

S8 Table. Toxicity of four insecticides to *w¹¹¹⁸* adults and heterozygous adults bearing G3'_{TMD3} mutations

| Insecticide | Genotype | Slope ± SE | LC ₅₀ (95% CI [†]) (mg/L) | χ ² (df) | P value | RR [‡] |
|--------------|--|------------|--|---------------------|---------|-----------------|
| Fipronil | <i>w¹¹¹⁸</i> | 5.77±0.71 | 0.82 (0.76-0.89) | 7.73 (13) | 0.861 | 1.00 |
| | G3' _{TMD3} /TM2 <i>Ubx¹³⁰</i> | 5.23±0.67 | 0.78 (0.72-0.85) | 5.69 (13) | 0.957 | 0.95 |
| | G3' _Q TMD3/TM2 <i>Ubx¹³⁰</i> | 4.61±0.63 | 0.84 (0.76-0.92) | 5.48 (13) | 0.963 | 1.02 |
| | G3' _S TMD3/TM2 <i>Ubx¹³⁰</i> | 5.38±0.68 | 0.80 (0.74-0.87) | 2.93 (13) | 0.998 | 0.98 |
| Avermectin | <i>w¹¹¹⁸</i> | 1.74±0.23 | 33.80 (26.36-45.33) | 7.22 (13) | 0.891 | 1.00 |
| | G3' _M TMD3/TM2 <i>Ubx¹³⁰</i> | 1.65±0.22 | 30.64 (23.70-41.14) | 6.08 (13) | 0.943 | 0.91 |
| | G3' _Q TMD3/TM2 <i>Ubx¹³⁰</i> | 1.70±0.23 | 35.00 (27.16-47.36) | 7.42 (13) | 0.879 | 1.04 |
| | G3' _S TMD3/TM2 <i>Ubx¹³⁰</i> | 1.60±0.22 | 29.67 (22.81-39.90) | 8.14 (13) | 0.834 | 0.88 |
| Fluralaner | <i>w¹¹¹⁸</i> | 2.07±0.25 | 1.89 (1.50-2.33) | 6.87 (13) | 0.909 | 1.00 |
| | G3' _M TMD3/TM2 <i>Ubx¹³⁰</i> | 2.21±0.27 | 1.64 (1.31-2.00) | 4.21 (13) | 0.989 | 0.87 |
| | G3' _Q TMD3/TM2 <i>Ubx¹³⁰</i> | 2.27±0.27 | 1.76 (1.42-2.14) | 9.19 (13) | 0.759 | 0.93 |
| | G3' _S TMD3/TM2 <i>Ubx¹³⁰</i> | 2.26±0.27 | 1.75 (1.41-2.13) | 9.42 (13) | 0.741 | 0.93 |
| Broflanilide | <i>w¹¹¹⁸</i> | 2.40±0.27 | 0.81 (0.66-0.97) | 8.86 (13) | 0.783 | 1.00 |
| | G3' _M TMD3/TM2 <i>Ubx¹³⁰</i> | 2.43±0.28 | 0.75 (0.61-0.90) | 4.90 (13) | 0.977 | 0.93 |
| | G3' _Q TMD3/TM2 <i>Ubx¹³⁰</i> | 2.44±0.28 | 0.81 (0.67-0.98) | 7.58 (13) | 0.870 | 1.00 |

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|---|-----------|------------------|----------|-------|------|
| G3'S _{TMD3} /TM2 <i>Ubx</i> ¹³⁰ | 2.57±0.29 | 0.86 (0.72-1.03) | 7.73(13) | 0.861 | 1.06 |
|---|-----------|------------------|----------|-------|------|

† CI, confidence intervals.

‡ RR indicates resistance ratio: resistance ratio = LC₅₀ value of a heterozygous G3'S_{TMD3} mutant/LC₅₀ value of the wild-type *w*¹¹⁸.

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