**Figure 1.** The proportion of homotypic compared to heterotypic matings recorded during the female (a), male (b) and group (c) mate choice assay. Female (a,c) and male population identity is shown on the x-axis. An asterisk represents a significant deviation from a random mating ratio as indicated by a repeated G-test for goodness of fit (p<0.05).

**Figure 2.** The hatchability (a), egg to adult viability (b), body weights (c) and average development time (d) of flies from parental and hybrid crosses. Letters indicate significant differences between cross identities.

**Figure 3.** The average proportion of red eyed offspring produced by flies from parental and hybrid crosses, in competition with brown eyed competitors. Average proportions were determined for each replicate population and plotted. The dashed line indicates the expected proportion of ⅕ of the offspring. Letters indicate significant differences between cross identities.