Table S1. Summary statistics of the linear mixed models testing for the effect of the mating group and batch on male reproductive success \( (mRS^*) \) and the four fitness components, namely partner fecundity \( (F^*) \), mating success \( (MS^*) \), sperm-transfer efficiency \( (STE^*) \), and sperm fertilising efficiency \( (SFE^*) \). The response variables were first transformed as follows: \( \sqrt{mRS} \), \( \sqrt{(F+0.5)} \), \( \sqrt{STE} \), and \( \log_{10}(SFE+1) \), and then relativized. All models included focal ID as a random effect. See Methods and Results for details.

| Response Source | df       | F value | P value |
|-----------------|----------|---------|---------|
| \( mRS^* \)     | mating group | 2, 284  | 0.27 | 0.763 |
|                 | batch    | 7, 142  | 2.28 | 0.031 |
|                 | mating group x batch | 14, 284 | 0.95 | 0.507 |
| \( F^* \)       | mating group | 2, 426  | 0.02 | 0.985 |
|                 | batch    | 7, 426  | 6.22 | <0.001 |
|                 | mating group x batch | 14, 426 | 1.25 | 0.236 |
| \( MS^* \)      | mating group | 2, 281  | 1.05 | 0.351 |
|                 | batch    | 7, 142.5 | 1.90 | 0.073 |
|                 | mating group x batch | 14, 280 | 0.74 | 0.738 |
| \( STE^* \)     | mating group | 2, 277  | 1.83 | 0.162 |
|                 | batch    | 7, 141.1 | 0.94 | 0.480 |
|                 | mating group x batch | 14, 277 | 1.37 | 0.165 |
| \( SFE^* \)     | mating group | 2, 267  | 1.92 | 0.148 |
|                 | batch    | 7, 136.7 | 0.78 | 0.602 |
|                 | mating group x batch | 14, 267 | 0.82 | 0.644 |