Molecular Cloning of a Novel Cuticle Protein cDNA from the Mulberry Longicorn Beetle, *Apriona germari*

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We have cloned a cDNA encoding the cuticle protein from the mulberry longicorn beetle, Apriona germari. In this report, the cloning, sequencing and mRNA expression of an A. germari cuticle protein cDNA are described. The A. germari cuticle protein cDNA contains an open reading frame of 300 bp encoding 100 amino acid residues. The predicted molecular mass for A. germari cuticle protein was approximately 8.7 kDa (AgLCP8.7). AgLCP8.7 contained a type-specific consensus sequence identifiable in other insect cuticle proteins. The deduced amino acid sequence of the A. germari cuticle protein cDNA is most similar to Drosophilla melanogaster ACP65A. Northern blot analysis revealed that the A. germari cuticle protein showed epidermis-specific expression. Southern blot analysis of the genomic DNA suggested the A. germari cuticle protein was a single gene.