

**Identification of Novel Insecticidal *cry1*-type Genes From  
*Bacillus thuringiensis* Strains Isolated in Korea**

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To identify new *cry1*-type crystal protein genes, 56 *Bacillus thuringiensis* isolates were selected on the basis of their toxicity against *Bombyx mori* larvae. Universal oligonucleotide primers K5un2 and K3un2 were designed to probe the most conserved regions of all known *cry1*-type gene sequences so that the amplified PCR fragments templated from *B. thuringiensis* strains may contain all possible *cry1*-type gene sequences. The restriction fragment length polymorphism (RFLP) patterns of the PCR-amplified fragments from 56 Bt isolates revealed 7 distinct patterns, and 7 standard isolates were selected from each RFLP group. Among these, 2112-3, 2117-2 and 2320-3 were classified *kurstaki* serotype and 2385-1 was *kenyae* by H-agglutination test. However 1281-2, 1299-2 and 2311-1 were not agglutinated with 33 H-antisera tested in this study. Through cloning and sequence analysis of the PCR-amplified fragments showing unique RFLP pattern, 8 novel *cry1*-type genes were identified from 7 standard isolates.