

INSECT-CONTROL PRODUCTS FOR HOUSEHOLD MOSQUITOES (DIPTERA: CULICIDAE)

ELENA I. BAKANOVA

Scientific Research Disinfectology Institute of Federal Service for Surveillance on
Consumer Rights Protection and Human Well-being ,
Nauchny proyezd 18, Moscow, 117246, Russia
e-mail: elena_bakanova@yahoo.com

Abstract The role of mosquitoes in transmission of infectious diseases is significant. Various formulations of insecticide products are used to control mosquitoes indoors: aerosols, electric heaters with cellulose mats, tablets or vials with a liquid, coils, sticks etc. Aerosol products are usually used against a wide spectrum of flying insects among which mosquitoes are one of the target objects. Among aerosols there is a group of insecticide products that is allowed to be used in presence of passengers for treatment of airplane cabins.

Products used with electric heaters are represented by cellulose mats, tablets or vials with a liquid. These products are allowed for use in the presence of people in the rooms with open windows within 8 hours a day and are convenient for application at night time.

Pyrotechnic insecticide products (coils, sticks) are recommended to be used in open or well ventilated areas such as verandahs, and summer small houses. The analysis of "Register of the Insecticide products allowed for household use in Russia" within the period from 2000 to present, showed aerosols and electric heaters with mates and liquids are the leading categories. For the last years the assortment of these products has considerably extended due the new actives, their share in volume of all registered products has considerably increased.

The assortment of products against mosquitoes for household use is represented by both domestic and imported ones. In Russia and nearby foreign countries there are several large manufacturers of insect control aerosols, and mats for electric heaters. The most significant producers are ARNEST (Nevinnomyssk, Stavropol territory), KHITON (Kazan), The factory of household chemical goods in Brest (Byelorussia), INVENT (the Moscow area). The basic active ingredients used in aerosols are pyrethroids from allethrin group, tetramethrin, d - tetramethrin, phenothrin, d - phenothrin etc. In the products used with electric heaters (mates, tablets, liquids) and pyrotechnic products highly volatile pyrethroids are used: allethrin group (d-allethrin, prallethrin, s-biothrin), transfluthrin, and vaporthrin. The amount of insecticide contained in a mat depends on specific active ingredient and usually it is within the limits of 10-40 mg per mat. Each of mentioned forms of products against mosquitoes has its own advantages and disadvantages, and generally different insecticides supplement each other. In any case use of insecticide products indoors requires strict observance of safety measures according to a label.