

Table S5 Mating combinations of F1 offspring of TK and WX crosses

| Cross | Mating combination* | Total egg rafts | Total Eggs | Total larvae | Hatching Rate | Comparison | Significance |
|-------|--|-----------------|------------|--------------|---------------|------------|-----------------------------|
| D1 | F1 _(WX♀×TK♂) ♀ (7)× TK♂ (7) | 7 | 1072 | 1 | 0.001±0.001 | D1 vs. D2 | P<0.0001(t=-28.098 df=10) |
| D2 | F1 _(WX♀×TK♂) ♀ (7)× WX♂ (7) | 5 | 900 | 835 | 0.922±0.040 | D2 vs. D3 | NS (t=0.055 df=8 P=0.958) |
| D3 | F1 _(WX♀×TK♂) ♀ (7)× F1 _(WX♀×TK♂) ♂ (7) | 5 | 779 | 716 | 0.919±0.007 | D1 vs. D3 | P<0.0001(t=-165.351 df=10) |
| D4 | TK♀ (10) × TK♂ (10) | 7 | 1091 | 1029 | 0.940±0.014 | D4 vs. D5 | P<0.0001(t=68.104 df=12) |
| D5 | TK♀ (10) × WX♂ (10) | 7 | 1046 | 0 | 0.000±0.000 | D5 vs. D6 | NS (t=-0.875 df=14 P=0.396) |
| D6 | TK♀ (10) × F1 _(WX♀×TK♂) ♂ (10) | 9 | 1558 | 3 | 0.002±0.002 | D4 vs. D6 | P<0.0001(t=76.332 df=14) |
| D7 | WX♀ (10)× TK♂ (10) | 7 | 941 | 10 | 0.009±0.009 | D7 vs. D8 | P<0.0001(t=-27.856 df=13) |
| D8 | WX♀ (10)× WX♂ (10) | 8 | 1207 | 917 | 0.847±0.027 | D8 vs. D9 | NS (t=-1.382 df=12 P=0.192) |
| D9 | WX♀ (10)× F1 _(WX♀×TK♂) ♂ (10) | 6 | 851 | 763 | 0.898±0.022 | D7 vs. D9 | P<0.0001(t=-39.975 df=11) |
| B1 | F1 _(TK♀×WX♂) ♀ (9)× TK♂ (9) | 7 | 1314 | 1194 | 0.908±0.025 | B1 vs. B2 | P<0.0001(t=42.365 df=14) |
| B2 | F1 _(TK♀×WX♂) ♀ (9)× WX♂ (9) | 9 | 1558 | 0 | 0.000±0.000 | B1 vs. B3 | NS(t=0.2 df=13 P=0.845) |
| B3 | F1 _(TK♀×WX♂) ♀ (9)× F1 _(TK♀×WX♂) ♂ (9) | 8 | 1453 | 1316 | 0.897±0.126 | B2 vs. B3 | P<0.0001(t=-21.417 df=15) |
| B4 | TK♀ (9)× TK♂ (9) | 6 | 793 | 739 | 0.916±0.026 | B4 vs. B5 | P<0.0001(t=38.000 df=11) |
| B5 | TK♀ (9)× WX♂ (9) | 7 | 888 | 0 | 0.000±0.000 | B4 vs. B6 | NS(t=0.713 df=9 P=0.494) |
| B6 | TK♀ (9)× F1 _(TK♀×WX♂) ♂ (9) | 5 | 818 | 712 | 0.872±0.060 | B5 vs. B6 | P<0.0001(t=-17.425 df=10) |
| B7 | WX♀ (9)× TK♂ (9) | 7 | 970 | 2 | 0.002±0.001 | B7 vs. B8 | P<0.0001(t=-57.272 df=11) |
| B8 | WX♀ (9)× WX♂ (9) | 6 | 864 | 793 | 0.921±0.017 | B8 vs. B9 | P<0.0001(t=52.845 df=10) |
| B9 | WX♀ (9)× F1 _(TK♀×WX♂) ♂ (9) | 6 | 622 | 1 | 0.001±0.001 | B7 vs. B9 | NS(t=0.636 df=11 P=0.538) |

* Numbers in parentheses refer to the numbers of mosquitoes used in the respective combinations.

For each cross, hatching rate value is expressed as mean± standard error. NS, nonsignificant P-value.