



Population Genetics of *Anopheles coluzzii* immune pathways and genes.

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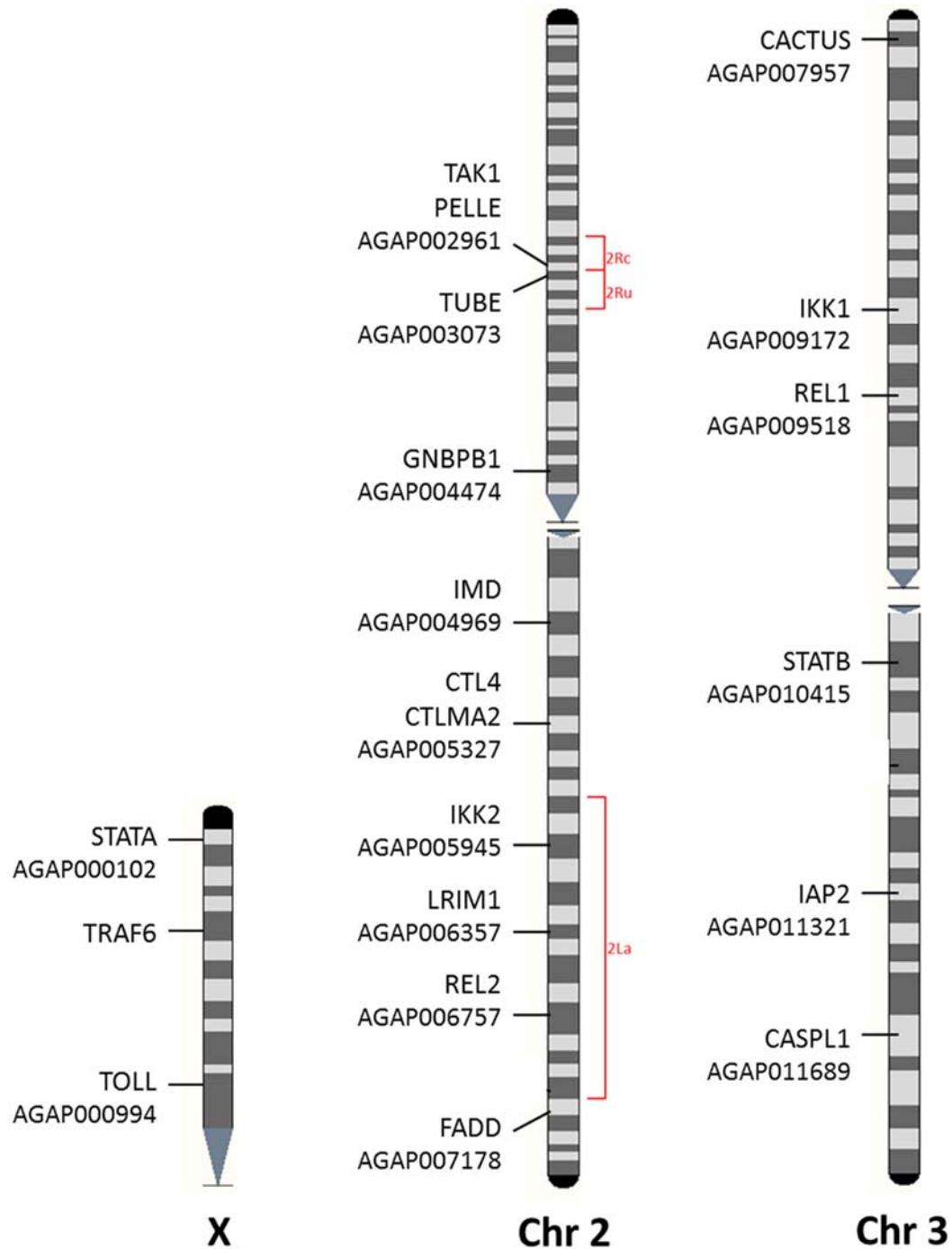


Figure S1 Approximate chromosomal locations of loci sampled. AGAP identifiers are provided for all non-immune control loci. Control loci are located within 40-100KB of their “matched” controls. Positions of chromosomal inversions are shown in red.

Table S1 Population genetic statistics for all sampled loci

| locus | N ^a | Sites ^b | S ^c | π_{total}^d | π_s^e | π_a^f | D ^g | K _{total} ^h | K _s ⁱ | K _A ^j | K _A /K _S ^k |
|------------|----------------|--------------------|----------------|-----------------|-----------|-----------|----------------|---------------------------------|-----------------------------|-----------------------------|---|
| CACTUS | 20 | 2660 | 133 | 0.0132 | 0.0215 | 0.0021 | -0.201 | 0.0247 | 0.047 | 0.0016 | 0.033 |
| CASPL1 | 19 | 1424 | 133 | 0.024 | 0.0608 | 0.0116 | -0.385 | 0.0269 | 0.061 | 0.0134 | 0.212 |
| CTL4 | 20 | 882 | 44 | 0.0125 | 0.0311 | 0.0039 | -0.263 | 0.0326 | 0.06 | 0.0147 | 0.237 |
| CTLMA2 | 20 | 891 | 55 | 0.0217 | 0.0258 | 0.0084 | 1.254 | 0.047 | 0.1021 | 0.0204 | 0.188 |
| FADD | 20 | 980 | 124 | 0.0294 | 0.0458 | 0.0149 | -0.601 | 0.0447 | 0.0663 | 0.0248 | 0.363 |
| GNBPB1 | 20 | 1782 | 79 | 0.0102 | 0.0202 | 0.0013 | -0.697 | 0.0334 | 0.0773 | 0.0064 | 0.078 |
| IAP2 | 20 | 873 | 78 | 0.0253 | 0.0451 | 0.006 | 0.3 | 0.0467 | 0.0783 | 0.0131 | 0.16 |
| IKK1 | 20 | 2681 | 170 | 0.0141 | 0.0336 | 0.0051 | -0.987 | 0.0294 | 0.0728 | 0.0077 | 0.102 |
| IKK2 | 20 | 2035 | 98 | 0.0119 | 0.0373 | 0.0043 | 0.116 | 0.037 | 0.0795 | 0.0082 | 0.098 |
| IMD | 20 | 1270 | 65 | 0.0116 | 0.0195 | 0.005 | -0.804 | 0.0328 | 0.0481 | 0.0215 | 0.439 |
| LRIM1 | 20 | 1636 | 76 | 0.0106 | 0.0265 | 0.0055 | -0.892 | 0.0302 | 0.0638 | 0.0179 | 0.272 |
| PELLE | 20 | 1986 | 87 | 0.013 | 0.0325 | 0.0039 | 0.261 | 0.0342 | 0.0751 | 0.0096 | 0.125 |
| REL1 | 19 | 6802 | 363 | 0.016 | 0.0226 | 0.0024 | 0.238 | 0.03 | 0.0493 | 0.0055 | 0.108 |
| REL2 | 19 | 5075 | 311 | 0.013 | 0.0288 | 0.0038 | -0.912 | 0.0151 | 0.0338 | 0.004 | 0.116 |
| STAT-A | 20 | 2740 | 55 | 0.0042 | 0.0064 | 0 | -1.111 | 0.0221 | 0.0268 | 0 | 0 |
| STAT-B | 19 | 2123 | 15 | 0.0018 | 0.0021 | 0.0015 | -1.025 | 0.0377 | 0.0627 | 0.0295 | 0.46 |
| TAK1 | 20 | 5409 | 395 | 0.0163 | 0.037 | 0.0023 | -0.819 | 0.0359 | 0.0506 | 0.0044 | 0.084 |
| TOLL | 20 | 3595 | 40 | 0.0017 | 0.0054 | 0.0004 | -1.802 | 0.0225 | 0.066 | 0.0065 | 0.094 |
| TRAF6 | 20 | 1814 | 53 | 0.0048 | 0.0079 | 0.0023 | -1.713 | 0.0574 | 0.1132 | 0.0181 | 0.149 |
| TUBE | 18 | 2285 | 110 | 0.0156 | 0.0365 | 0.0087 | 0.081 | 0.0305 | 0.0711 | 0.0131 | 0.176 |
| AGAP000102 | 20 | 3500 | 131 | 0.0078 | 0.0104 | 0.0034 | -1.218 | 0.0498 | 0.0388 | 0.0145 | 0.368 |
| AGAP000994 | 20 | 2519 | 47 | 0.0027 | 0.0049 | 0.0001 | -1.98 | 0.0288 | 0.0477 | 0.0019 | 0.039 |
| AGAP002961 | 20 | 4700 | 237 | 0.0116 | 0.0315 | 0.0017 | -0.58 | 0.0208 | 0.0504 | 0.0032 | 0.062 |
| AGAP003073 | 20 | 1768 | 115 | 0.0152 | 0.0241 | 0.0003 | -0.743 | 0.0393 | 0.0895 | 0.0033 | 0.035 |
| AGAP004474 | 19 | 2363 | 150 | 0.0181 | 0.0282 | 0.0013 | -0.077 | 0.0442 | 0.0579 | 0.0031 | 0.052 |
| AGAP004969 | 20 | 1653 | 64 | 0.009 | 0.0209 | 0.0034 | -0.753 | 0.022 | 0.0594 | 0.0053 | 0.086 |
| AGAP005327 | 19 | 1088 | 54 | 0.0102 | 0.0208 | 0.0007 | -1.107 | 0.0099 | 0.0117 | 0.0003 | 0.029 |
| AGAP005945 | 19 | 2553 | 183 | 0.0169 | 0.0367 | 0.0016 | -0.678 | 0.0487 | 0.0562 | 0.0027 | 0.046 |
| AGAP006357 | 20 | 3166 | 213 | 0.0183 | 0.0336 | 0.0013 | -0.086 | 0.034 | 0.0728 | 0.0065 | 0.085 |
| AGAP006757 | 20 | 5014 | 409 | 0.0183 | 0.0204 | 0.0004 | -0.868 | 0.0489 | 0.0406 | 0.0002 | 0.005 |
| AGAP007178 | 20 | 1699 | 84 | 0.0105 | 0.0253 | 0.0017 | -1.017 | 0.0203 | 0.0424 | 0.0032 | 0.074 |
| AGAP007957 | 20 | 4364 | 317 | 0.0158 | 0.0293 | 0.0029 | -0.915 | 0.0287 | 0.0666 | 0.0065 | 0.094 |
| AGAP009172 | 19 | 2826 | 125 | 0.0115 | 0.0242 | 0.0006 | -0.4 | 0.0269 | 0.0492 | 0.0021 | 0.042 |
| AGAP009518 | 19 | 4695 | 411 | 0.021 | 0.0253 | 0.0021 | -0.709 | 0.039 | 0.0267 | 0.0014 | 0.051 |
| AGAP010415 | 20 | 1275 | 25 | 0.0035 | 0.0117 | 0.0011 | -1.188 | 0.0271 | 0.0947 | 0.0021 | 0.02 |
| AGAP011321 | 20 | 1566 | 89 | 0.0142 | 0.0376 | 0.005 | -0.381 | 0.0318 | 0.0809 | 0.0134 | 0.158 |
| AGAP011689 | 20 | 1684 | 96 | 0.0153 | 0.041 | 0.0003 | -0.132 | 0.022 | 0.0414 | 0.0029 | 0.067 |

^aNumber of *A. coluzzii* alleles sampled

^bNumber of base pairs sequenced per allele

^cNumber of segregating sites

^dPairwise genetic diversity calculated for all sites

^ePairwise genetic diversity calculated for synonymous sites

^fPairwise genetic diversity calculated for nonsynonymous sites

^gTajima's D calculated using silent sites.

^hPairwise divergence at all sites between *A. coluzzii* and *A. merus*

ⁱPairwise silent divergence between *A. coluzzii* and *A. merus*

^jPairwise replacement divergence between *A. coluzzii* and *A. merus*

^kK_A/K_S ratio between *A. coluzzii* and *A. merus*