

## Proteomic Analysis of the Parasitization Specific Proteins in *Plutella xylostella* Larvae Hemolymph

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Insects defend themselves against foreign invaders such as microorganisms, nematodes and parasites by innate immune responses. *Cotesia plutellae*, endoparasitoid wasp against diamondback moth (DBM), *Plutella xylostella*, overcomes the host defense mechanism via venom, virus and serosal membrane cells called teratocytes but their functions remain to be defined. This study was performed to investigate the differently expressed proteins in parasitized *Plutella xylostella* larvae to find out the parasitism specific proteins. By using powerful technique, two-dimensional polyacrylamide gel electrophoresis (2-D PAGE), we investigated parasitism specific proteins in host hemolymph 4 days after parasitism. About 1000 protein spots were detected in 2-D gels and total 62 spots were determined to have been differentially released in the parasitized DBM larvae. 14 spots were disappeared, 20 spots were down-regulated, 8 spots were newly synthesized, and 20 spots were up-regulated. Our results suggested that these parasitic proteins were related to suppress the innate immune responses from host.