RESIDUAL EFFECT OF 10% BIFENTHRIN WP ON MOSQUITOES, AND COMMUNITY ACCEPTANCE, IN EASTERN THAILAND

Narumon Komalamisra[1], Raweewan Srisawat[1], Chamnarn Apiwathanasorn[1], Yudthana Samung [1]and Payoong Kaisri[2]

[1]Insecticide Research Unit, Department of Medical Entomology, Faculty of Tropical Medicine, Mahidol University, Bangkok; [2]Vector Borne Control Center 3.5, Chanthaburi, Thailand

Abstract. This study was conducted from May to October 2008 in two villages in Chanthaburi Province: village No.2 Tup Sai Canton (control) and village No.12 Pong Nam Ron (treatment area). Indoor residual spraying, using 10% bifenthrin WP (Bitecthrin WP®) was conducted at a concentration of 25 mg/m^2 with 87.3% spray coverage of the houses in the treated area. Monthly entomological studies showed that in the control area, *Anopheles minimus* density was significantly higher than the treatment area. A WHO cone bioassay test showed the residual effect against laboratory-bred, *An. dirus* persisted for up to 6 months. Community acceptability was good and most preferred insecticide spraying. 10% bifenthrin WP applied six-monthly can be used as an indoor residual spray for malaria control.

Correspondence: Narumon Komalamisra, Insecticide Research Unit, Department of Medical Entomology, Faculty of Tropical Medicine, Mahidol University, 420/6 Ratchawithi Road, Bangkok 10400, Thailand.
E-mail: tmnkm@mahidol.ac.th