

Abstract

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Amoxicillin is one of the most frequently prescribed antibiotic. It belongs to the wide spektrum of aminopenicilin and it is excreted by diuresia in uncovered condition of 60-75%. By means of urine and from waste dumps goes to surface waters, where it operates to the not target organisms. At valuation of the ecotoxicological effect of amoxicillin there we used the 24-hours test of acute toxicity on brine shrimp *Artemia salina*, L., rotifer *Brachionus calyciflorus* by means of the Rotoxkit F and the Rotoxkit F Chronic. Next we used the 72-hours test of inhibition of white mustard *Sinapis alba*, L. germination and the 30-minutes test of acute toxicity with tubificid worm *Tubifex tubifex*. We used drugs Augmentin® 625 mg and Ospamox® 375 mg/5 ml. Tests take place darkling and in action of UVA radiation 365 nm and we investigated with values of EC₅₀ (the concentration which evoke the toxic efekt by 50% of population) for animals and for *S. alba* the value IC₅₀ (the inhibitory concentration). The less sensitive organism againts incidence of amoxicillin was tubificid worm who seems to be the optimal by testing of toxicity as alone because in all tests leads to the values of EC₅₀.

Key words: ecotoxicity, Augmentin® 625 mg, Ospamox® 375 mg/5 ml, amoxicillin, *Artemia salina*, *Brachionus calyciflorus*, *Sinapis alba*, *Tubifex tubifex*