasions biologiques, Mollusques

Thème (issu du Text Mining) : MILIEU NATUREL, SCIENCES EXACTES SCIENCES HUMAINES

Date : 2006-10-17

Format : text/xml

Langue : Inconnu

Droits d'utilisation : info:eu-repo/semantics/openAccess, restricted use

Télécharger les documents : <https://archimer.ifremer.fr/doc/2006/acte-3305.pdf>

<https://archimer.ifremer.fr/doc/00000/3305/>

Permalien : <https://www.documentation.eauetbiodiversite.fr/notice/les-mollusques-invasifs-des-bassins-conchyliques-du-littoral-manche-atlantique-diversite-et-structu0>

Evaluer cette notice: