

LARVICIDAL ACTIVITY OF NEONICOTINOIDS AND PYRETHROIDS AGAINST MOSQUITOES

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Abstract Comparative acute mosquito larvicidal activity of neonicotinoids in different formulations: acetamiprid (Mospilan, Aspid), imidacloprid (Confidor, Shanfidor), thiacloprid (Calipso), thiamethoxam (Actara, Agita) and pyrethroids: cypermethrin (Cifox), permethrin (Medifox — super) was studied in laboratory. Late 2-th instar of mosquitoes *Aedes aegypti* and method of World Health Organization were used in the all studies. Field trials were carried out in Astrakhan region against larvae of *Culex pipiens pipiens* and *Cx. pipiens molestus*. All studies neonicotinoids independently of active ingredient and formulation have demonstrated moderate larvicidal activity: LC_{50} was changed in limits 0.10 — 0.37 mg/l. The formulation of pyrethroids were more activity, that activity of neonicotinoids (LC_{50} of Cifox — $9.8 * 10^{-4}$ and of Medifox — super — $2.6 * 10^{-3}$ mg/l).