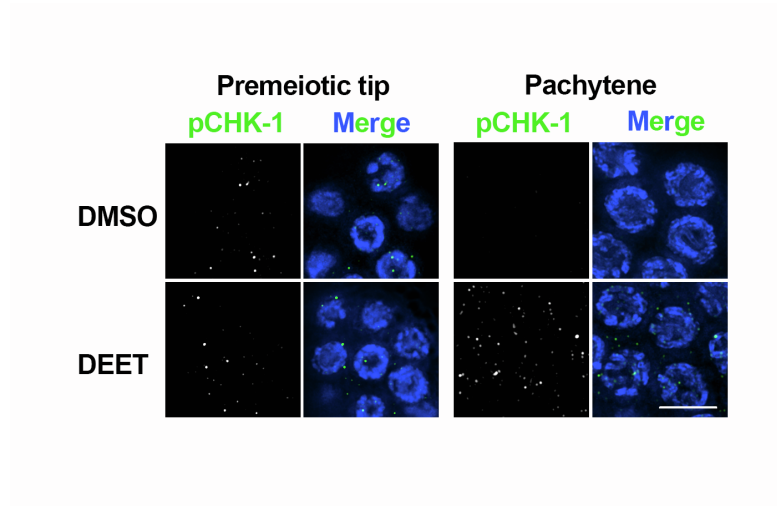


Supplemental information

**Altered gene expression linked
to germline dysfunction following exposure
of *Caenorhabditis elegans* to DEET**

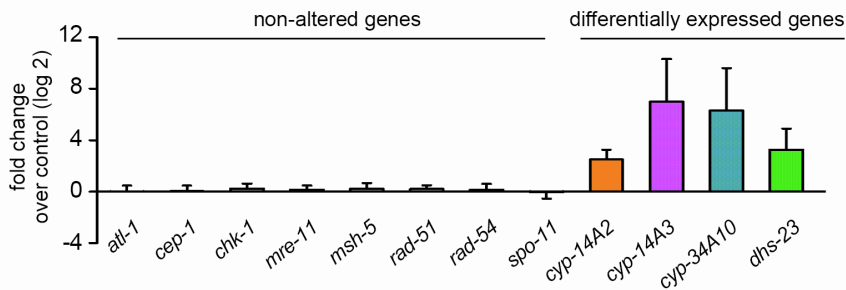
Nara Shin, Laura I. Lascarez-Lagunas, Ayana L. Henderson, Marina Martínez-García, Rajendiran Karthikraj, Victor Barrera, Shannan Ho Sui, Kurunthachalam Kannan, and Mónica P. Colaiácovo

SUPPLEMENTAL FIGURES



Supplemental Figure 1. DEET exposure leads to CHK-1 activation. Related to Figure 2E. High-resolution images of premeiotic tip and mid pachytene nuclei from whole-mounted gonads immunostained for phosphorylated CHK-1 (pCHK-1; green) and co-stained with DAPI (blue). Scale bar, 5 μ m.

Supplemental Figure 2



Supplemental Figure 2. RNA-sequencing validation by quantitative RT-PCR.

Related to Figure 4. 8 genes involved in DSB formation (*spo-11*), DSB repair (*mre-11*, *msh-5*, *rad-51*, and *rad-54*), and DNA damage response (*atl-1*, *cep-1*, and *chk-1*) for which no change in expression was observed, and 4 DE genes, were examined by qRT-PCR see data S1J. Each analysis was performed with technical triplicates and normalized to *gpd-1* (GAPDH). Gene expression level change relative to vehicle alone is depicted in log₂ scale with SEM. Only DE genes show gene expression changes.

Table S1. Primers utilized for quantitative RT-PCR analysis. Related to STAR Methods.

#	Primer pair	F sequence	R sequence
1	<i>atl-1</i>	cgtcgaaccttcgtctctc	gcattctcctgcgtttctc
2	<i>cep-1</i>	ttccgacgcaagtagtctcc	ccgttgcattgaacaacac
3	<i>chk-1</i>	gtctggctgtctggattgt	ttgctgatccatcccatgta
4	<i>mre-11</i>	ctgtttggaagcacagcaa	ttgaatgctcgaacaagacg
5	<i>msh-5</i>	ccccaaaacagctttcata	ggcgtcttgaatggatcact
6	<i>rad-51</i>	ccaggctgatgctaaaaagc	ttcggcttctggtaaattgg
7	<i>rad-54</i>	cgtcttcgaatgtggatcg	gtcgtttcttcggcttcag
8	<i>spo-11</i>	tggacctacgaaagaattgc	tgatcgatgggaaacgatg
9	<i>cyp-14A2</i>	ccactcccattcattggaaa	tgtccataatgtgaagcatgg
10	<i>cyp-14A3</i>	ccactaccgcagttgtct	ggacgattagcacggtgat
11	<i>cyp-34A10</i>	ggctcccaaaaggacctact	acggcgcttctaactgat
12	<i>dhs-23</i>	gcatcgggacaagatgaagt	cagtcaaaagagcaccagca