

**CONCENTRATION LEVELS OF ANTIFOULING BOOSTER BIOCIDES IN
WATER AND SEDIMENTS OF VARIOUS GREEK MARINAS AND PORTS.**

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ABSTRACT

The concentration and distribution of booster biocides in waters and sediments from coastal areas can provide information required assessing the fate of these chemicals in freshwater ecosystems and their likely impacts to the marine environment. These biocides were introduced as alternatives to organotin compounds in antifouling products, after restrictions imposed on the use of Tributyltin (TBT) in 1987. Although, the fate of TBT compounds in marine environment have been extensively studied, very little work has been performed to assess the accumulation of organic booster biocides in water and sediments. An extended survey of the antifouling biocides - irgarol 1051, dichlofluanid, sea nine 211 and chlorothalonil - was carried out in waters and sediments of the coastal areas around Greece, for the period from October 1999 to September 2000. The sampling sites were: Piraeus, Elefsina, Thessaloniki, Patras, Chalkida, Igoumenitsa, and Preveza (Aktio). The concentration levels of biocides were higher during the period from April to October. This seasonal dependence is expected when one considers the application time of antifouling paints and mimics trends in the seasonal distribution of biocides in other European sites.