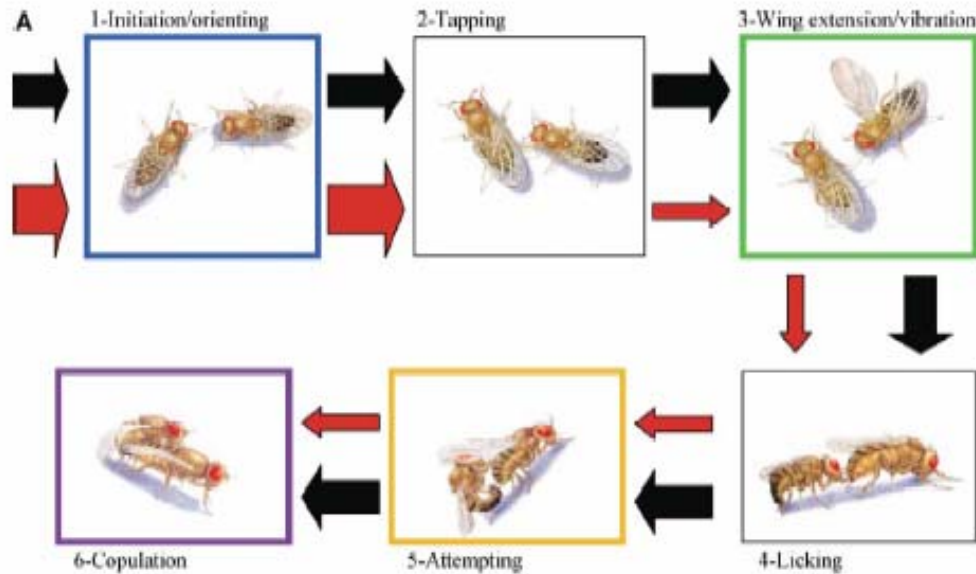
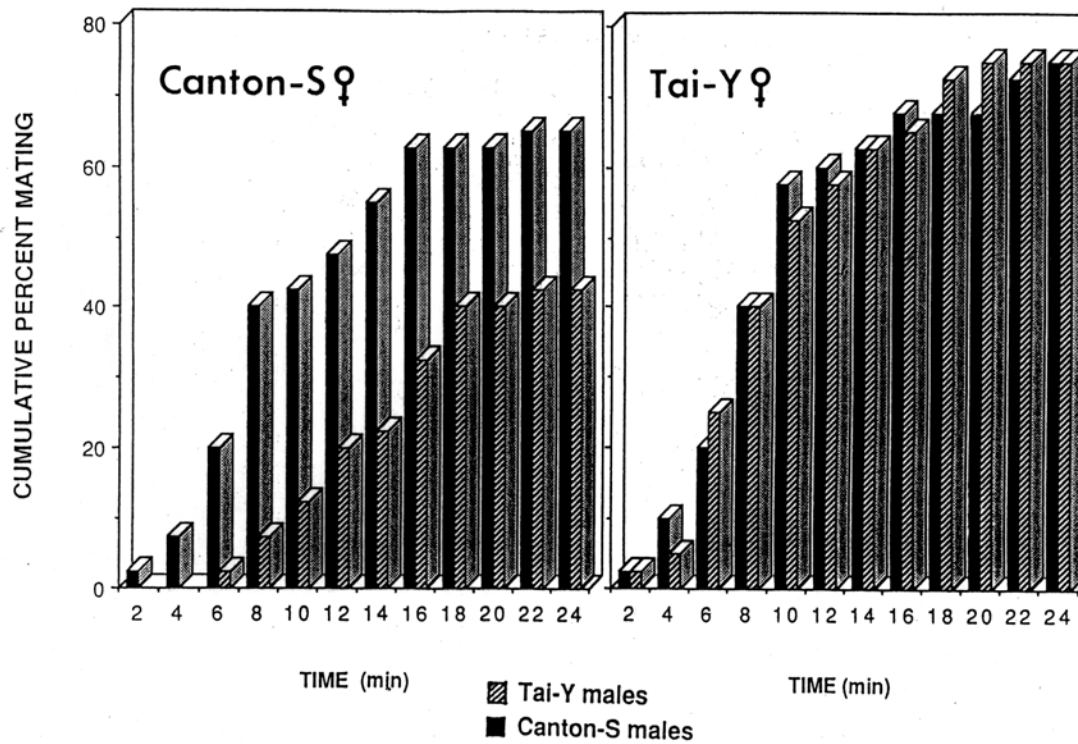


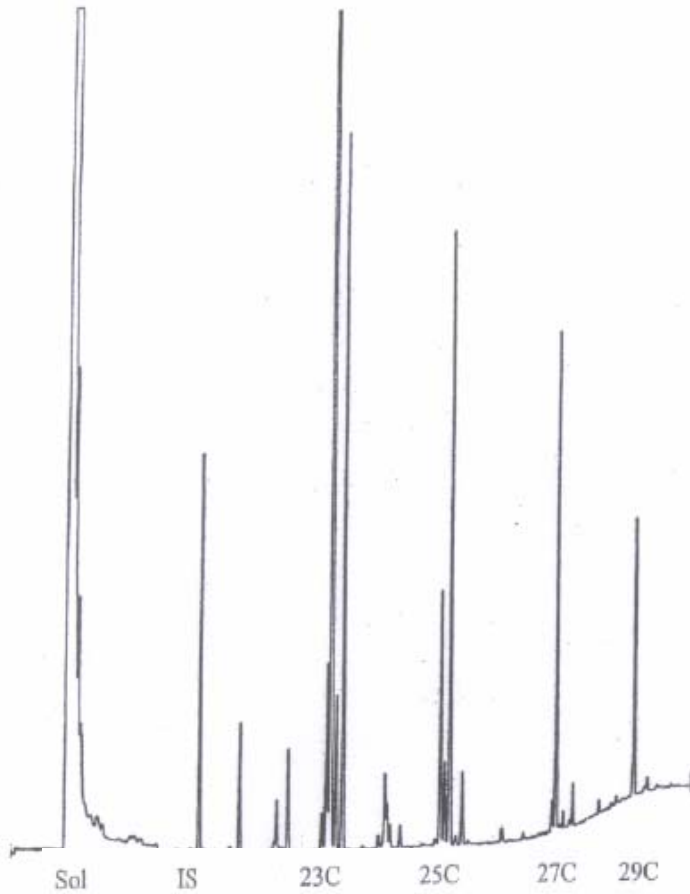
Genetics of Courtship and Mating



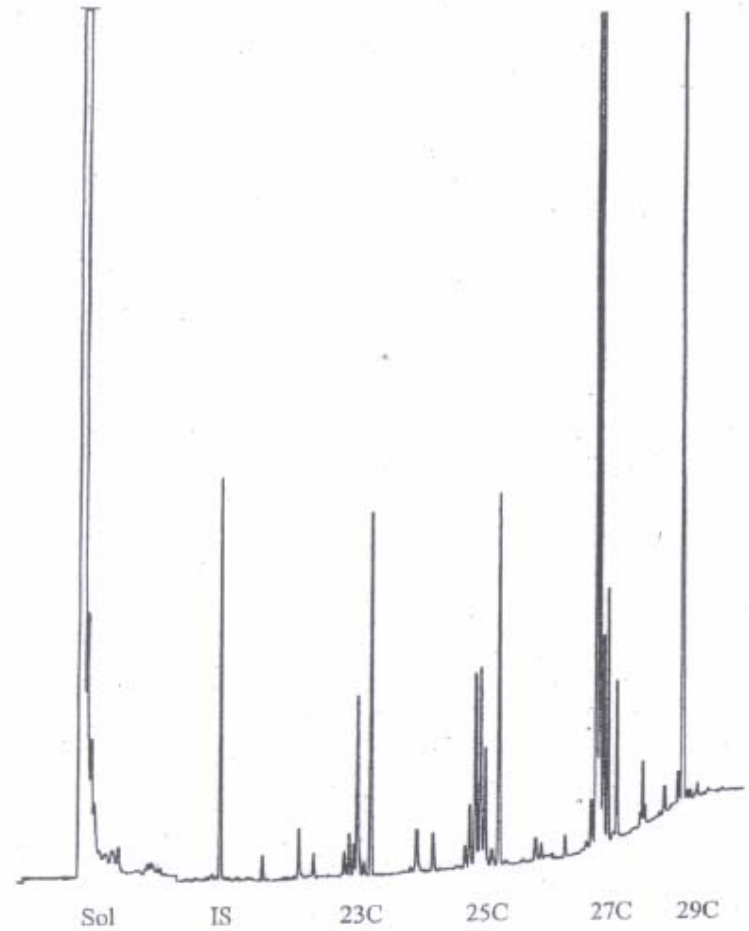
Cumulative Percent Mating



CS Hydrocarbon Profile

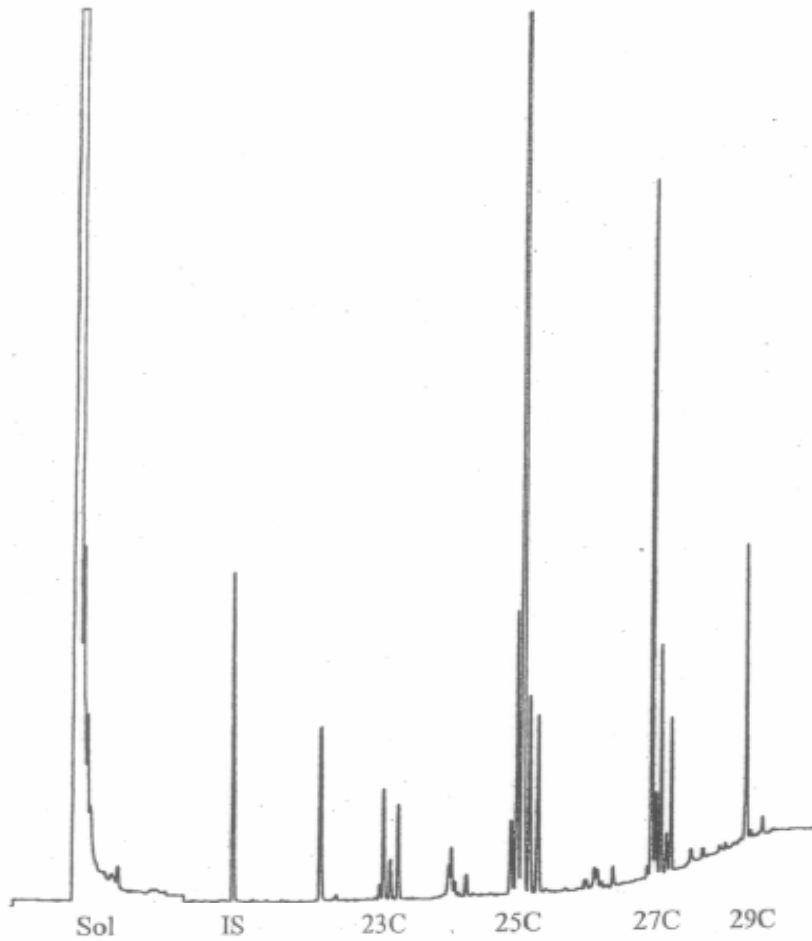


Canton-S males

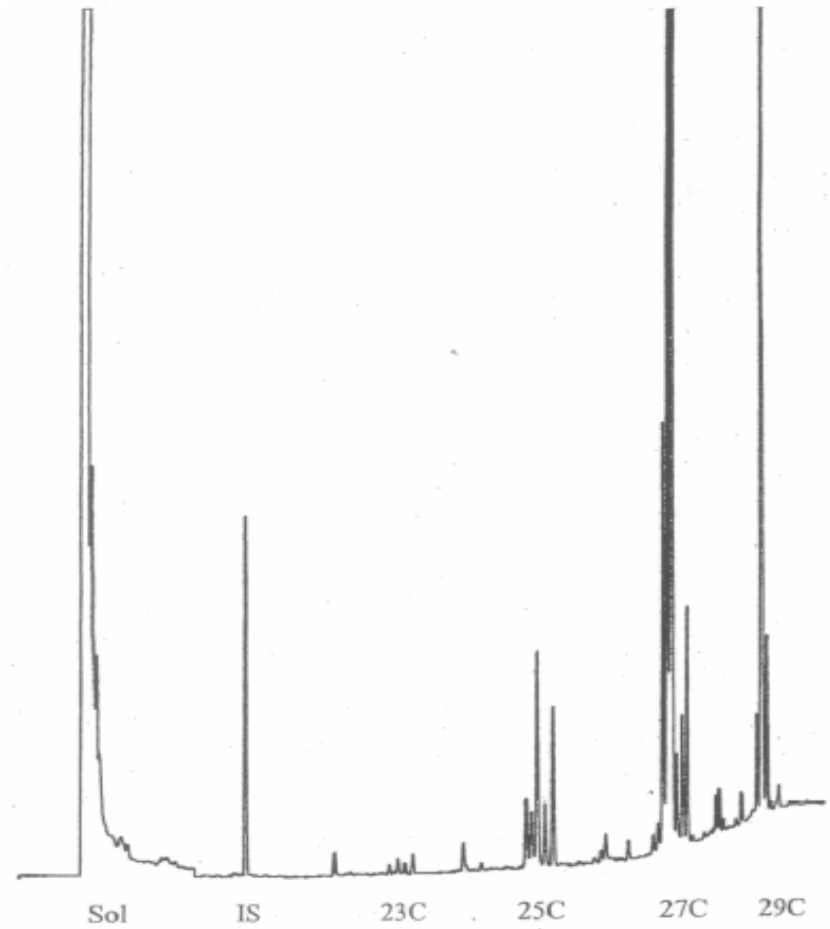


Canton-S females

TY Hydrocarbon Profile

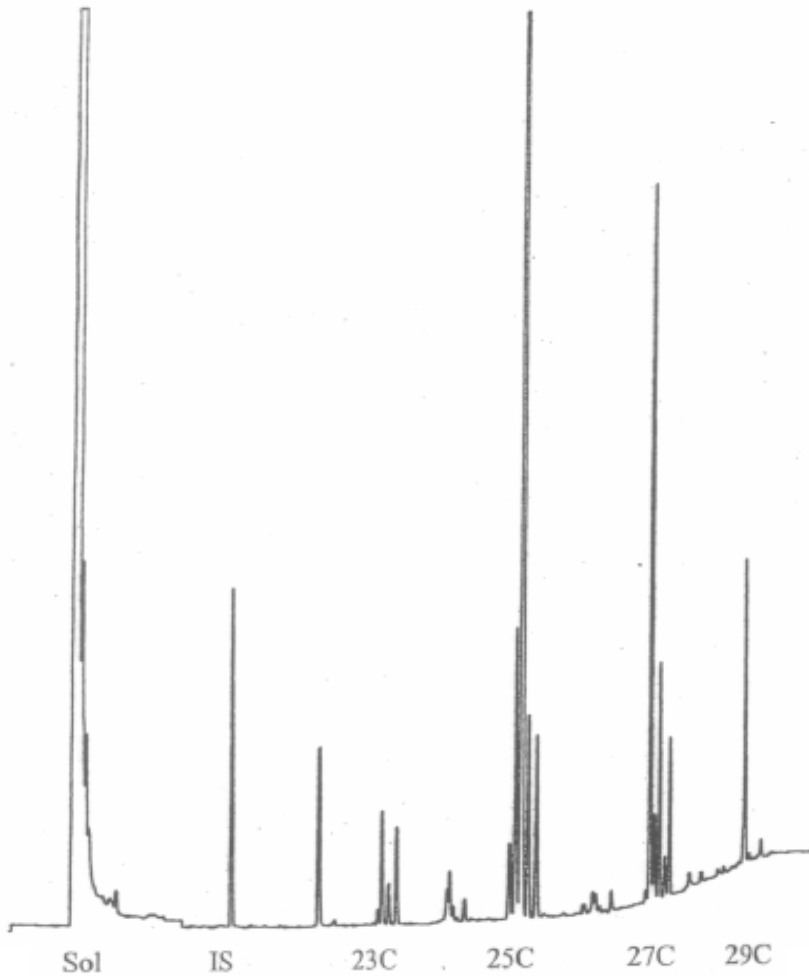


Tai-Y males

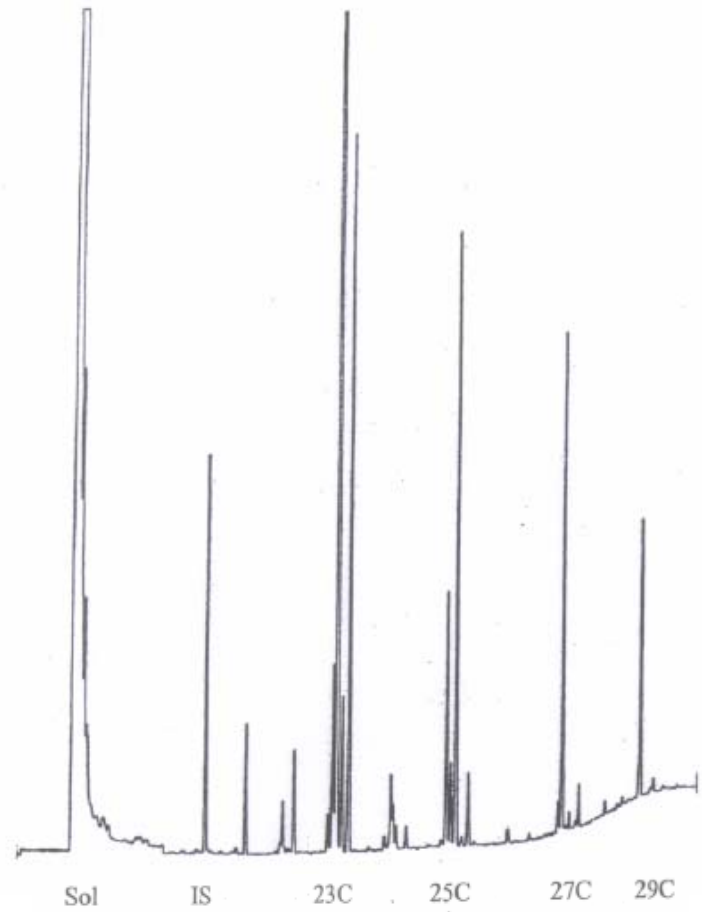


Tai-Y females

Male Hydrocarbon Profile

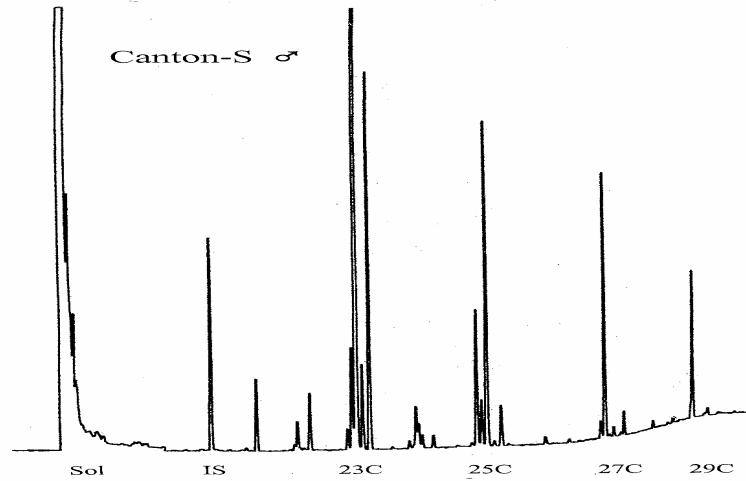
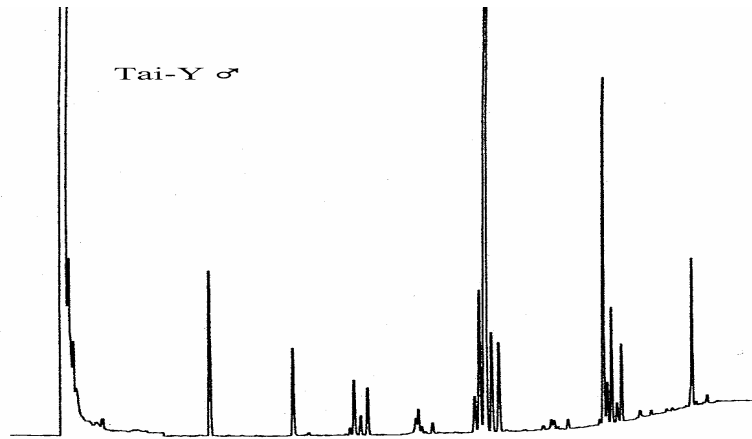


Tai-Y males



Canton-S males

Male Hydrocarbon Profile



The quantity of 7-tricosene and 7-pentacosene on adult *D. melanogaster* males from the Canton-S and Tai-Y strains. Means are given in ng \pm 1 SEM.

Line	7-tricosene (7t)	7-pentacosene (7p)	7t/7p ratio	n
Canton-S	454 \pm 25	88 \pm 9	5.2 \pm 0.8	31
Tai-Y	29 \pm 3	720 \pm 25	0.04 \pm 0.01	30

Genotype	7-tricosene	7-pentacosene	7t/7p ratio	n
----------	-------------	---------------	-------------	---

X Chromosome Introgression Lines:

<i>y-cv</i> (0-13.7)	499 \pm 30	82 \pm 8	6.5 \pm 0.36	20
<i>cv-v</i> (13.7-33.0)	399 \pm 21	93 \pm 7	4.7 \pm 0.34	20
<i>v-f</i> (33.0-56.7)	483 \pm 32	84 \pm 8	6.9 \pm 1.12	20
<i>f-car</i> (56.7-62.5)	446 \pm 24	166 \pm 17	3.0 \pm 0.23	20
F(3,76) =	2.7, P > 0.050	13.8, P < 0.001	8.1, P < 0.001	

Genotype	7-tricosene	7-pentacosene	7t/7p ratio	n
----------	-------------	---------------	-------------	---

3rd Chromosome Introgression Lines:

<i>ru-h</i> (0-26.5)	469 ± 22	107 ± 9	4.8 ± 0.36	21
<i>h-st</i> (26.5-44.0)	474 ± 22	202 ± 10	2.4 ± 0.11	27
<i>st-cu</i> (44.0-50.0)	705 ± 29	100 ± 5	7.5 ± 0.41	27
<i>st-sr</i> (44.0-62.0)	479 ± 26	105 ± 8	5.0 ± 0.37	28
<i>sr-ca</i> (62.0-100.3)	420 ± 12	73 ± 3	5.9 ± 0.19	25
<i>cu-ca</i> (50.0-100.3)	392 ± 15	172 ± 9	2.5 ± 0.16	29
F(5,151) =	23.3, P < 0.001	42.2, P < 0.001	49.9, P < 0.001	

Genotype	7-tricosene	7-pentacosene	7t/7p ratio	n
----------	-------------	---------------	-------------	---

Interactions

<i>f-car + h-st</i>	523±36	438±28*	NA	24
---------------------	--------	---------	----	----

*The expected additive amount for *f-car + h-st* would have been only about 280 ng (88 ng Canton-S baseline + 78 ng increase from *f-car* + 114 ng increase from *h-st*). The approximately 58% increase over the expected amount of 7-pentacosene is most likely due to epistatic interactions between the different genes in these intervals