

Table S1. Comparison of estimated age of parous mosquitoes, estimated extrinsic Incubation period + average days post eclosion, the probability that a given mosquito will exceed the EIP, and the number of potential vectors per trap per day, and the incident rate ratio of potential vectors per day. Nogales, SN is used as standard for all statistical comparisons.

| Year | Month | City | Total N | Age of Parous Mosquitoes, in days, median (Q1, Q3) | P-value (age) ^a | EIP + 2.63 days, median (Q1, Q3) | P-value (EIP) ^b | Prob. Exceeds EIP, median (Q1, Q3) | No. Potential Vectors/ trap/day | IRR (95% CI) ^c |
|------|--------------|-------------|---------|--|----------------------------|----------------------------------|----------------------------|------------------------------------|---------------------------------|---------------------------|
| 2013 | Jul | Nogales, SN | 96 | 4.1 (3.4, 6.5) | Ref. | 12.9 (12.7, 13.1) | Ref. | 0.00 (0.00, 0.06) | 0.16 | Ref. |
| | | Tucson* | - | - | - | - | - | - | - | - |
| | | Nogales, AZ | 10 | 20.2 (19.8, 21.8) | < 0.01 | 13.6 (13.6, 13.6) | <0.001 | 0.85 (0.82, 0.86) | 0.21 | 1.3 (0.3, 6.2) |
| | | Hermosillo | 73 | 9.0 (4.8, 15.3) | < 0.001 | 8.8 (8.5, 9.1) | <0.001 | 0.50 (0.08, 0.88) | 0.42 | 2.1 (0.8, 5.8) |
| 2013 | Aug. | Nogales, SN | 143 | 5.2 (4.0, 8.8) | Ref. | 15.5 (14.0, 16.3) | Ref. | 0.02 (0.00, 0.21) | 0.22 | Ref. |
| | | Tucson | 338 | 8.4 (5.4, 14.6) | < 0.001 | 10.7 (10.3, 10.9) | <0.001 | 0.33 (0.07, 0.80) | 1.21 | 5.2 (2.5, 11.2) |
| | | Nogales, AZ | 70 | 5.3 (3.8, 8.2) | 0.83 | 12.9 (12.4, 15.9) | <0.001 | 0.03 (0.00, 0.18) | 0.32 | 1.3 (0.4, 4.1) |
| | | Hermosillo | 145 | 7.3 (4.9, 11.7) | 0.01 | 9.3 (9.1, 9.4) | <0.001 | 0.30 (0.08, 0.72) | 0.52 | 2.2 (1.0, 4.9) |
| 2013 | Sept/ Oct | Nogales, SN | 131 | 6.7 (5.1, 8.9) | Ref. | 30.4 (22.6, 41.8) | Ref. | 0.01 (0.00, 0.09) | 0.08 | Ref. |
| | | Tucson | 167 | 6.3 (4.6, 13.8) | 0.6 | 14.3 (11.3, 18.4) | <0.001 | 0.09 (0.02, 0.67) | 0.55 | 4.7 (1.4, 17.7) |
| | | Nogales, AZ | 102 | 7.2 (4.4, 12.8) | 0.59 | 21.8 (18.4, 31.0) | 0.01 | 0.02 (0.00, 0.26) | 0.56 | 5.3 (1.2, 27.7) |
| | | Hermosillo | 381 | 6.6 (4.1, 12.7) | 0.84 | 10.0 (9.8, 10.2) | <0.001 | 0.15 (0.01, 0.73) | 1.30 | 11.0 (3.3,40.5) |
| 2013 | | Nogales, SN | 370 | 5.6 (4.0, 8.5) | Ref. | 15.6 (13.1, 22.0) | Ref. | 0.01 (0.00, 0.12) | 0.2 | Ref. |
| | | Tucson | - | - | - | - | - | - | - | - |
| | | Nogales, AZ | 182 | 6.5 (4.2, 12.6) | 0.11 | 16.8 (12.9, 21.1) | 0.86 | 0.03 (0.00, 0.27) | 0.4 | 2.1 (0.9, 4.9) |
| | | Hermosillo | 599 | 6.9 (4.3, 12.8) | <0.001 | 9.4 (9.1, 10.0) | <0.001 | 0.24 (0.04, 0.75) | 0.8 | 4.0 (2.3, 7.2) |
| 2014 | Jul | Nogales, SN | 71 | 8.0 (5.0, 11.9) | Ref. | 13.5 (12.1, 14.6) | Ref. | 0.20 (0.01, 0.55) | 0.27 | Ref. |
| | | Tucson | 259 | 9.5 (5.8, 13.6) | 0.46 | 9.4 (9.2, 9.7) | <0.001 | 0.54 (0.12, 0.79) | 1 | 3.7 (1.5, 9.5) |
| | | Nogales, AZ | 22 | 3.9 (3.3, 4.4) | <0.001 | 15.2 (14.5, 16.2) | <0.01 | 0.01 (0.00, 0.02) | 0.01 | n/a |
| | | Hermosillo | 223 | 7.7 (4.8, 13.8) | 0.68 | 9.9 (9.7, 10.0) | <0.001 | 0.32 (0.05, 0.78) | 0.42 | 1.5 (0.6, 3.3) |
| 2014 | Aug. | Nogales, SN | 213 | 6.7 (4.5, 11.9) | Ref. | 16.0 (15.2, 18.1) | Ref. | 0.00 (0.00, 0.08) | 0.23 | Ref. |
| | | Tucson | 964 | 10.3 (5.8, 14.3) | 0.02 | 9.6 (9.4, 10.1) | <0.001 | 0.57 (0.13, 0.82) | 3.74 | 17.2 (8.3, 37.4) |
| | | Nogales, AZ | 56 | 5.7 (4.4, 8.7) | 0.26 | 15.5 (15.0, 16.8) | 0.07 | 0.00 (0.00, 0.02) | 0.06 | 0.2 (0.0, 1.4) |
| | | Hermosillo | 189 | 8.6 (5.5, 12.3) | 0.12 | 10.3 (10.2, 10.4) | <0.001 | 0.32 (0.07, 0.66) | 0.28 | 1.5 (0.7, 3.3) |
| 2014 | Sept/ Oct | Nogales, SN | 302 | 8.1 (5.8, 11.0) | Ref. | 28.8 (25.6, 31.1) | Ref. | 0.01 (0.00, 0.07) | 0.25 | Ref. |
| | | Tucson | 442 | 10.3 (4.8, 14.7) | 0.29 | 13.0 (12.3, 15.4) | <0.001 | 0.39 (0.02, 0.69) | 1.62 | 6.0 (2.4, 15.6) |
| | | Nogales, AZ | 122 | 5.4 (3.8, 11.6) | <0.01 | 31.3 (25.1, 35.6) | 0.04 | 0.00 (0.00, 0.06) | 0.13 | 0.6 (0.1, 2.9) |
| | | Hermosillo | 519 | 6.4 (4.5, 10.7) | <0.01 | 10.8 (10.5, 11.0) | <0.001 | 0.13 (0.02, 0.52) | 0.59 | 2.2 (0.9, 5.1) |
| 2014 | | Nogales, SN | 586 | 7.8 (5.3, 11.8) | Ref. | 20.2 (15.4, 28.6) | Ref. | 0.01 (0.00, 0.17) | 0.25 | Ref. |
| | | Tucson | 1665 | 10.1 (5.6, 14.4) | <0.01 | 9.9 (9.4, 12.0) | <0.001 | 0.51 (0.11, 0.77) | 2.12 | 8.4 (5.0, 14.3) |
| | | Nogales, AZ | 200 | 5.0 (3.9, 8.6) | <0.001 | 18.6 (15.4, 31.1) | 0.55 | 0.00 (0.00, 0.02) | 0.07 | 0.3 (0.1, 0.8) |
| | | Hermosillo | 931 | 7.3 (4.7, 12.4) | 0.47 | 10.3 (10.0, 10.8) | <0.001 | 0.21 (0.03, 0.68) | 0.43 | 1.8 (1.1, 2.9) |

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|-------------|--------------|-------------|-------|-----------------|------------------|-------------------|------------------|-------------------|------|------------------------|
| 2015 | Jul | Nogales, SN | 66 | 5.4 (4.0, 8.1) | Ref. | 11.8 (11.6, 12.3) | Ref. | 0.02 (0.00, 0.12) | 0.08 | Ref. |
| | | Tucson | 314 | 4.7 (3.8, 7.3) | 0.24 | 9.6 (9.5, 9.7) | <0.001 | 0.05 (0.01, 0.26) | 0.61 | 6.8 (2.6, 21.0) |
| | | Nogales, AZ | 73 | 4.7 (3.8, 6.7) | 0.32 | 11.7 (11.5, 12.1) | 0.28 | 0.01 (0.00, 0.05) | 0.09 | 0.5 (0.0, 3.6) |
| | | Santa Ana | 206 | 4.7 (3.9, 6.3) | 0.14 | 9.8 (9.6, 9.9) | <0.001 | 0.04 (0.02, 0.18) | 0.31 | 3.1 (1.0, 10.6) |
| | | Hermosillo | 220 | 5.6 (3.9, 9.2) | 0.73 | 9.1 (8.9, 9.2) | <0.001 | 0.15 (0.03, 0.54) | 0.68 | 6.7 (2.6, 20.6) |
| | | Obregon | 342 | 5.3 (4.0, 8.0) | 0.73 | 9.2 (9.1, 9.4) | <0.001 | 0.08 (0.03, 0.36) | 0.97 | 9.9 (3.9, 30.4) |
| 2015 | Aug. | Nogales, SN | 163 | 6.3 (4.3, 10.6) | Ref. | 12.7 (12.6, 12.8) | Ref. | 0.04 (0.00, 0.34) | 0.37 | Ref. |
| | | Tucson | 390 | 7.3 (4.9, 11.2) | 0.1 | 9.1 (8.8, 9.3) | <0.001 | 0.36 (0.10, 0.67) | 1.46 | 3.8 (2.1, 7.0) |
| | | Nogales, AZ | 85 | 6.1 (4.1, 7.8) | 0.56 | 12.7 (12.5, 12.8) | 0.43 | 0.04 (0.00, 0.11) | 0.19 | 0.5 (0.1, 1.6) |
| | | Santa Ana | 201 | 5.2 (4.4, 8.3) | 0.37 | 10.7 (10.1, 11.1) | <0.001 | 0.09 (0.04, 0.36) | 0.54 | 1.4 (0.7, 2.9) |
| | | Hermosillo | 140 | 7.2 (5.0, 11.9) | 0.14 | 9.9 (9.6, 10.0) | <0.001 | 0.26 (0.06, 0.65) | 0.48 | 1.2 (0.6, 2.3) |
| | | Obregon | 174 | 5.1 (4.2, 7.6) | 0.1 | 9.7 (9.5, 9.8) | <0.001 | 0.08 (0.03, 0.30) | 0.43 | 1.1 (0.5, 2.2) |
| 2015 | Sept/ Oct | Nogales, SN | 188 | 7.1 (4.8, 11.4) | Ref. | 19.9 (19.4, 20.5) | Ref. | 0.01 (0.00, 0.10) | 0.16 | Ref. |
| | | Tucson | 640 | 5.5 (4.1, 8.4) | 0.01 | 10.8 (10.5, 11.2) | <0.001 | 0.08 (0.02, 0.31) | 1.3 | 7.4 (3.6, 16.3) |
| | | Nogales, AZ | 62 | 4.1 (3.7, 4.5) | <0.001 | 20.7 (20.3, 21.2) | <0.001 | 0.00 (0.00, 0.00) | 0.03 | 0.3 (0.0, 1.6) |
| | | Santa Ana | 93 | 5.6 (3.9, 9.6) | 0.17 | 12.8 (12.0, 14.7) | <0.001 | 0.02 (0.01, 0.34) | 0.2 | 1.1 (0.4, 3.1) |
| | | Hermosillo | 109 | 4.6 (3.9, 7.4) | <0.001 | 12.0 (11.7, 12.1) | <0.001 | 0.03 (0.00, 0.19) | 0.13 | 0.9 (0.3, 2.4) |
| | | Obregon | 158 | 5.6 (4.4, 10.0) | 0.22 | 10.8 (10.3, 11.1) | <0.001 | 0.10 (0.02, 0.45) | 0.43 | 2.5 (1.1, 5.9) |
| 2015 | | Nogales, SN | 417 | 6.4 (4.4, 10.5) | Ref. | 12.9 (12.6, 19.6) | Ref. | 0.02 (0.00, 0.19) | 0.2 | Ref. |
| | | Tucson | 1,344 | 5.9 (4.1, 9.7) | 0.15 | 9.7 (9.3, 10.6) | <0.001 | 0.13 (0.03, 0.49) | 1.1 | 5.1 (3.3, 8.0) |
| | | Nogales, AZ | 220 | 4.6 (3.8, 6.8) | <0.001 | 12.7 (12.1, 20.1) | 0.1 | 0.00 (0.00, 0.05) | 0.1 | 0.4 (0.2, 1.1) |
| | | Santa Ana | 500 | 5.0 (4.2, 7.7) | 0.01 | 10.1 (9.8, 11.1) | <0.001 | 0.06 (0.02, 0.24) | 0.4 | 1.5 (0.9, 2.6) |
| | | Hermosillo | 469 | 5.8 (4.2, 9.7) | 0.34 | 9.7 (9.1, 10.7) | <0.001 | 0.13 (0.02, 0.50) | 0.4 | 1.9 (1.2, 3.1) |
| | | Obregon | 674 | 5.3 (4.2, 8.4) | 0.01 | 9.6 (9.3, 9.9) | <0.001 | 0.08 (0.03, 0.36) | 0.6 | 2.7 (1.7, 4.3) |

^a Logistic regression for binomial proportions ^b Wilcoxon rank sum test with continuity correction ^c Negative binomial regression model stratified by collection cycle and year, relating count of potential vectors per household collection site with log (trap days) as offset and with city as a predictor. * Ref. indicates the city used for comparisons. July Tucson 2013 missing due to differing RNA extraction methods used for mosquito samples during that collection period.