

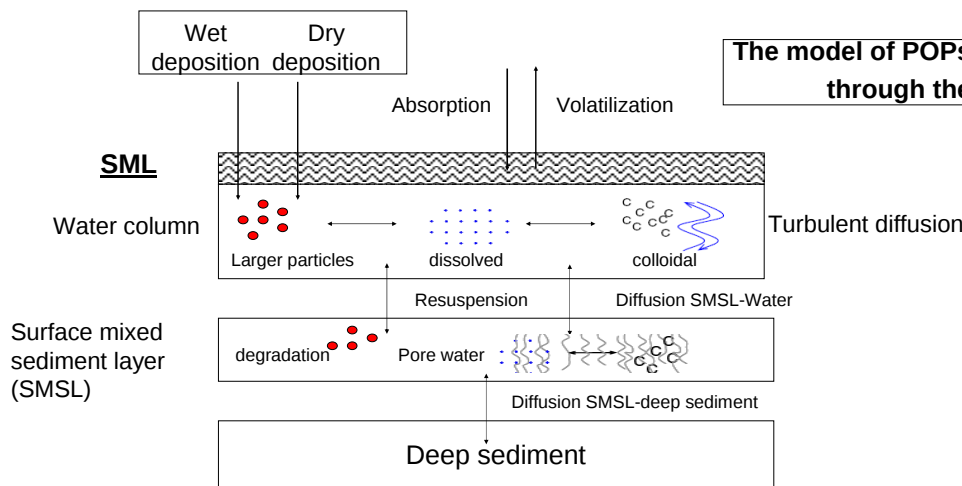
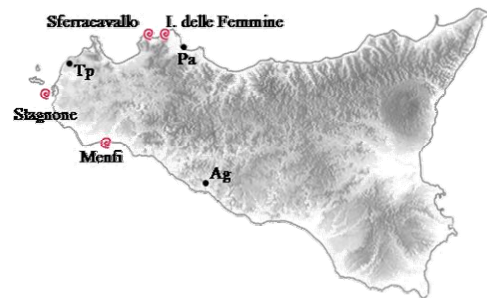
PCBS, OC PESTICIDES AND PAHS IN MARINE INTERTIDAL GASTROPODS OF WESTERN SICILY, MEDITERRANEAN REGION

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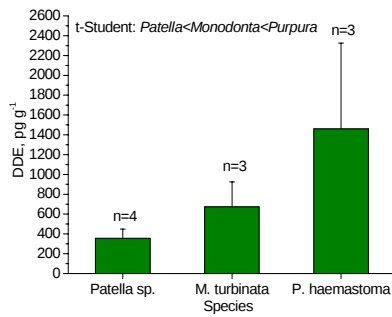
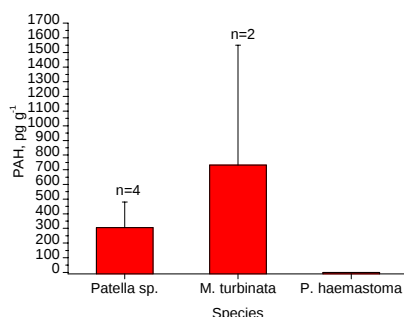
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Persistent Organic Pollutants (POPs), such as polychlorinated biphenyls (PCBs), organochlorine pesticides (OCs) and polycyclic aromatic hydrocarbons (PAHs) are toxic organic compounds able to persist in the Environment for a long time. They are accumulated into food webs and this represents a threat for human health and environmental quality. Movements of water mass are important in distributing and canalising POPs through marine habitats and organisms. Despite to the importance of these contaminants and their role in the ecosystems, data on POPs dynamics is scant in the Mediterranean even though most of southern Mediterranean coastal areas are intensely influenced by anthropogenic pressure.



In this study, concentrations of PCBs, OCPs and PAHs were analyzed by gas chromatography/mass spectrometry (GC/MS) in dominant intertidal invertebrates (*Patella* sp., *Monodonta turbinata* and *Purpura haemastoma*) collected from Sicilian sites (Isola delle Femmine, Sferracavallo, Stagnone di Marsala and Menfi).



Only 4 PAHs over 15 significantly changed among sites and species; the only PCB 153 was detected in one species (*M. turbinata*), while OCPs were more abundant and frequent than other POPs. DDE isomers, i.e. p,p'-DDE and o,p'-DDE reached very high concentrations in *P. haemastoma* (Stagnone; a pristine environment) and *M. turbinata* (Isola delle Femmine; a MPA).