EVALUATION OF RESIDUAL EFFECT OF DELTAMETHRIN 5% AGAINST ANOPHELES STEPHENSI IN IRANSHAHR DISTRICT OF SOUTHEASTERN IRAN

¹A. RAEISI, ²H. LADONNI, ²K. AKBARZADEH, ²M.R. ABAI AND ¹M. RANJBAR KAHKHA

¹Ministry of Health and Medical Education, Center for Disease Control, Department of Malaria Control, Tehran, I.R. Iran ²Department of Medical Entomology, School of Public Health & Institute of Public Health Research, Tehran, I.R.Iran

Abstract An attempt was made to evaluate the residual effect of deltamethrin 5% WP at recommended dosage of 25 a.i.mg/m² on different local surfaces such as mud, plaster, cement, tile and brick walls as well as wooden and thatch roofs in a malarious area, Sistan & Baluchistan provinces, in southeastern Iran. Contact bioassay tests were carried out using WHO standard method against 2-3 day sugar fed, a lab-bred strain of *Anopheles stephensi* (Iranshahr strain). The result of bioassay tests showed 79.1%-94.0% mortality on sorbent surfaces and 64.8% - 81.3% on non-sorbent surfaces respectively. Due to irritation of deltamethrin, particularly during the first week of bio-assay test, mortality did not reach 100%. Based on the result of this study, it could be concluded that deltamethrin WP 5% is an insecticide with a residual effect activity of about 2-3 months.