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## Contact toxicity of three formulations from lambda- cyhalothrin against German cockroach, Blattella germanica (L.) (Blattaria: Blattellidae)

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The German cockroach, Blattella germanica (L.) is a major household and public health pest worldwide. Current control strategies rely heavily upon various formulations of insecticides. In the present study, contact toxicity of three lambda-cyhalothrin formulations, emulsifiable concentrate (ICON 5 EC®), capsule suspension (DEMAND 10 CS®) and wettable powder (ICON 10 WP®) were tested against 5 to 7-day-old adults of the German cockroach exposed for 1 h. Experiments were conducted at 27±2 °C and 60±10% R.H with a photoperiod of 12:12 h (L:D). The results indicated that mortality of adults increased with increasing insecticide concentration. Males were more susceptible to all formulations than females. The most potent formulation was WP with the LC50 values of 9.87 and 12.24 mg.ai/m<sup>2</sup> against males and females, respectively. The formulation of CS attained the LC50 values of 11.02 and 13.42 mg.ai/m<sup>2</sup> and that of EC attained the values of 12.30 and 15.01 mg.ai/m<sup>2</sup> against males and females, respectively. The results demonstrated that the formulations of WP and CS had high activity against the German cockroach.

Keywords: Blattella germanica, Contact toxicity, Formulations, Lambda-cyhalothrin

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