

TOKSISITAS *Bacillus sphaericus* H-5a5b (VCRC B42) TERHADAP LARVA *Culex quinquefasciatus*

Toxicity of Bacillus sphaericus H-5a5b (VCRC B42) Against Larvae of Culex quinquefasciatus

Salamun*, Rosmanida**, Ni'matuzahroh*, R.A. Samsumaharto*
*Laboratorium Biologi Medisinal, **Laboratorium Biologi Lingkungan
Fakultas Matematika dan Ilmu Pengetahuan Alam
Universitas Airlangga
Surabaya

ABSTRACT

Bacillus sphaericus H-5a5b is an entomopathogenic agent which showing high potency for vector control, highly specific to insect target, and do not produce any adverse environmental impact. Such agent would be promising for vector control in Indonesia. The present studies is aimed to observing the toxicity status of *B. sphaericus* H-5a5b (VCRC B42) against *C. quinquefasciatus* larvae.

The larvae of *C. quinquefasciatus* were reared under the laboratory conditions. The Powder of VCRC B42 were prepared by Vector Control Research Centre (VCRC), India. Bioassays on VCRC B42 against larvae of *C. quinquefasciatus* were also carried out under the laboratory conditions. The values of LD_{50} and LT_{50} for VCRC B42 were decided using probitt analysis. The toxicity status was compared with standart of VCRC India.

The results of the bioassays showed that the VCRC B42 was moderately toxic against larvae of the *C. quinquefasciatus*. The value of LD_{50} for VCRC B42 was 0,058 mg/l and of LT_{50} about 27 hours.

Keywords : Larvicidal toxicity, *Bacillus sphaericus* H-5a5b, *Culex quinquefasciatus*