

Chili for clean ship hulls

September 27, 2017 | Andres Jordi Topics: Pollutants | Ecosystems

In order to protect ship hulls and other surfaces exposed to water from algae, molluscs and crustaceans, they are coated with so-called antifouling biocides. Such biocides do not only protect the surfaces, however, but are often leached into the environment and can harm other life forms. The industry is therefore trying to develop more ecologically sound products. Eawag researchers have now investigated the toxic effects of three new substances on non-target organisms (green algae, water fleas and zebra fish): tralopyril, triphenylboranpyridin and capsaicin. While the first two caused toxic reactions, capsaicin did not. A risk assessment carried out by the environmental toxicologists for a hypothetical harbour confirmed the environmental tolerance of this substance, which is produced from chili pepper pods. As tralopyril degrades very quickly, it is also applicable for aquatic use.

Related Links

doi.org/10.1016/j.aquatox.2017.07.019

https://www.eawag.ch/en/info/portal/news/news-archive/archive-detail/chili-for-clean-ship-hulls

