

Development of bioinsecticide from native nematode symbiotic bacteria
Xenorhabdus nematophilus

이범주, 이지원*
고려대학교
(leejw@korea.ac.kr*)

Xenorhabdus nematophilus is known as symbiotic bacteria, gram negative. This bacteria which invade in the nematode's hemocyte and midgut, have the mechanism to enter the vermin's hemocyte and midgut with nematode and to secrete exotoxin protein, then to make the vermin killed. The new bioinsecticide is paid attention to as an alternative of the existing *Bacillus thuringiensis*.

We got the unique coding sequence secrete exotoxin protein in *X. nematophilus*. The DNA sequence we have acquired, have core region which toxicity have in the existing documents and homology is very high. *X. nematophilus* symbiosis in nematode acquired in domestic soil and secreted recombinant protein of *Escherichia coli in vitro* and have examined insecticidal activity of recombination.