Identification of effector proteins from generalist herbivore, *Spodoptera*litura using de novo transcriptomics

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Additional files

Additional file 1: Figure S1. Species distribution and similarity percentage of all the potential effector proteins in head and salivary gland against UniProt (Order: Lepidoptera).

Additional file 1: Figure S2. Enriched GO terms.

Additional file 1: Figure S3. Enriched GO terms of potential effector proteins assembled by referenced genome of *S. litura*.

Additional file 1: Figure S4. The enriched COG functions for predicted potential effector proteins in head and salivary gland of *S. litura*.

Additional file 1: Figure S5. The predicted Pfam domains of potential effector proteins that only present in plant fed salivary gland (SGF) of *S. litura*.

Additional file 2: Table S1. Annotation summary of potential effector proteins.

Additional file 3: Table S2. Annotation summary of potential effector proteins (based of reference genome)

Additional file 4: Table S3. The list of KEGG pathways.

Additional file 5: Table S4. The Pfam domains found in the head and salivary gland transcriptome.

Additional file 6: Table S5. Proteins with interesting functions annotated to Pfam and Nr database.

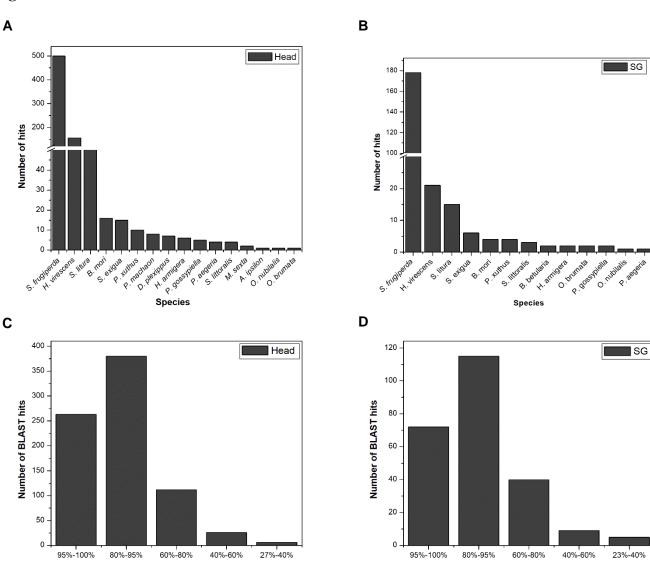
Additional file 7: Table S6. List of proteins functionally annotated to Nr database but with no Pfam domain.

Additional file 8: Table S7. Annotation summary of potential effector proteins (based of Arabidopsis fed *S. litura*).

Additional file 9: Table S8. Primers used for RT-PCR of highly expressed genes in head and salivary gland.

Additional file 10: Figure R1-R17. Raw and unprocessed gel pictures corresponding to Fig 9

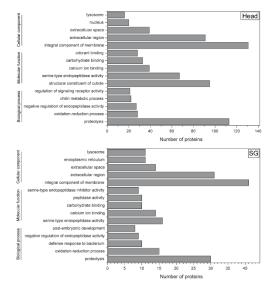
Figure S1



Similarity Percentage

Similarity Percentage

Α



В

Cellular component

SG Head integral component of membraneextracellular region extracellular space endoplasmic reticulumlysosome integral component of membrane ferritin complex extracellular region ■ cytoplasm extracellular space ■ intracellular nucleus cytosol = endoplasmic reticulum lumen endoplasmic reticulum ■ extracellular exosome cytosol ■ intermediate filament collagen trimer ■ late endosome ■ integral component of plasma membrane = nucleus endoplasmic reticulum lumen plasma membrane = fusome apical part of cell ■ membrane autophagosome neuronal cell body ■ cell ■ ribosome chorion = dendrite ■ extracellular matrix 1% 2% 2% 2% 2% Golgi apparatus Golgi membrane secretory granule mitochondrial inner membrane peptidase complex Other cellular components ■ nucleoplasm ■ outer membrane-bounded periplasmic space perivitelline space

preribosome, large subunit precursor
 receptor complex
 Other cellular components

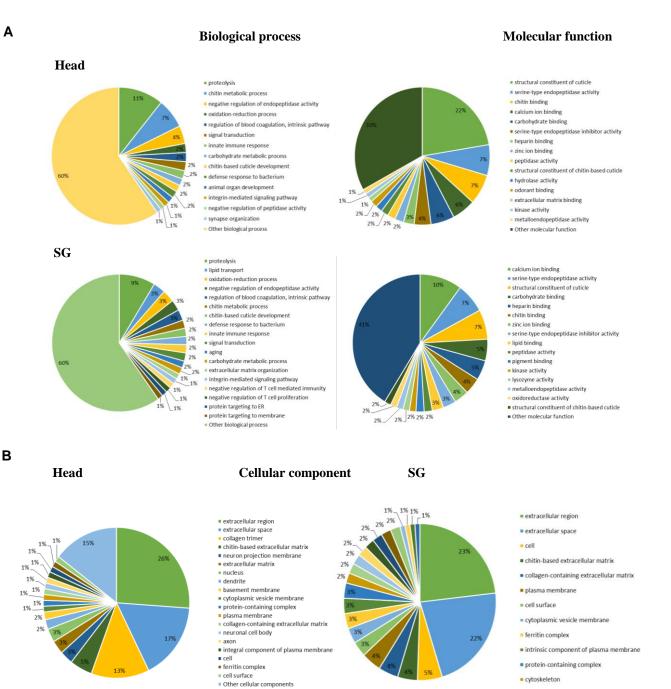
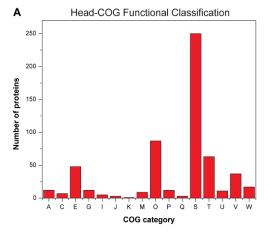
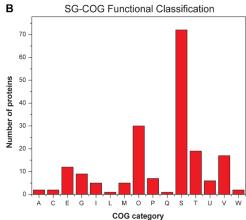


Figure S4





- (A) RNA processing and modification
- (C) Energy production and conversion
- Amino acid transport and metabolism
- (G) Carbohydrate transport and metabolism
- Lipid transport and metabolism (l)
- Replication, recombination and repair
- Cell wall/membrane/envelope biogenesis
- Post-translational modification, protein turnover, and chaperones
- Inorganic ion transport and metabolism
- (Q) Secondary metabolites biosynthesis, transport, and catabolism
- Function unknown
- (T) Signal transduction mechanisms
- (U) Intracellular trafficking, secretion, and vesicular transport
 (V) Defense mechanisms
- (W) Extracellular structures

Figure S5

