

Abstract

Intra-locus sexual conflict is the driving force for many fundamental behaviours like courtship and competition. Competitive aggression is an important component in the behavioural repertoire of the males of almost every species. In this thesis, the evolution of aggressive behavior in *Drosophila melanogaster* lines selected for different levels of sexual conflict has been studied via certain parameters, some of them well-defined in literature. Reproductive behavior was also measured, as the hypothesized end to the means of aggressive behavior. The study is conducted on M and F lines the male: female ratio of which are correspondingly 3:1 and 1:3. Across fighting combinations (M vs. M, F vs. F and M vs. F), no significant difference in overall levels of aggression or courtship behaviour were observed. However, within the M vs. F combination, a highly significant directionality was observed. The M male within the M vs. F combination was extremely aggressive when confronted with an F male, as opposed to an M male. These results indicate the capacity of the *Drosophila melanogaster* male to judge the potential „aggressiveness“ of an opponent and to adjust its behavior accordingly.