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Development of methodology for detection of ecological maximum permissible concentration of xenobiotics (on the example of pyrethroid insecticides)

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Abstract

The current aquatic legislation in Russia is based on two basic strategies of defense, conservation and improvement of quality of nature reservoirs. Leading direction in the area of experimental and practical ecology is development of methodology for detection of ecological MPC of xenobiotics considering physiological properties of aquatic population since this methodology is not created all over the world yet. Considering the revealed effect of the action of low and ultralow doses of pyrethroid insecticides to aquatic arthropods, we corrected previous approach for assessment of ecologic MAC for hazardous substances. On the present stage of investigations, the following basic universal principles for detection of aquatic ecologic MAC for xenobiotics were stated. © IDOSI Publications, 2013.

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Keywords

Daphnia, Ecological maximum permissible concentration, Pesticide, Pyrethroid, Xenobiotics