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BED BUGS – THE PROBLEM IN RUSSIA

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The bed bug *Cimex lectularius* L. is blood-feeding parasite of humans, bats and different domestic animals. In the early 1990s, pest management professionals began to see an increase in beg bug infestations across the world. Now the bed bug problem is very important in many countries, however, in Russia bed bug infestation considerably increased only in 2007. In Russian Federation, pyrethroids were used for the bed bug control during past 20 years, and this fact was the cause for development the pyrethroid resistance in bed bug populations. We have determined the diagnostic concentration ($LC_{95} \times 2$) for several insecticides from different classes of chemical compounds for susceptible strain *C. lectularius,* using the topical method of application of acetone solution drops (0,3 µl) on the ventral part of adult *C. lectularius*. These concentrations (%) were: 1) for organophosphates – 0.007 for malathion, 0.02 for diazinon, 1.4 for trichlorfon, and 0.014 for chlorpyriphos; 2) for pyrethroids – 0.03 for permethrin, 0.00008 for cypermethrin, 0.000001 for alphacypermethrin, 0.00008 for deltamethrin, and 0.00005 for λ-cyhalothrin; 3) for neonicotinoids – 0.0015 for imidacloprid and 0.0044 for acetamiprid.

Key Words *Cimex lectularius,* control, organophosphate, pyrethroid, neonicotinoid