**Table S2. Ant PC2 top 20 genes, ranked by loading value in descending order (0.098 - 0.054). Column “Homolog” refers to presence of a homolog between the current C. floridanus assembly and proteins annotated in de Bekker et al. (2015) with corresponding RNAseq data displaying similar patterns to our study. Comments related to putative functions are from Uniprot (Bateman 2019) and Interpro (Finn et al. 2017).**

|  |  |  |  |
| --- | --- | --- | --- |
| **BLAST** | **PFAM** | **Homolog** | **Comments** |
| NA | NA | no |  |
| NA | NA | no |  |
| uncharacterized LOC105253145 | PF00135|Carboxylesterase family | no |  |
| uncharacterized LOC105254189 | PF13639|Ring finger domain | yes |  |
| cytochrome P450 9e2 | PF00067|Cytochrome P450 | no |  |
| sialin | NAPF07690|Major Facilitator Superfamily | yes |  |
| uncharacterized LOC105251735 | NA | yes |  |
| pheromone-binding protein Gp-9-like | PF01395|PBP/GOBP family | no | Odorant binding |
| NA | NA | no |  |
| uncharacterized LOC112639471 | PF15430|Single domain von Willebrand factor type C | no | Response to infection and changes in nutritional status, especially in arthropods. |
| protein CREG1 | PF13883|Pyridoxamine 5'-phosphate oxidase | no  | Control of cell growth and apoptosis |
| defensin | PF01097|Arthropod defensin | no | Arthropod immunity, especially against bacteria |
| uncharacterized LOC112639414 | PF01395|PBP/GOBP family | no | Odorant binding |
| 2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial-like | PF00155|Aminotransferase class I and II | no |  |
| uncharacterized LOC105255569 | PF13445|RING-type zinc-finger, PF00240|Ubiquitin family | no |  |
| regucalcin | PF08450|SMP-30/Gluconolactonase/LRE-like region | no | Modulates calcium dependent processes and signaling |
| ankyrin-1 | PF07525|SOCS box, PF00023|Ankyrin repeat, PF12796|Ankyrin repeat  | yes |  |
| protein CREG1 | PF13883|Pyridoxamine 5'-phosphate oxidase | yes | Control of cell growth and apoptosis |
| cytochrome P450 4C1-like | PF00067|Cytochrome P450 | no | JH interacting, starvation response (Lu *et al.* 1999) |
| WEB family protein At4g27595, chloroplastic | NA | no | Most BLAST results lacked meaningful annotations |

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Finn, R. D., T. K. Attwood, P. C. Babbitt, A. Bateman, P. Bork *et al.*, 2017 InterPro in 2017––beyond protein family and domain annotations. Nucleic Acids Res. 45: D190–D199.

Lu, K.-H., J. Y. Bradfield, and L. L. Keeley, 1999 Juvenile hormone inhibition of gene expression for cytochrome P4504C1 in adult females of the cockroach, *Blaberus discoidalis*. Insect Biochem. Mol. Biol. 29: 667–673.