

Influence of age on mating propensity in two sibling species, *Drosophila ananassae* and *D. pallidosa*

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Mating propensity in *Drosophila* is affected by a number of factors including age of flies. Here, we studied the age factor in two sibling species of *Drosophila*. We tested the effect of age on mating propensity of two sibling species (*Drosophila ananassae* and *D. pallidosa*) using five wild type strains of *D. ananassae* and three wild type strains of *D. pallidosa*. To determine the effect of age on mating propensity, five age groups were selected: 4, 8, 12, 16 and 20 days of each strain of *D. ananassae* and *D. pallidosa*. Fifteen pairs of flies were introduced into the Elens-Wattiaux mating chamber for direct observation for 60 min and in each strain, five replicates were run. Data were analyzed by one-way, two-way ANOVA and student's t-test. Mating propensity of all the strains of both the sibling species vary significantly. All the strains of both the sibling species showed increase in the mating propensity with age (up to 12 days) and then it decreased as the age prolonged suggesting that 12 days aged flies are more eager to mate. Age wise variation was more pronounced than strain wise variation in *D. ananassae*. However, it was just opposite in the case of *D. pallidosa*. Mating propensity of *D. ananassae* was significantly higher as compared to *D. pallidosa* in each age group.

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