

Table S1. List of primers used for the qRT-PCR determination of genes.

| Vectorbase [‡] | Forward primer (5'-3') | Reverse primer (5'-3') |
|-------------------------|---------------------------|--------------------------|
| CPIJ000841 | CTTGATCTGGGCGTGAACA | TTTTCCATGGGCTCCAAAG |
| CPIJ001357 | TCGGGATCGTCATCTTCTTC | GACCGATCGGCAGTGTACG |
| CPIJ002046 | AATTCCGAACCGTCGTCAC | GTAGGTCGCGGCATAGCTC |
| CPIJ003456 | GCACATCCCCGAAGTGTC | CCAGCTGGGCGTAAATGA |
| CPIJ003525 | GGCGTAACGTGGATGTTTCT | ATAAACTTGAACGCCGTTGG |
| CPIJ003531 | ACGAATCGTACGACCTGGAC | CTTCTGGCCAAGCTTCAAAC |
| CPIJ003879 | CAGCTGGCAGTGTTGCTG | TCCAAGTGGACGGCCTTA |
| CPIJ003915 | GACGAGCACGTTACGCTCA | ACGGACCACCAGAGTCACC |
| CPIJ004290 | AAGGCCGTCGATGACTACG | AATCCGTTGACGGGATCAG |
| CPIJ004640 | TTCCAGGTGTCCCTCATCC | TCAGCGCGTTGTAGTTTGG |
| CPIJ004660 | GAACCGATTACCGTCCTG | ATCCACCGCAGAAGTGTCC |
| CPIJ005273 | GAACCGGCTGACGAGAGTC | GCGTCCTTTCCCTCCTTCT |
| CPIJ005473 | CCTGCCGGACAAAGACTAAG | TCGGGGGTTGTTAGTACCAG |
| CPIJ005952 | TACGAGCTGGCCCTTAATCCGTTT | AGACTTTCCGCAGGTGGGTACTTT |
| CPIJ006502 | GTTCCACCACATCCCAACTC | CGGCTCAAACAGATCAGACA |
| CPIJ007079 | ATCCATCATCTCGCCCAAG | TTCAGCTCCAGCAGGGAGT |
| CPIJ007193 | ACGACGCCCAGTATTACGC | ATACTTGCGCAGCATCACG |
| CPIJ007471 | TGGATCTGCTGCGTCTGA | AGCGCCAGTTTGAGTTGC |
| CPIJ008286 | GACCGGGAAGTCAGATCCA | TGCGTTCCAGATGAAGGTG |
| CPIJ008515 | GATCCTCAGCGATCGAAGC | CAGCAGCTCGTTGCACACT |
| CPIJ010190 | AACGCTTCTGCCAGTGTC | AAAACCACATGCCAGCATTC |
| CPIJ011837 | TTATTCCGTTCAAGTGGAGGCACGA | TTCAGCAGTGCTTCAAACCGGAAG |
| CPIJ012470 | TGAACGTCCTTAGGGATGGCGAAA | TTGCTAGTCGCGGAAACGAACTGA |
| CPIJ012707 | CCGACATGGGACCTGTGTA | CTGCATCGCAGCACATTC |
| CPIJ012708 | TCCTGCGTTGCTCCAAAT | GTACCCCGCATTGCAGTC |
| CPIJ012716 | TGCCATCATTCCCTAGCC | AGAAGCACTGCACGAAGCA |
| CPIJ012719 | CTGACCATCGAGCAGCAGA | CGACGGTCTTTTCCCTGGAC |
| CPIJ012721 | CCAAGTGTTTCGTGCGTTG | CCGGTCCGATAGAAGCAC |
| CPIJ013321 | GCAAACCTCTGCTGGGCTATC | CGTGTCCAGGTGCTTGTAGA |
| CPIJ013633 | CCAGGTCTCGTTCCTGCAT | CAGGTAGGGCTTCCACCAG |
| CPIJ015385 | GCCAATCCGTGCTTCAAC | AGGTTCACGGACACCAC |
| CPIJ015960 | AGTGCATTCGGAGGTCCTTCATGT | AGACTTGTCACCAGCTTATCGGCA |
| CPIJ016702 | CAGCAGCAGCAAAAAGTGC | GTGTTCCGACTGGAGACGA |
| CPIJ019052 | GCCTTGATTTCCGGGACTT | CGCCCAGATCTTTGTGCTT |
| CPIJ019581 | CAACTACGAGTGGGGCAAGT | ACTCAAGACGGCAATGATGA |
| CPIJ020018 | TGTCCAAGTTTCGGTTCGAGGCTA | AGGTGATGGCATCCGTTGAGGTAT |
| rRNA | CGCGGTAATTCCAGCTCCACTA | GCATCAAGCGCCACCATATAGG |

[‡]*Cx. quinquefasciatus* genome Johannesburg strain v1.2, www.vectorbase.org

Table S2: Complete list of up- and down-regulated genes for sugar-fed only females for the HAmCq^{G8} strain of *Culex quinquefasciatus* for the initial 72h post-eclosion.

| Time interval | SCOP [†] general function | Gene | Vectorbase anotation [‡] | FPKM* (time 1) | FPKM (time 2) | Fold change | |
|---------------|---|------------|--|--|---------------|-------------|------|
| 2 to 12h | General Information | CPIJ002675 | glutathione S-transferase 1 | 1.0 | 21.8 | 22.5 | |
| | | CPIJ009133 | salivary endonuclease | 3.2 | 94.6 | 29.4 | |
| | Intra-cellular processes | CPIJ001773 | synaptic vesicle protein | 0.2 | 6.3 | 29.0 | |
| | | CPIJ001774 | synaptic vesicle protein | 0.3 | 5.1 | 17.7 | |
| | | CPIJ001775 | synaptic vesicle protein | 0.7 | 21.9 | 31.0 | |
| | | CPIJ008945 | sugar transporter | 2.5 | 25.7 | 10.3 | |
| | | CPIJ008946 | sugar transporter | 3.0 | 34.3 | 11.3 | |
| | | CPIJ017478 | conserved hypothetical protein | 3.4 | 28.0 | 8.3 | |
| | | CPIJ019591 | solute carrier family 2 | 10.8 | 125.7 | 11.6 | |
| | | CPIJ001239 | cathepsin B | 2.0 | 96.0 | 49.2 | |
| | | CPIJ001240 | cathepsin B-like thiol protease | 0.4 | 7.9 | 21.3 | |
| | | CPIJ002595 | zinc carboxypeptidase | 1.3 | 12.5 | 9.4 | |
| | | CPIJ004640 | trypsin 5G1 | 5.7 | 354.0 | 61.8 | |
| | | CPIJ004984 | serine protease1/2 | 1.1 | 29.8 | 26.0 | |
| | | CPIJ005273 | trypsin 2 | 2.7 | 76.8 | 27.9 | |
| | | CPIJ006502 | late trypsin | 3.1 | 324.9 | 104.5 | |
| | | CPIJ007025 | FXa-directed anticoagulant | 1.7 | 43.0 | 24.7 | |
| | | CPIJ008388 | aminopeptidase N | 0.5 | 20.9 | 40.9 | |
| | | CPIJ010521 | serine protease inhibitor dipetalogastin | 0.5 | 7.4 | 13.6 | |
| | | CPIJ011998 | zinc carboxypeptidase A 1 | 2.5 | 23.8 | 9.6 | |
| | | CPIJ012161 | sphingomyelin phosphodiesterase | 1.0 | 42.5 | 42.6 | |
| | | CPIJ014781 | cysteine-rich protease inhibitor | 0.5 | 26.2 | 55.8 | |
| | | CPIJ016348 | serine protease1/2 | 2.5 | 243.5 | 97.7 | |
| | | CPIJ016937 | coagulation factor X | 1.3 | 37.5 | 29.6 | |
| | | CPIJ017414 | trypsin 4 | 0.3 | 19.6 | 68.3 | |
| | | CPIJ017964 | trypsin 7 | 0.3 | 13.0 | 51.6 | |
| | | CPIJ017965 | trypsin 7 | 0.5 | 10.0 | 19.5 | |
| | | CPIJ018871 | salivary apyrase; 5' nucleotidase | 0.6 | 15.0 | 24.2 | |
| | | CPIJ019168 | salivary apyrase | 1.3 | 12.0 | 9.6 | |
| | | Metabolism | CPIJ020192 | trypsin-like salivary secreted protein | 0.4 | 14.6 | 36.0 |
| | | | CPIJ017521 | alpha-amylase I | 5.7 | 180.2 | 31.6 |
| | | | CPIJ011388 | diazepam binding inhibitor | 63.4 | 626.6 | 9.9 |
| | | | CPIJ001082 | cat eye syndrome critical region protein 1 | 3.0 | 36.6 | 12.3 |
| | | | CPIJ005463 | salivary lipase | 1.0 | 13.3 | 12.8 |
| | | | CPIJ006549 | lipase member I | 0.1 | 4.4 | 72.7 |
| | | | CPIJ008977 | pyridoxal phosphate phosphatase | 12.5 | 247.6 | 19.7 |
| | | | CPIJ012882 | argininosuccinate synthase | 1.4 | 20.0 | 14.2 |
| | | | CPIJ016050 | hepatic triacylglycerol lipase | 0.2 | 7.9 | 32.9 |
| | | | CPIJ017178 | myoinositol oxygenase | 14.5 | 155.4 | 10.7 |
| | | | CPIJ018802 | endochitinase A | 0.3 | 4.7 | 16.1 |
| | CPIJ000040 | | UDP-glucuronosyltransferase 2B1 | 2.1 | 51.6 | 24.1 | |
| | CPIJ015713 | | conserved hypothetical protein | 8.8 | 84.8 | 9.6 | |
| CPIJ019044 | 15.3 kDa basic salivary protein | | 1.5 | 67.3 | 46.2 | | |
| CPIJ000294 | cytochrome P450 4C1 | | 3.2 | 25.6 | 8.0 | | |
| CPIJ005952 | cytochrome P450 | | 11.9 | 339.4 | 28.4 | | |
| CPIJ009032 | larval serum protein 2 | | 1.9 | 22.7 | 12.2 | | |
| CPIJ010225 | cytochrome P450 12b1, mitochondrial | | 1.7 | 15.0 | 9.0 | | |
| CPIJ010227 | cytochrome P450 12b1, mitochondrial | | 2.8 | 32.0 | 11.5 | | |
| CPIJ010546 | cytochrome P450 9c1 | | 0.1 | 7.7 | 106.0 | | |
| CPIJ011837 | cytochrome P450 | | 5.1 | 58.3 | 11.4 | | |
| CPIJ011996 | 10-formyltetrahydrofolate dehydrogenase | | 3.4 | 62.5 | 18.3 | | |
| CPIJ012470 | cytochrome P450 9b2 | | 5.6 | 60.9 | 10.9 | | |
| CPIJ019586 | cytochrome P450 6d3 | | 2.2 | 19.2 | 8.7 | | |
| CPIJ019587 | cytochrome P450 6d3 | | 6.3 | 57.8 | 9.1 | | |
| CPIJ020018 | cytochrome P450 6d3 | | 7.1 | 70.8 | 10.0 | | |
| CPIJ000021 | salivary protein | | 5.9 | 135.2 | 23.0 | | |
| CPIJ004030 | venom allergen | | 0.6 | 8.2 | 13.5 | | |
| CPIJ015956 | glycine N-methyltransferase | | 2.2 | 31.1 | 13.9 | | |
| No Annotation | CPIJ000835 | | chymotrypsin-2 | 5.6 | 111.7 | 20.0 | |
| | CPIJ001276 | defensin-A | 18.5 | 154.3 | 8.4 | | |

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|------------|--|-------|--------|-------|
| CPIJ001685 | conserved hypothetical protein | 0.8 | 15.2 | 19.0 |
| CPIJ001686 | conserved hypothetical protein | 0.3 | 11.6 | 39.1 |
| CPIJ002046 | salivary protein | 1.8 | 84.0 | 46.6 |
| CPIJ002089 | salivary protein | 7.8 | 183.4 | 23.6 |
| CPIJ002476 | hypothetical protein | 2.9 | 50.5 | 17.6 |
| CPIJ002532 | sodium-dependent multivitamin transporter | 4.1 | 35.7 | 8.6 |
| CPIJ003019 | conserved hypothetical protein | 1.4 | 21.9 | 15.3 |
| CPIJ003054 | conserved hypothetical protein | 0.1 | 8.0 | 58.9 |
| CPIJ003129 | conserved hypothetical protein | 1.6 | 14.0 | 8.5 |
| CPIJ003456 | uricase | 5.1 | 91.6 | 18.1 |
| CPIJ003468 | hypothetical protein | 151.1 | 3496.9 | 23.1 |
| CPIJ003615 | salivary protein | 21.6 | 368.5 | 17.1 |
| CPIJ003879 | lipid storage droplets surface-binding protein 1 | 22.9 | 239.8 | 10.5 |
| CPIJ004054 | hypothetical protein | 0.2 | 5.9 | 23.9 |
| CPIJ004641 | trypsin | 0.5 | 135.2 | 286.0 |
| CPIJ005906 | conserved hypothetical protein | 2.3 | 41.6 | 17.9 |
| CPIJ005910 | 7.8 kDa basic salivary peptide | 22.7 | 191.1 | 8.4 |
| CPIJ006908 | carboxylesterase-6 | 9.3 | 102.1 | 11.0 |
| CPIJ007079 | trypsin-1 | 70.9 | 928.5 | 13.1 |
| CPIJ007333 | amylase | 2.9 | 65.2 | 22.4 |
| CPIJ007452 | 8.9 kDa basic salivary peptide | 12.0 | 311.6 | 26.0 |
| CPIJ007471 | oskar | 2.1 | 44.9 | 21.7 |
| CPIJ007646 | conserved hypothetical protein | 0.4 | 200.4 | 458.4 |
| CPIJ007741 | conserved hypothetical protein | 5.3 | 42.9 | 8.1 |
| CPIJ007742 | 30.5 kDa secreted protein 30.5k-1 | 3.5 | 40.0 | 11.5 |
| CPIJ007838 | chymotrypsin-2 | 3.4 | 36.4 | 10.8 |
| CPIJ008014 | oxidase/peroxidase | 3.1 | 101.8 | 33.1 |
| CPIJ008032 | conserved hypothetical protein | 0.8 | 7.6 | 9.9 |
| CPIJ008464 | hypothetical protein | 0.3 | 69.0 | 235.6 |
| CPIJ008471 | hypothetical protein | 6.8 | 269.7 | 39.5 |
| CPIJ008479 | 9.7 kDa salivary peptide | 6.4 | 146.7 | 22.9 |
| CPIJ010046 | threonine-rich salivary mucin | 27.5 | 394.3 | 14.3 |
| CPIJ010333 | conserved hypothetical protein | 1.5 | 26.0 | 17.6 |
| CPIJ010337 | hypothetical protein | 2.9 | 1053.0 | 365.9 |
| CPIJ010338 | conserved hypothetical protein | 4.6 | 684.0 | 149.2 |
| CPIJ010339 | conserved hypothetical protein | 1.0 | 173.3 | 182.4 |
| CPIJ010699 | cecropin A | 12.3 | 190.6 | 15.5 |
| CPIJ010772 | 16 kDa salivary peptide | 0.2 | 43.1 | 259.7 |
| CPIJ010773 | 16.8 kDa salivary peptide | 0.2 | 29.5 | 183.0 |
| CPIJ010792 | 16.7 kDa salivary peptide | 0.3 | 10.6 | 33.7 |
| CPIJ011013 | apyrase | 2.8 | 24.5 | 8.8 |
| CPIJ011505 | conserved hypothetical protein | 19.7 | 193.9 | 9.9 |
| CPIJ012056 | sodium-dependent serotonin transporter | 2.5 | 56.8 | 22.4 |
| CPIJ012254 | conserved hypothetical protein | 1.3 | 36.5 | 29.1 |
| CPIJ012707 | wnt inhibitory factor 1 | 3.6 | 108.3 | 30.4 |
| CPIJ012708 | wnt inhibitory factor 1 | 2.2 | 111.2 | 51.0 |
| CPIJ012783 | 7.7 kDa salivary cysteine-rich peptide | 2.0 | 34.5 | 17.6 |
| CPIJ012900 | als | 1.4 | 20.5 | 14.8 |
| CPIJ013450 | hypothetical protein | 0.2 | 5.0 | 20.9 |
| CPIJ013702 | 17.2 kDa salivary peptide | 8.7 | 136.2 | 15.6 |
| CPIJ013705 | conserved hypothetical protein | 13.1 | 127.3 | 9.7 |
| CPIJ013706 | conserved hypothetical protein | 11.0 | 129.7 | 11.8 |
| CPIJ014402 | hypothetical protein | 0.2 | 13.1 | 75.5 |
| CPIJ014545 | short form D7clu32 salivary protein | 1.0 | 13.3 | 13.7 |
| CPIJ014861 | conserved hypothetical protein | 4.8 | 47.8 | 9.9 |
| CPIJ015385 | vitellogenin | 0.3 | 54.3 | 158.5 |
| CPIJ015502 | 16.8 kDa salivary protein | 0.7 | 41.0 | 60.1 |
| CPIJ015613 | galactose-specific C-type lectin | 2.4 | 124.0 | 51.8 |
| CPIJ015614 | galactose-specific C-type lectin | 3.0 | 208.0 | 68.8 |
| CPIJ015615 | salivary C-type lectin | 2.1 | 33.4 | 16.2 |
| CPIJ015774 | 34 kDa salivary secreted protein 34k-2 | 0.3 | 4.8 | 16.8 |
| CPIJ016318 | larval cuticle protein 8.7 | 102.4 | 3783.8 | 37.0 |
| CPIJ016702 | calbindin-32 | 10.9 | 223.0 | 20.5 |
| CPIJ016792 | hypothetical protein | 1.0 | 16.4 | 17.0 |
| CPIJ016936 | Trypsin | 1.3 | 47.5 | 36.7 |

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|--------------------------|------------|--|--------|---------|--------|
| | CPIJ016972 | salivary secreted protein 62k-3 | 1.0 | 14.2 | 14.8 |
| | CPIJ017043 | hypothetical protein | 4.9 | 104.4 | 21.2 |
| | CPIJ017044 | hypothetical protein | 1.9 | 91.3 | 47.5 |
| | CPIJ017687 | conserved hypothetical protein | 4.6 | 81.3 | 17.8 |
| | CPIJ017960 | hypothetical protein | 4.6 | 117.3 | 25.2 |
| | CPIJ018205 | chymotrypsin-2 | 2.2 | 23.0 | 10.3 |
| | CPIJ018773 | hypothetical protein | 8348.3 | 68893.7 | 8.3 |
| | CPIJ018872 | salivary mucin | 0.5 | 18.6 | 37.9 |
| | CPIJ019040 | 15.8 kDa salivary peptide | 12.9 | 313.1 | 24.4 |
| | CPIJ019051 | 16.7 kDa salivary peptide | 0.6 | 63.0 | 104.6 |
| | CPIJ019052 | 13.1 kDa salivary protein | 0.3 | 70.6 | 216.7 |
| | CPIJ019055 | 17.5 kDa salivary peptide | 0.4 | 60.8 | 137.1 |
| | CPIJ019252 | salivary mucin | 0.3 | 32.7 | 96.0 |
| | CPIJ019253 | apyrase | 0.2 | 9.3 | 42.8 |
| | CPIJ019268 | calbindin-32 | 14.8 | 237.5 | 16.0 |
| | CPIJ019284 | hypothetical protein | 6.6 | 116.4 | 17.6 |
| | CPIJ019552 | calbindin-32 | 9.1 | 198.1 | 21.8 |
| | CPIJ019905 | hypothetical protein | 10.5 | 886.2 | 84.7 |
| | CPIJ019944 | hypothetical protein | 9.5 | 132.9 | 14.0 |
| | CPIJ019945 | hypothetical protein | 6.9 | 101.9 | 14.7 |
| Regulation | CPIJ010170 | conserved hypothetical protein | 0.3 | 4.9 | 17.6 |
| | CPIJ010171 | conserved hypothetical protein | 0.1 | 1.3 | 15.5 |
| | CPIJ013451 | zinc finger protein | 0.2 | 6.2 | 26.8 |
| | CPIJ001084 | low molecular weight protein-tyrosine-phosphatase | 2.4 | 35.9 | 14.9 |
| | CPIJ010312 | conserved hypothetical protein | 20.2 | 224.9 | 11.1 |
| | CPIJ009440 | cytoplasmic polyadenylation element binding protein | 0.1 | 4.7 | 32.5 |
| | CPIJ004145 | predicted protein | 1.5 | 18.8 | 12.8 |
| | CPIJ007193 | period circadian protein | 9.1 | 89.2 | 9.9 |
| | CPIJ010788 | conserved hypothetical protein | 12.1 | 98.2 | 8.1 |
| | CPIJ014546 | salivary short D7 protein 4 | 1.0 | 22.9 | 22.3 |
| | CPIJ014550 | long form D7Bclu1 salivary protein | 1.1 | 19.8 | 17.6 |
| | CPIJ014553 | salivary long D7 protein 3 | 5.0 | 57.3 | 11.5 |
| | CPIJ015944 | predicted protein | 0.3 | 8.4 | 30.8 |
| Extra-cellular processes | CPIJ017322 | conserved hypothetical protein | 46.3 | 5.0 | -9.2 |
| General | CPIJ011014 | peptidylglycine alpha-amidating monooxygenase COOH-terminal interactor protein-1 | 18.9 | 2.3 | -8.3 |
| | CPIJ000841 | dimeric dihydrodiol dehydrogenase | 420.9 | 10.6 | -39.7 |
| | CPIJ005895 | conserved hypothetical protein | 15.4 | 1.6 | -9.4 |
| | CPIJ013724 | dimethylaniline monooxygenase | 117.3 | 0.6 | -186.6 |
| | CPIJ017482 | choline dehydrogenase | 76.8 | 3.4 | -22.7 |
| | CPIJ017483 | glucose dehydrogenase | 27.2 | 0.3 | -96.4 |
| | CPIJ017487 | glucose dehydrogenase | 1.7 | 0.1 | -23.8 |
| Intra-cellular processes | CPIJ008515 | cellular retinaldehyde binding protein | 190.2 | 17.4 | -10.9 |
| | CPIJ008722 | conserved hypothetical protein | 90.2 | 9.4 | -9.6 |
| | CPIJ003915 | chymotrypsin 1 | 166.1 | 0.5 | -348.2 |
| | CPIJ004215 | conserved hypothetical protein | 16.5 | 1.2 | -13.6 |
| | CPIJ004659 | trypsin 7 | 5.0 | 0.1 | -57.6 |
| | CPIJ004660 | trypsin 1 | 339.9 | 17.5 | -19.4 |
| | CPIJ012643 | conserved hypothetical protein | 57.1 | 1.4 | -39.5 |
| | CPIJ017794 | 220 kDa silk protein | 13.8 | 1.4 | -9.5 |
| | CPIJ019781 | trypsin 1 | 20.4 | 0.4 | -47.1 |
| | CPIJ011555 | mitochondrial carrier protein | 105.9 | 11.4 | -9.3 |
| Metabolism | CPIJ002066 | alpha-galactosidase A | 23.8 | 1.6 | -15.0 |
| | CPIJ010945 | acidic mammalian chitinase | 43.0 | 3.4 | -12.7 |
| | CPIJ002725 | lipase 1 | 58.4 | 0.9 | -67.8 |
| | CPIJ004802 | endothelial lipase | 3.1 | 0.2 | -15.9 |
| | CPIJ013029 | esterase FE4 | 1.9 | 0.1 | -16.2 |
| | CPIJ011840 | cytochrome P450 | 33.6 | 0.9 | -35.9 |
| | CPIJ011841 | cytochrome P450 | 34.7 | 1.9 | -17.8 |
| | CPIJ015954 | cytochrome P450 | 14.8 | 1.6 | -9.4 |
| | CPIJ015960 | cytochrome P450 4A6 | 152.1 | 14.1 | -10.8 |
| | CPIJ015961 | cytochrome P450 | 37.0 | 2.5 | -15.1 |
| | CPIJ017484 | glucose dehydrogenase | 26.2 | 0.4 | -67.3 |

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|---------------|-------------|----------------------------------|-------------------------------------|----------------------------------|--------|--------|-------|
| No Annotation | CPIJ000499 | hypothetical protein | 10.5 | 0.3 | -30.6 | | |
| | CPIJ001222 | conserved hypothetical protein | 252.2 | 2.0 | -126.7 | | |
| | CPIJ001839 | cuticle protein | 54.4 | 1.0 | -56.9 | | |
| | CPIJ002800 | larval/pupal cuticle protein H1C | 16.4 | 0.5 | -31.9 | | |
| | CPIJ002801 | larval/pupal cuticle protein H1C | 9.3 | 0.5 | -17.6 | | |
| | CPIJ003026 | conserved hypothetical protein | 13.6 | 0.2 | -87.2 | | |
| | CPIJ004287 | conserved hypothetical protein | 22.5 | 2.6 | -8.6 | | |
| | CPIJ004288 | cuticle protein | 8.8 | 0.7 | -13.2 | | |
| | CPIJ004290 | cuticle protein | 249.6 | 7.6 | -32.8 | | |
| | CPIJ004293 | cuticle protein | 88.7 | 2.8 | -31.4 | | |
| | CPIJ004475 | conserved hypothetical protein | 210.1 | 5.1 | -41.3 | | |
| | CPIJ005176 | G12 | 11.3 | 0.3 | -33.1 | | |
| | CPIJ006327 | metalloproteinase | 29.1 | 0.4 | -65.9 | | |
| | CPIJ007055 | SEC14 | 77.9 | 6.1 | -12.9 | | |
| | CPIJ007056 | conserved hypothetical protein | 71.0 | 4.8 | -14.8 | | |
| | CPIJ007448 | conserved hypothetical protein | 12.7 | 0.4 | -28.8 | | |
| | CPIJ008211 | conserved hypothetical protein | 270.1 | 0.8 | -323.1 | | |
| | CPIJ008231 | pupal cuticle protein | 123.2 | 4.3 | -28.9 | | |
| | CPIJ008286 | serine protease | 813.0 | 16.9 | -48.2 | | |
| | CPIJ008659 | metalloproteinase | 15.8 | 0.2 | -95.0 | | |
| | CPIJ008974 | cuticle protein | 28.6 | 0.9 | -32.7 | | |
| | CPIJ009098 | conserved hypothetical protein | 1444.0 | 24.9 | -58.1 | | |
| | CPIJ009099 | conserved hypothetical protein | 1853.0 | 57.2 | -32.4 | | |
| | CPIJ009207 | conserved hypothetical protein | 19.9 | 0.3 | -74.2 | | |
| | CPIJ009585 | hypothetical protein | 143.3 | 0.5 | -265.3 | | |
| | CPIJ011001 | sulfotransferase | 5.0 | 0.3 | -19.1 | | |
| | CPIJ012507 | conserved hypothetical protein | 104.1 | 2.0 | -51.9 | | |
| | CPIJ013663 | elongase | 179.3 | 9.9 | -18.1 | | |
| | CPIJ013764 | cuticle protein 7 | 12.7 | 0.9 | -14.9 | | |
| | CPIJ013765 | cuticle protein 18.6 | 44.4 | 2.0 | -22.5 | | |
| | CPIJ013931 | conserved hypothetical protein | 5.3 | 0.3 | -16.0 | | |
| | CPIJ014435 | hypothetical protein | 89.0 | 0.7 | -120.9 | | |
| | CPIJ014778 | conserved hypothetical protein | 39.4 | 3.0 | -13.1 | | |
| | CPIJ015291 | hypothetical protein | 8.3 | 0.1 | -66.9 | | |
| | CPIJ016716 | conserved hypothetical protein | 59.8 | 4.9 | -12.2 | | |
| | CPIJ017020 | hypothetical protein | 30.9 | 0.1 | -268.6 | | |
| | CPIJ017620 | hypothetical protein | 2100.1 | 8.7 | -240.2 | | |
| | CPIJ017806 | conserved hypothetical protein | 31.1 | 2.2 | -14.3 | | |
| | CPIJ017862 | sulfotransferase | 6.3 | 0.5 | -12.8 | | |
| | CPIJ018582 | pupal cuticle protein | 140.8 | 5.0 | -27.9 | | |
| | CPIJ018910 | conserved hypothetical protein | 64.9 | 5.7 | -11.3 | | |
| | CPIJ019396 | hypothetical protein | 267.8 | 23.7 | -11.3 | | |
| | Regulation | CPIJ012716 | odorant-binding protein | 134.0 | 2.8 | -48.2 | |
| | | CPIJ012719 | general odorant-binding protein 56d | 679.5 | 47.9 | -14.2 | |
| | | CPIJ012721 | odorant-binding protein | 59.0 | 1.0 | -57.7 | |
| | | CPIJ018956 | general odorant-binding protein 56d | 523.0 | 42.4 | -12.3 | |
| | 12 v 24h | Extra-cellular processes | CPIJ018858 | fibrinogen and fibronectin | 4.1 | 70.7 | 17.2 |
| | | | CPIJ002173 | conserved hypothetical protein | 6.2 | 60.0 | 9.6 |
| | | | CPIJ014105 | galactose-specific C-type lectin | 1.7 | 24.1 | 13.8 |
| | Information | Intra-cellular processes | CPIJ017289 | conserved hypothetical protein | 0.0 | 3.5 | N/C* |
| | | | CPIJ000214 | serpin B10 | 9.2 | 122.6 | 13.3 |
| | Metabolism | | CPIJ005273 | trypsin 2 | 76.8 | 7233.8 | 94.2 |
| | | | CPIJ011998 | zinc carboxypeptidase A 1 | 23.8 | 321.9 | 13.5 |
| | | | CPIJ014254 | chymotrypsin B1 | 0.4 | 11.6 | 29.0 |
| | | | CPIJ015161 | chymotrypsin 1 | 0.1 | 24.6 | 172.0 |
| | | | CPIJ015162 | serine-type endopeptidase | 0.1 | 9.7 | 86.6 |
| | | | CPIJ017414 | trypsin 4 | 19.6 | 368.2 | 18.8 |
| | | | CPIJ017964 | trypsin 7 | 13.0 | 110.5 | 8.5 |
| | | | CPIJ017575 | low-density lipoprotein receptor | 12.7 | 120.0 | 9.4 |
| | | | CPIJ002715 | lipase 3 | 0.4 | 9.8 | 23.4 |
| CPIJ001886 | | | cytochrome P450 4C1 | 0.0 | 2.9 | 66.5 | |
| No Annotation | | CPIJ006840 | CD109 antigen | 0.4 | 4.7 | 10.9 | |
| | | CPIJ000529 | conserved hypothetical protein | 0.1 | 3.5 | 60.6 | |
| | | CPIJ000835 | chymotrypsin-2 | 111.7 | 4177.6 | 37.4 | |

| | | | | | |
|--------------------------|--------------------------|---|--------|-------|--------|
| | | CPIJ001237 conserved hypothetical protein | 3.2 | 32.4 | 10.0 |
| | | CPIJ004491 sodium/potassium/calcium exchanger 3 | 1.9 | 16.9 | 9.0 |
| | | CPIJ005637 conserved hypothetical protein | 0.0 | 0.1 | 0.0 |
| | | CPIJ006087 sodium/solute symporter | 1.3 | 15.1 | 11.9 |
| | | CPIJ008023 olfactory receptor | 0.1 | 3.9 | 35.5 |
| | | CPIJ012164 conserved hypothetical protein | 0.1 | 16.4 | 177.5 |
| | | CPIJ014969 caldecrin | 2.4 | 33.1 | 13.7 |
| | | CPIJ015718 arginase | 2.1 | 18.6 | 9.0 |
| Regulation | | CPIJ015936 hypothetical protein | 0.7 | 6.9 | 10.4 |
| Extra-cellular processes | | CPIJ011368 f-box/lrr protein | 69.9 | 2.1 | -32.9 |
| Intra-cellular processes | | CPIJ000521 sodium-dependent phosphate transporter | 4.2 | 0.3 | -12.5 |
| | | CPIJ010466 laccase-like multicopper oxidase 1 | 6.8 | 0.6 | -12.3 |
| | | CPIJ016802 laccase-like multicopper oxidase 1 | 9.7 | 0.9 | -10.4 |
| | | CPIJ011997 zinc carboxypeptidase A 1 | 68.8 | 1.2 | -56.8 |
| | | CPIJ012680 ADAM 12 | 23.8 | 2.1 | -11.2 |
| | | CPIJ016937 coagulation factor X | 37.5 | 3.8 | -9.9 |
| Metabolism | | CPIJ000679 conserved hypothetical protein | 142.5 | 14.0 | -10.1 |
| | | CPIJ000680 conserved hypothetical protein | 384.3 | 19.9 | -19.3 |
| | | CPIJ007603 conserved hypothetical protein | 325.4 | 25.3 | -12.8 |
| | | CPIJ010945 acidic mammalian chitinase | 3.4 | 0.3 | -10.6 |
| | | CPIJ012316 conserved hypothetical protein | 30.6 | 3.6 | -8.6 |
| | | CPIJ005936 carbonic anhydrase II | 9.9 | 0.2 | -43.7 |
| | | CPIJ006311 conserved hypothetical protein | 56.7 | 6.3 | -9.0 |
| | | CPIJ011837 cytochrome P450 | 58.3 | 3.4 | -17.0 |
| No Annotation | | CPIJ000641 salivary asparagine-rich mucin | 134.3 | 1.7 | -79.1 |
| | | CPIJ001605 pro-resilin | 37.8 | 1.6 | -23.2 |
| | | CPIJ002016 conserved hypothetical protein | 19.2 | 2.2 | -8.9 |
| | | CPIJ003019 conserved hypothetical protein | 21.9 | 0.8 | -27.8 |
| | | CPIJ003030 adult cuticle protein | 13.2 | 0.2 | -57.7 |
| | | CPIJ003473 cuticle protein | 337.4 | 16.8 | -20.1 |
| | | CPIJ003474 cuticle protein | 1824.0 | 129.9 | -14.0 |
| | | CPIJ005336 conserved hypothetical protein | 23.8 | 1.7 | -14.0 |
| | | CPIJ006195 hypothetical protein | 16.2 | 0.5 | -33.3 |
| | | CPIJ006794 conserved hypothetical protein | 141.5 | 15.8 | -9.0 |
| | | CPIJ006796 conserved hypothetical protein | 124.6 | 13.6 | -9.2 |
| | | CPIJ006797 conserved hypothetical protein | 196.3 | 20.1 | -9.8 |
| | | CPIJ008231 pupal cuticle protein | 4.3 | 0.3 | -13.7 |
| | | CPIJ008489 conserved hypothetical protein | 65.9 | 6.4 | -10.3 |
| | | CPIJ009100 conserved hypothetical protein | 586.3 | 21.4 | -27.4 |
| | | CPIJ009334 conserved hypothetical protein | 113.3 | 2.3 | -48.9 |
| | | CPIJ010338 conserved hypothetical protein | 684.0 | 55.7 | -12.3 |
| | | CPIJ010705 conserved hypothetical protein | 32.8 | 2.2 | -14.9 |
| | | CPIJ012090 actin | 373.3 | 24.4 | -15.3 |
| | | CPIJ012641 pupal cuticle protein | 18.6 | 0.5 | -34.8 |
| | | CPIJ012973 conserved hypothetical protein | 5.6 | 0.4 | -15.1 |
| | | CPIJ013278 conserved hypothetical protein | 31.8 | 0.6 | -52.8 |
| | | CPIJ013783 pupal cuticle protein | 31.9 | 1.7 | -19.3 |
| | | CPIJ013785 conserved hypothetical protein | 828.9 | 2.6 | -321.8 |
| | | CPIJ015249 hypothetical protein | 12.0 | 1.4 | -8.4 |
| | | CPIJ015250 hypothetical protein | 61.0 | 5.3 | -11.5 |
| | | CPIJ016655 conserved hypothetical protein | 733.3 | 45.9 | -16.0 |
| | | CPIJ016702 calbindin-32 | 223.0 | 22.7 | -9.8 |
| | | CPIJ016842 conserved hypothetical protein | 16.4 | 1.2 | -13.6 |
| | | CPIJ017736 conserved hypothetical protein | 184.0 | 16.8 | -11.0 |
| | | CPIJ017876 cuticle protein | 306.8 | 13.5 | -22.7 |
| | | CPIJ019699 structural contituent of cuticle | 145.7 | 11.3 | -12.9 |
| | | CPIJ019849 conserved hypothetical protein | 13.9 | 1.5 | -9.5 |
| | | CPIJ019982 conserved hypothetical protein | 10.7 | 0.9 | -11.5 |
| Regulation | | CPIJ000274 conserved hypothetical protein | 28.1 | 1.8 | -15.3 |
| | | CPIJ011799 conserved hypothetical protein | 15.7 | 1.7 | -9.2 |
| 24 v 36h | Extra-cellular processes | CPIJ000931 conserved hypothetical protein | 12.6 | 1.3 | -9.7 |
| | | CPIJ011371 f-box/lrr protein | 23.1 | 1.8 | -12.8 |
| | Information | CPIJ017289 conserved hypothetical protein | 3.5 | 0.0 | 0.0 |
| | Intra-cellular processes | CPIJ000214 serpin B10 | 122.6 | 4.4 | -27.9 |

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|--------------------------|--------------------------|--------------------------|------------------------------------|--------------------------------|------|--------|-------|
| No Annotation | | CPIJ003470 | hypothetical protein | 2549.0 | 37.8 | -67.5 | |
| | | CPIJ003473 | cuticle protein | 16.8 | 0.5 | -31.9 | |
| | | CPIJ003474 | cuticle protein | 129.9 | 2.4 | -53.9 | |
| | | CPIJ003476 | cuticle protein | 1099.5 | 17.3 | -63.7 | |
| | | CPIJ003477 | cuticle protein | 1043.6 | 16.9 | -61.7 | |
| | | CPIJ009100 | conserved hypothetical protein | 21.4 | 1.7 | -13.0 | |
| | | CPIJ009101 | hypothetical protein | 80.5 | 6.0 | -13.4 | |
| | | CPIJ009111 | conserved hypothetical protein | 50.0 | 5.2 | -9.6 | |
| | | CPIJ012090 | actin | 24.4 | 2.5 | -9.8 | |
| | | CPIJ017874 | hypothetical protein | 490.3 | 9.7 | -50.5 | |
| | | CPIJ017875 | hypothetical protein | 1222.8 | 30.2 | -40.5 | |
| | | CPIJ018642 | pupal cuticle protein | 80.3 | 8.5 | -9.4 | |
| | | CPIJ018939 | oxidoreductase | 0.1 | 0.0 | 0.0 | |
| | 36 v 48h | Metabolism | CPIJ006495 | conserved hypothetical protein | 2.3 | 21.0 | 9.2 |
| Intra-cellular processes | | CPIJ000990 | cytosol aminopeptidase | 6.6 | 0.1 | -79.3 | |
| | | CPIJ002595 | zinc carboxypeptidase | 19.0 | 0.1 | -170.8 | |
| | | CPIJ003539 | cytosol aminopeptidase | 6.2 | 0.0 | -146.0 | |
| Metabolism | | CPIJ004028 | venom allergen 3 | 14.2 | 0.4 | -36.0 | |
| No Annotation | | CPIJ007077 | trypsin-4 | 9.5 | 0.4 | -26.2 | |
| | | CPIJ010092 | ficolin-3 | 15.2 | 0.3 | -44.5 | |
| | | CPIJ010778 | conserved hypothetical protein | 6.1 | 0.6 | -10.5 | |
| | | CPIJ011171 | LWamide neuropeptides | 47.7 | 0.3 | -178.1 | |
| | | CPIJ011620 | conserved hypothetical protein | 1.4 | 0.0 | -63.2 | |
| | | CPIJ016384 | conserved hypothetical protein | 12.2 | 0.2 | -56.0 | |
| Regulation | | CPIJ015944 | predicted protein | 18.2 | 0.3 | -57.2 | |
| 48 v 60h | | Intra-cellular processes | CPIJ000990 | cytosol aminopeptidase | 0.1 | 2.3 | 27.2 |
| | | | CPIJ002595 | zinc carboxypeptidase | 0.1 | 18.2 | 163.7 |
| | | CPIJ003539 | cytosol aminopeptidase | 0.0 | 3.0 | 70.3 | |
| | Metabolism | CPIJ014185 | conserved hypothetical protein | 1.0 | 14.8 | 15.0 | |
| | | CPIJ004028 | venom allergen 3 | 0.4 | 12.6 | 31.9 | |
| | No Annotation | CPIJ007077 | trypsin-4 | 0.4 | 9.6 | 26.5 | |
| | | CPIJ010092 | ficolin-3 | 0.3 | 9.0 | 26.5 | |
| | | CPIJ011171 | LWamide neuropeptides | 0.3 | 38.8 | 144.9 | |
| | | CPIJ016384 | conserved hypothetical protein | 0.2 | 15.0 | 68.8 | |
| | Regulation | CPIJ015944 | predicted protein | 0.3 | 7.7 | 24.1 | |
| 60 v 72h | Intra-cellular processes | CPIJ002595 | zinc carboxypeptidase | 18.2 | 2.2 | -8.4 | |
| | Metabolism | CPIJ009796 | lipoprotein lipase | 5.0 | 0.4 | -12.0 | |
| | No Annotation | CPIJ001231 | conserved hypothetical protein | 10.7 | 0.2 | -53.7 | |
| | | CPIJ015506 | hypothetical protein | 60.2 | 3.0 | -19.9 | |
| | | CPIJ016394 | nuclear pore complex protein Nup93 | 0.4 | 0.0 | -23.7 | |

[†]Structural Classification of Proteins (SCOP) database for the *Culex quinquefasciatus* database (v1.73).
<http://supfam.cs.bris.ac.uk/SUPERFAMILY/>

[‡]Vectorbase annotation for the Johannesburg strain of *Cx. quinquefasciatus* JHBv1.2.

<http://www.vectorbase.org/>

*[Paired end] Fragments Per Kilo bases of gene length per Million RNA-Seq reads mapped. Time 1 and 2 represent the earlier and later time points in the comparison, respectively.

**N/C= Not calculable