**Table S5.** Kegg pathways significantly enriched by heat stress and the combination of heat stress and HF infestation, respectively ($q < 0.05$).

| Term | ID | Input number | Background number | q-value |
|---|---|---|---|---|
| **Pathways up enriched by heat stress (Heat vs CK )** | | | | |
| Protein processing in endoplasmic reticulum | osa04141 | 70 | 203 | 2.77E-22 |
| Galactose metabolism | osa00052 | 20 | 54 | 1.47E-06 |
| Spliceosome | osa03040 | 34 | 196 | 0.000184 |
| Glycosphingolipid biosynthesis - globo series | osa00603 | 6 | 8 | 0.003251 |
| Basal transcription factors | osa03022 | 10 | 41 | 0.026583 |
| **Pathways down enriched by heat stress (Heat vs CK)** | | | | |
| Carbon metabolism | osa01200 | 73 | 225 | 0.038981 |
| Citrate cycle (TCA cycle) | osa00020 | 25 | 50 | 0.017641 |
| Pyruvate metabolism | osa00620 | 33 | 75 | 0.017641 |
| Fatty acid metabolism | osa01212 | 33 | 72 | 0.01433 |
| Fatty acid biosynthesis | osa00061 | 25 | 40 | 0.0025 |
| Biosynthesis of secondary metabolites | osa01110 | 213 | 779 | 0.037688 |
| Biosynthesis of amino acids | osa01230 | 84 | 207 | 0.000409 |
| Cysteine and methionine metabolism | osa00270 | 43 | 85 | 0.001003 |
| Biotin metabolism | osa00780 | 17 | 20 | 0.0025 |
| **Pathways up enriched by the combination of heat stress and HF infestation (HF+Heat vs CK)** | | | | |
| Protein processing in endoplasmic reticulum | osa04141 | 75 | 203 | 7.12E-12 |
| Galactose metabolism | osa00052 | 22 | 54 | 0.00080706 |
| Glutathione metabolism | osa00480 | 25 | 80 | 0.00528206 |
| Phenylpropanoid biosynthesis | osa00940 | 32 | 125 | 0.01135889 |
| Phenylalanine metabolism | osa00360 | 26 | 99 | 0.02207683 |
| Stilbenoid, diarylheptanoid and gingerol biosynthesis | osa00945 | 9 | 18 | 0.03074527 |
| Basal transcription factors | osa03022 | 14 | 41 | 0.03157745 |
| Glycosphingolipid biosynthesis - globo series | osa00603 | 6 | 8 | 0.03218391 |
| Starch and sucrose metabolism | osa00500 | 32 | 145 | 0.0397822 |
| **Pathways down enriched by the combination of heat stress and HF infestation (HF+Heat vs CK)** | | | | |
| Pyruvate metabolism | osa00620 | 57 | 75 | 0.00011171 |
| Fatty acid metabolism | osa01212 | 53 | 72 | 0.00018849 |
| Biosynthesis of amino acids | osa01230 | 112 | 207 | 0.00018849 |
| Carbon metabolism | osa01200 | 118 | 225 | 0.00020306 |
| Citrate cycle (TCA cycle) | osa00020 | 41 | 50 | 0.00020306 |
| Glycolysis / Gluconeogenesis | osa00010 | 71 | 119 | 0.00050205 |
| DNA replication | osa03030 | 34 | 54 | 0.02583402 |
| Cysteine and methionine metabolism | osa00270 | 47 | 85 | 0.02611459 |