

Gene Expression Patterns Associated with *Nd* (Naked pupa) Mutants in *Bombyx mori* using cDNA Microarrays

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Bombyx mori has been recognized as a model insect. More than 400 visible mutations have been reported and about 200 of them have been assigned to conventional linkage groups. Of them, *Nd* mutants made cocoon layers fragile containing only sericin but no fibroin frequently pupate without forming cocoon. Using cDNA microarrays constructed from 2,446 ESTs, we monitored the gene expression patterns in *Nd* mutants of *Bombyx mori* at 2 time points during larvae stage (day-2 to day-5 fifth instar larvae). Of the 2,446 ESTs on the microarrays, 353 ESTs had significant signals. Differentially expressed genes can be grouped into six categories; 1) genes that are all expressed at two mutants 2) genes that are not expressed at two mutants 3) genes that are expressed at day-2 fifth in two mutants 4) genes that are not expressed at day-5 fifth in two mutants 5) genes that only are expressed at day-2 fifth in *Nd* mutant 6) genes that only are expressed at day-5 fifth in *Nd*-s mutant. Our study identified the expression patterns associated with *Nd* mutant using cDNA microarrays