

ODORANT BINDING GENES OF THE TARNISHED

PLANT BUG, *Lygus lineolaris*

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Abstract

Transcriptome of the tarnished plant bug, *Lygus lineolaris*, was obtained using high-throughput sequencing technologies. Bioinformatics analysis of expressed sequence tags (ESTs) revealed nine novel gene sequences coding for odorant binding proteins. Odorant binding genes bind communication chemicals such as pheromones and transport them to respective receptors. Expression of these odorant binding genes in different tissues was studied using quantitative real time polymerase chain reaction (qRT-PCR). Tissue expression data indicate that these proteins are not limited to antennae of *Lygus lineolaris*.