

## **Supplementary Materials S1**

Effects of flupyradifurone and two reference insecticides, commonly used in toxicological studies, on the larval proteome of the honey bee *Apis mellifera*

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### **S1-Supplementary peptide data**

Matched peptides of five proteins after 2D-gelelectrophoresis and identification via LC/MS.

1 - Matched peptides for **3-Ketoacyl-CoA thiolase** are shown in **bold red**.

1 MSLVTK**GIFI VAAKRTPFGS FGGK**FMNK**NA TDL**S**VIAAKS** ALQSAKLNPE  
51 KVDNVIFGHV LPISSDGGF LTRHVALK**SG IPLEKPSFSL** NRLCGSGFQS  
101 IVSGAQSILL GESKIVLTGG VENMSQVPFS VRNIRFGTSL GQKYQFEDSL  
151 WLGFSPTYCN LSMGETAEK**L GSQYNLKRQE VDEF**ALRSQQ LWKAANDAGR  
201 **FNEEIAPVTI TVKKQDIVVN TDEHPRPQT**L**QNL**SKLPS**I FKKD**GLVTAG  
251 SSSGISDGAG VIILASEEVI **KTEQLTPLAR** LVGYSVVGVE PSIMGIGVPV  
301 AIQKLLKITN KTLNDIELIE INEAFGSQTL ACVKELKLDI NK**LNVDGGSI**  
351 **ALGHPLAASG SRITAH**L**VHE LRRR**KTGSLG IGSACIGGGQ GIALMIEAL

2 - Matched peptides for **major royal jelly protein 2** are shown in **bold red**.

1 MTRWLFMVAC LGIACQGAIV RENSPRNLEK SLNVIHEWKY FDYDFGSEER  
51 RQAAIQSGEY DHTKNYPFDV DQWRDK**TFVT ILRYDGV**P**ST LN**VISGKTGK  
101 GGRLLPYPD WSFAEFKDCS KIVSAFK**IAI DKFDR**LWVLD SGLVNRTVPV  
151 CAPK**LHVFDL** KTSNHLKQIE IPHDI AVNAT TGKGGLVSLA VQAIDLANTL  
201 VYMADHK**GDA LIVYQNADDS FHRLTSNTFD YDPRYAK**MT**I DGE**SFTLKNG  
251 ICGMALSPVT NNLYYSPLAS HGLYYVNTAP FMK**SQFGENN VQYQ**GS**EDIL**  
301 **NTQSLAK**AVS KNGVLFVGLV GNSAVGCWNE HQSLQR**QNLE MVAQ**NDRT**LQ**  
351 **MIAGMKI**KKEE LPHFVGSNKP VKDEYMLVLS NRMQKIVNDD FNFDDVNFRI  
401 LGANVKELIR NTHCVNNNQDN IQNTNNQN DNNQKNNKKN ANNQKNNNQDN  
451 DN

3 - Matched peptides for **glutathione S-transferase S1-like** are shown in *bold red*.

1 MTERQPLYKL IYFNARGRAE HIRYIFAYAG IDYVDERILK ECWPELKKS  
51 PYGMLPVL EI NGKPIAQSN VARYLARKHN LTGRDEWEAM MCDVLVDTLG  
101 DLKQFISQYR IEEDLFKKKE KKMKLLKETI PFYLNKFEQI ISENGSYTVG  
151 TTTTWADFVF AVALENFENI FGTMALENYP GLRALKKRVH EIPSIVNWLS  
201 KRPHTFEGRV LLLFHFTNLI RNFYLYSKMS TYK**LTYFPVK GLGEP**IRFL  
251 **SYAGISFEDE RFD**RDDWP**KI KPTT**PF**GQVP VLDVDG**KKIA Q**SVAIS**RYLA  
301 **KKSG**LAGKDD **WEA**LEIDSIV **DTI**HDV**RARL AAF**HYEENE**E IKA**AKRK**IA**D  
351 **EVV**PYYLERL **DAQ**VKNNGGY FVG**GAL**SWAD LSFVALLDYL NFMNGSD**LIE**  
401 **KYD**NLK**Q**LKE **KVL**NLPAIKS **WLD**KRPH**SDF**

4 - Matched peptides for **retinal dehydrogenase 1** are shown in *bold red*.

1 MKMNRKIDIK **YTQ**LFINNNF **VDS**VSGKK**F**S **TIN**PADGSVI **AEI**SEGD**KAD**  
51 **V**DKAVAAAKE AFSRKS**KWRT MDASVRGNLM NK**FAD**LI**ARD **LEY**IATLE**TL**  
101 **D**NGK**TYS**DAL **FDI**EASIQ**TI R**YASWCDKI **FGD**TIPADGN **LIS**TRKEPV  
151 GVV**GQ**IIPWN YPFLMLAW**KW SP**ALATGCTI **VLK**PAEQ**TPL SAL**YAAALAK  
201 **EAG**FP**P**GVIN **VIT**GYGPTAG **AAI**AEHPEIN **KIA**FTG**STEV** **GHL**IMAASAK  
251 SNLK**RVS**LEL **G**GKS**PL**VIFD **DVD**IK**EAAEI AF**NAIFAN**HG Q**NCCAGS**RTF**  
301 **VHAKI**YDQ**FV NHAK**QLASQR **KVG**DPFN**SET Q**QGPQIDEEM **FHK**VLSLIK**S**  
351 **GQ**EEGAV**LET G**GERHGN**VG**Y **FIK**PTVFSNV **TDT**MRIAK**EE I**FGPVQ**SILK**  
401 **FET**MDEVIER **AN**NTNYGLAA **G**VVTKNIDKA **LIF**AQAVEAG **SVW**INCYDAI  
451 TPQTPFGG**FK QSGIG**RELGA **EGL**KEYLE**TK** TISIKVSNN

5 - Matched peptides for **14-3-3 protein zeta** shown in *bold red*.

1 MSVDKEELVQ RAK**LAE**QAER **YDD**MAAAMKA **VTET**GVELSN **EERN**LLSVAY  
51 **K**NVVGARRSS **WR****VISSIEQK** **TEG**SERKQ**QM A**KEYREKVEK **ELR**EICYDVL  
101 **G**LLDKYLIPK **ASNAESKVFY LKM**KGDYYRY **LA**EVATGETR **NAV**VDDS**QKA**  
151 **YQ**DAFEISK**S KM**QPT**HIRL GL**ALNFSVFY **YEIL**NSPDKA **CQ**LAK**QAF**DD  
201 **AIA**ELDTLNE **DSY**KDSTLIM **QLLR**DNLT**LW T**SDTQGD**ADE A**QEGGD**N**