

**Supplementary Table 3:** Differential expression of spermathecae genes at two time points (3 and 6 hours) post-mating.

3 hour to Virgin array comparison						6 hour to Virgin array comparison						6 hour to 3 hour array comparison***					
Affy ID	Gene Symbol	FC	regulation	q- value		Affy ID	Gene Symbol	FC	regulation	q- value		Affy ID	Gene Symb	FC	regulation	q- value	
1627119_at	CG8329	22.21	up	0.01		1627119_at	CG8329	14.09	up	0.03		1625795_a_at	CG3394	3.09	up	0.19 **	
1640217_at	CG30154	14.92	up	0.00		1629118_at	PGRP-SC2	9.28	up	0.01		1623744_at	CG30411	2.96	up	0.19 **	
1637833_at	Jhe	14.79	up	0.04		1628177_at	jhamt	7.38	up	0.07		1627808_at	CG13011 //	2.04	up	0.25 **	
1629969_at	CG11426	11.93	up	0.01		1637833_at	Jhe	7.18	up	0.10		1631222_at	pdm3	5.01	down	0.14 **	
1639704_at	CG14695	9.70	up	0.10		1629969_at	CG11426	6.10	up	0.03		1640217_at	CG30154	3.48	down	0.05	
1637338_at	CG12517	9.63	up	0.04		1626144_at	CG7763	6.06	up	0.03		1633463_s_at	CG30463	3.36	down	0.20 **	
1629118_at	PGRP-SC2	8.49	up	0.01		1631394_at	CG31324	4.68	up	0.07		1629398_at	CG10383	3.19	down	0.16 **	
1626144_at	CG7763	7.11	up	0.02		1633812_at	CG9080	4.31	up	0.03		1629322_at	Pde6	3.04	down	0.24 **	
1631394_at	CG31324	6.98	up	0.03		1640217_at	CG30154	4.28	up	0.00		1628215_s_at	kuz	2.86	down	0.19 **	
1628177_at	jhamt	6.34	up	0.07		1626222_at	Ser8	3.66	up	0.08		1631244_a_at	Pabp2	2.76	down	0.16 **	
1624210_at	CG32699	4.65	up	0.02		1633208_at	---	3.60	up	0.10		1641037_at	CG32702	2.63	down	0.16 **	
1637814_s_at	Jafrac2	4.43	up	0.00		AFFX-r2-Dros	---	3.35	up	0.01		1635173_at	pgant5	2.18	down	0.19 **	
1623247_at	CG10420	4.16	up	0.04		1633765_at	asparagine-synth	3.23	up	0.09		1637814_s_at	Jafrac2	2.05	down	0.16 **	
1641117_a_at	CG17600	4.14	up	0.03		1634158_at	CG6164	3.18	up	0.06							
1637541_at	Fs	4.10	up	0.06		1624590_at	CG17134	3.15	up	0.07							
1640509_s_at	lama	3.97	up	0.03		1627837_at	CG5527	3.03	up	0.05							
1626456_at	l(1)G0320	3.88	up	0.04		1627872_at	CG3770	3.01	up	0.04							
1637430_s_at	CG1572	3.87	up	0.03		1634503_at	CG15695	2.91	up	0.01							
1631244_a_at	Pabp2	3.85	up	0.01		1634522_s_at	Paps	2.89	up	0.06							
1631783_at	CG4267	3.82	up	0.03		1630088_at	CG16743 /// Dya	2.83	up	0.06							
1639719_at	Pabp2	3.76	up	0.03		1636507_at	vanin-like	2.76	up	0.04							
1634522_s_at	Paps	3.62	up	0.03		1630827_s_at	---	2.57	up	0.06							
1628594_at	rut	3.57	up	0.07		1625153_at	p24-2	2.48	up	0.07							
1629396_a_at	CG8486	3.45	up	0.02		1626163_s_at	Act5C	2.46	up	0.02							
1638462_at	CG18088	3.44	up	0.04		1623051_at	CG18125	2.46	up	0.00							
1640884_at	CG15784	3.35	up	0.09		1641563_at	CG8286	2.41	up	0.04							
1632964_at	CG15678	3.34	up	0.07		1626196_at	CaBP1	2.40	up	0.00							
1628536_s_at	CG11880	3.30	up	0.02		1628536_s_at	CG11880	2.40	up	0.05							
1632317_at	CG3036	3.21	up	0.06		1625569_at	CG7565	2.40	up	0.09							
1629705_at	CG6084 /// Dyal	3.15	up	0.07		1639111_at	CG15362	2.37	up	0.04							
1624042_at	Gprk2	3.12	up	0.06		1637125_at	CG2004	2.33	up	0.03							
1630119_s_at	norpA	2.99	up	0.04		1624802_at	CG31686	2.31	up	0.00							
1628240_at	CG4825	2.94	up	0.10		1636591_at	skpB	2.31	up	0.04							
1624191_at	cmet	2.88	up	0.02		1623486_at	CG7900	2.29	up	0.04							
1633765_at	asparagine-synth	2.80	up	0.10		1641646_at	Spase22-23	2.25	up	0.09							
1631222_at	pdm3	2.73	up	0.05		1626871_at	icln	2.24	up	0.10							
1631953_at	CG30375	2.71	up	0.07		1636572_at	Duox	2.23	up	0.04							
1630865_s_at	CG11337	2.69	up	0.04		1636037_at	CG31195	2.19	up	0.09							
1624590_at	CG17134	2.67	up	0.08		1637814_s_at	Jafrac2	2.17	up	0.03							
1629322_at	Pde6	2.62	up	0.06		1634773_at	SsRbeta	2.17	up	0.04							
1627434_at	CG5741	2.62	up	0.04		AFFX-r2-Dros	---	2.16	up	0.03							
1641037_at	CG32702	2.60	up	0.02		1624863_a_at	CG8042	2.16	up	0.06							

\*\*\*these genes had q-values greater than the acceptance level.

1623051_at	CG18125	2.57	up	0.00	1625271_at	CG15438	2.16	up	0.04
1624802_at	CG31686	2.56	up	0.00	1638663_at	Sec61alpha	2.14	up	0.03
1628215_s_at	kuz	2.55	up	0.05	1623356_at	CG11999	2.12	up	0.03
1625563_s_at	CG14253	2.52	up	0.04	AFFX-Dros-A---		2.12	up	0.08
1633463_s_at	CG30463	2.48	up	0.08	1636902_at	CG1840	2.08	up	0.04
1627872_at	CG3770	2.48	up	0.04	1631245_s_at	CG9706	2.07	up	0.06
1623692_s_at	rho-4	2.43	up	0.08	1636280_s_at	CG12360	2.05	up	0.05
1636576_s_at	norpA	2.42	up	0.03	1633661_at	CG11377	2.03	up	0.05
1623761_at	CG15347 /// Dya	2.42	up	0.03	1624181_at	CG8062 /// Dmir	2.02	up	0.03
1629650_at	CG3248	2.40	up	0.04	1638344_at	CG5287	2.02	up	0.03
1626079_a_at	CG2201	2.39	up	0.07	1623458_at	CG14899 /// Dbt	2.01	up	0.07
1631205_a_at	CG6084 /// Dyak	2.36	up	0.03	1637650_at	CG4164	2.01	up	0.05
1627840_a_at	zip	2.35	up	0.09	1635450_a_at	smp-30	8.37	down	0.04
1641563_at	CG8286	2.35	up	0.03	1627182_at	CG13299	7.42	down	0.07
1641504_s_at	wdp	2.34	up	0.02	1625312_at	CG10553	6.71	down	0.06
1632824_at	Fs	2.34	up	0.07	1636268_at	CG10570 /// Dya	6.54	down	0.08
1636037_at	CG31195	2.34	up	0.06	1636973_at	smp-30	6.40	down	0.04
1635321_at	CG14688	2.33	up	0.05	1623851_at	CG9400	6.34	down	0.06
AFFX-r2-Dros---		2.31	up	0.03	1629819_s_at	Sema-2a	4.32	down	0.08
1633354_at	Cyp6v1	2.29	up	0.04	1625434_at	CG3270	4.29	down	0.05
1632865_s_at	CG12974	2.27	up	0.10	1626291_at	CG9036 /// Dsect	4.06	down	0.04
1635547_a_at	Aats-trp	2.27	up	0.03	1635336_at	comm2	3.92	down	0.02
1636505_at	CG15083	2.26	up	0.06	1632478_a_at	Pkc53E	3.37	down	0.07
1623158_s_at	rho-4	2.25	up	0.10	1641191_s_at	Ugt36Bc	3.33	down	0.04
1629398_at	CG10383	2.24	up	0.08	1639069_at	Cyp12d1-d	3.30	down	0.06
1633812_at	CG9080	2.24	up	0.08	1623777_s_at	CG1358	3.28	down	0.09
1634722_s_at	mbf1	2.24	up	0.03	1636888_a_at	Aph-4	3.27	down	0.05
1632928_at	CG9523	2.20	up	0.03	1635210_a_at	Ppn	3.27	down	0.04
1624547_s_at	B52	2.18	up	0.02	1640350_at	fau	3.15	down	0.10
1634124_at	CG30428	2.15	up	0.10	1632490_at	CG8008	3.03	down	0.06
1638511_at	Aats-trp	2.15	up	0.02	1638128_at	CG30280	2.97	down	0.06
1625042_at	CG31288	2.13	up	0.06	1639232_s_at	SP1029	2.92	down	0.08
1639111_at	CG15362	2.12	up	0.04	1625023_a_at	nAcRbeta-21C	2.90	down	0.09
1623787_at	CG7144	2.12	up	0.07	1639439_at	CG2471 /// Dyak	2.90	down	0.09
1628292_s_at	HLH106	2.11	up	0.07	1627662_at	Ugt35a	2.90	down	0.07
1624199_at	NPFR76F	2.09	up	0.10	1633876_at	CG7110	2.87	down	0.00
1626684_at	CG7607	2.07	up	0.06	1623068_at	Cyp4e3	2.74	down	0.04
1626196_at	CaBP1	2.07	up	0.01	1640006_at	CG18609 /// Dya	2.74	down	0.10
1626506_at	Syx18	2.07	up	0.02	1636750_s_at	CG13737	2.68	down	0.07
1628194_at	CG2918	2.06	up	0.04	1640918_at	ome	2.65	down	0.03
1634503_at	CG15695	2.06	up	0.03	1636900_at	CG5390 /// Dyak	2.58	down	0.04
1632991_at	CG1418 /// Dere	2.05	up	0.04	1634440_s_at	Eip74EF	2.56	down	0.09
1636741_s_at	Hsc70Cb	2.05	up	0.07	1634208_a_at	plx	2.52	down	0.03
1630683_at	CG5208	2.04	up	0.07	1638195_at	CG33968	2.47	down	0.07
1626478_at	CG12340	2.02	up	0.07	1625986_at	CG31826	2.41	down	0.03
1628866_at	ncm	2.02	up	0.09	1626953_at	Fmo-1	2.40	down	0.10

1624798_s_at	Galpha49B	2.01	up	0.05
1639542_at	Sema-5c	2.01	up	0.06
1640984_s_at	Aats-thr	2.00	up	0.03
1633540_at	CG8147	9.20	down	0.10
1625053_at	CG16898	8.76	down	0.07
1635450_a_at	smp-30	6.27	down	0.04
1636973_at	smp-30	6.08	down	0.03
1627854_at	CG9914	5.39	down	0.09
1625312_at	CG10553	4.55	down	0.08
1640365_s_at	CG14021	4.38	down	0.10
1623851_at	CG9400	4.08	down	0.08
1636564_at	CG14757	4.07	down	0.09
1640020_at	CG10990 /// Dm	4.00	down	0.01
1631533_at	Cyp6a22	3.96	down	0.04
1635073_at	CG17108 /// Dsi	3.95	down	0.04
1633086_s_at	CG1213	3.86	down	0.08
1625486_a_at	PGRP-LA	3.67	down	0.05
1636579_s_at	mdy	3.64	down	0.02
1624101_at	Cyp6a23	3.60	down	0.02
1629819_s_at	Sema-2a	3.53	down	0.10
1633218_a_at	UGP	3.49	down	0.04
1635210_a_at	Ppn	3.49	down	0.03
1632802_at	JhI-26	3.42	down	0.04
1626022_at	Cyp12e1	3.40	down	0.01
1633639_at	Cyp28d1	3.36	down	0.06
1633401_s_at	Cyp12d1-d /// Cy	3.30	down	0.02
1628052_at	Cyp6a17	3.28	down	0.03
1625434_at	CG3270	3.27	down	0.07
1628716_at	CG13283	3.25	down	0.10
1639901_a_at	Cyp49a1	3.21	down	0.04
1635336_at	comm2	3.18	down	0.02
1631266_a_at	CG5840	3.17	down	0.08
1634583_s_at	CG4822	3.16	down	0.09
1637257_at	CG9009	3.13	down	0.04
1632490_at	CG8008	3.11	down	0.04
1638128_at	CG30280	3.08	down	0.04
1625795_a_at	CG3394	2.99	down	0.04
1624836_at	CG13795	2.95	down	0.04
1624950_a_at	CG14823	2.95	down	0.04
1624971_at	CG5254	2.94	down	0.07
1623068_at	Cyp4e3	2.93	down	0.03
1632688_s_at	CG11594	2.92	down	0.10
1627773_a_at	Jheh2	2.91	down	0.02
1625491_at	bwa	2.87	down	0.07
1634786_at	lectin-28C	2.86	down	0.09
1626953_at	Fmo-1	2.86	down	0.05

1627410_at	Amph	2.38	down	0.08
1640754_at	CG5295	2.38	down	0.09
1628252_at	CG17919	2.38	down	0.06
1629903_at	CG30359	2.37	down	0.09
1638554_at	CG4115	2.37	down	0.09
1641598_at	wun2	2.36	down	0.06
1633401_s_at	Cyp12d1-d /// Cy	2.35	down	0.06
1626414_at	Jheh1	2.34	down	0.09
1626769_s_at	CG1553	2.31	down	0.10
1640020_at	CG10990 /// Dm	2.29	down	0.04
1639928_a_at	CG30084	2.20	down	0.04
1633989_at	CG1124 /// Dyak	2.17	down	0.09
1634487_at	tau	2.17	down	0.09
1636274_at	wgn	2.16	down	0.03
1632734_s_at	bnb	2.13	down	0.10
1637309_a_at	Cyp12e1	2.08	down	0.05
1626022_at	Cyp12e1	2.08	down	0.05
1624497_at	---	2.04	down	0.03

1639069_at	Cyp12d1-d	2.84	down	0.07
1624873_at	kar	2.82	down	0.08
1641191_s_at	Ugt36Bc	2.81	down	0.05
1625023_a_at	nAcRbeta-21C	2.80	down	0.08
1637826_at	CG10623	2.79	down	0.03
1623191_at	Rab9	2.79	down	0.04
1638592_at	CG6560	2.78	down	0.07
1635033_at	CG30083	2.73	down	0.09
1629789_at	CG9649	2.71	down	0.09
1632955_at	PhKgamma	2.71	down	0.07
1636747_at	CG8051	2.70	down	0.04
1626147_s_at	CPTI	2.69	down	0.07
1636900_at	CG5390 /// Dyak	2.65	down	0.03
1641575_at	Cad87A	2.63	down	0.01
1629903_at	CG30359	2.62	down	0.05
1625588_s_at	CG6199	2.62	down	0.09
1633200_at	CG9449	2.61	down	0.07
1641446_s_at	CG5171 /// Dyak	2.60	down	0.07
1623744_at	CG30411	2.60	down	0.05
1627662_at	Ugt35a	2.57	down	0.08
1637309_a_at	Cyp12e1	2.55	down	0.02
1628721_at	CG9864 /// Dsec	2.53	down	0.05
1625947_at	GLaz	2.53	down	0.03
1635522_a_at	CG12789	2.53	down	0.03
1633876_at	CG7110	2.50	down	0.01
1634374_at	CG33138	2.50	down	0.08
1626271_at	CG9634	2.48	down	0.09
1641108_at	CG17928	2.47	down	0.08
1626291_at	CG9036 /// Dsec	2.47	down	0.08
1626641_s_at	glob1	2.46	down	0.08
1634468_at	CG13397	2.45	down	0.04
1626414_at	Jheh1	2.44	down	0.07
1626734_at	CG6484	2.44	down	0.02
1631628_s_at	CG12896 /// Prx	2.44	down	0.08
1634208_a_at	plx	2.43	down	0.02
1630066_at	CG4302	2.43	down	0.10
1634238_a_at	CG9628	2.42	down	0.05
1627117_a_at	CG3301	2.42	down	0.06
1641693_s_at	CG32158	2.37	down	0.06
1630044_s_at	CG6904	2.37	down	0.04
1625835_at	yellow-f2	2.35	down	0.05
1629771_at	Cyp12a5	2.33	down	0.05
1639637_a_at	CG3376	2.33	down	0.05
1625873_at	CG15661	2.33	down	0.07
1629609_at	GRHR	2.32	down	0.09
1639495_at	Cyp9b1	2.32	down	0.02

1623298_at	CG6067	2.29	down	0.07
1636750_s_at	CG13737	2.29	down	0.09
1632072_at	CG34134	2.29	down	0.05
1638437_at	CG14638	2.26	down	0.06
1625986_at	CG31826	2.25	down	0.03
1632114_at	Cyp12a4	2.24	down	0.02
1639868_at	CG1702	2.23	down	0.08
1628373_at	CG32085	2.23	down	0.05
1628611_at	CG11241	2.21	down	0.10
1636888_a_at	Aph-4	2.20	down	0.10
1641681_s_at	CG5288 /// Dsir	2.20	down	0.08
1634188_a_at	tim	2.19	down	0.04
1630496_a_at	spell	2.19	down	0.04
1626769_s_at	CG1553	2.19	down	0.09
1638195_at	CG33968	2.18	down	0.08
1624497_at	---	2.17	down	0.02
1633573_a_at	att-ORFA /// att-4	2.17	down	0.06
1636976_at	CG5322	2.17	down	0.06
1623241_s_at	CG30104	2.17	down	0.08
1640754_at	CG5295	2.16	down	0.09
1637370_at	yellow-f	2.12	down	0.07
1638282_at	CG14196	2.11	down	0.10
1633893_at	CG31217 /// Dvi	2.11	down	0.05
1640462_at	Ho	2.11	down	0.03
1636920_s_at	CG12016	2.11	down	0.04
1641389_at	CG14959	2.10	down	0.05
1632636_at	CG2145	2.10	down	0.08
1631549_s_at	CG18278 /// CG	2.09	down	0.03
1632772_at	CG15203	2.08	down	0.07
1623144_at	ci	2.07	down	0.10
1624586_a_at	Prat2	2.04	down	0.03
1639592_at	CG3624	2.03	down	0.07
1640918_at	ome	2.02	down	0.06
1633592_a_at	CREG	2.01	down	0.04
1631452_at	CG8665	1.99	down	0.06