Molecular Cloning a cDNA Encoding the Cysteine-Rich Protein from the Mulberry Longicorn Beetle, *Apriona germari*

Zhong-Zheng Gui, Wei Lu, Hung-Dae Sohn and Byung-Rae Jin

College of Natural Resources and Life Science, Dong-A University, Busan 604-714, Korea

We have cloned a cDNA encoding the cysteine-rich protein from the mulberry longicorn beetle, *Apriona germari*. In this report, the cloning, sequencing and mRNA expression of an *A. germari* cysteine-rich protein cDNA are described. The *A. germari* cysteine-rich protein cDNA contains an open reading frame of 207 bp encoding 69 amino acid residues. The predicted molecular mass for *A. germari* cysteine-rich protein was approximately 7.6 kDa. The *A. germari* cysteine-rich protein contained six conserved cysteine residues identifiable in other insect cysteine-rich protein. The deduced amino acid sequence of the *A. germari* cysteine-rich protein cDNA is most similar to the longicorn beetle, *Acalolepta luxuriosa*, cysteine-rich protein. Northern blot analysis revealed that the *A. germari* cysteine-rich protein is expressed in the fat body and midgut of *A. germari* larva. Southern blot analysis of the genomic DNA suggested the *A. germari* cysteine-rich protein was a single gene.