Table S5. Regression coefficient between environmental factor and the number of alleles for each locus.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | WI |  | CI |  | TMC |  | PRS |  | PRW |  | MSD |  | WinSR |  | SprSR |  | SumSR |  | AutSR |  |
| Aat01 | -0.215 |  | -0.246 |  | -0.236 |  | -0.042 |  | -0.151 |  | 0.004 |  | -0.082 |  | 0.083 |  | -0.005 |  | -0.207 |  |
| Aat02 | -0.512 | \*\* | -0.688 | \*\* | -0.751 | \*\* | -0.057 |  | -0.463 | \* | -0.103 |  | 0.193 |  | 0.408 | \* | 0.336 |  | -0.151 |  |
| Aat04 | -0.243 |  | -0.170 |  | -0.321 |  | 0.032 |  | -0.409 | \* | -0.187 |  | 0.421 | \* | -0.079 |  | -0.082 |  | -0.377 |  |
| Aat05 | -0.166 |  | -0.123 |  | -0.207 |  | -0.086 |  | -0.445 | \* | -0.438 | \* | 0.389 |  | -0.175 |  | -0.123 |  | -0.373 |  |
| Aat06 | -0.168 |  | -0.089 |  | -0.084 |  | -0.183 |  | -0.125 |  | 0.003 |  | -0.116 |  | -0.272 |  | 0.034 |  | -0.485 | \* |
| Aat08 | -0.374 |  | -0.258 |  | -0.135 |  | 0.392 |  | 0.113 |  | 0.193 |  | 0.250 |  | 0.297 |  | -0.023 |  | -0.374 |  |
| Aat09 | -0.112 |  | -0.090 |  | -0.089 |  | 0.155 |  | -0.170 |  | -0.093 |  | 0.405 | \* | 0.152 |  | -0.216 |  | -0.124 |  |
| Aat10 | 0.034 |  | -0.002 |  | -0.051 |  | -0.255 |  | -0.262 |  | -0.078 |  | -0.054 |  | 0.063 |  | 0.147 |  | 0.258 |  |
| Aat11 | -0.080 |  | -0.147 |  | -0.253 |  | 0.109 |  | -0.434 | \* | -0.324 |  | 0.416 | \* | 0.047 |  | -0.046 |  | -0.056 |  |
| Aat13 | -0.251 |  | -0.185 |  | -0.234 |  | -0.012 |  | -0.345 |  | -0.134 |  | 0.080 |  | -0.102 |  | 0.058 |  | -0.429 | \* |
| Egm1005 | 0.154 |  | -0.041 |  | -0.074 |  | -0.226 |  | -0.175 |  | -0.202 |  | -0.119 |  | -0.194 |  | 0.236 |  | -0.181 |  |
| Egm14860 | -0.314 |  | -0.289 |  | -0.353 |  | 0.038 |  | -0.158 |  | 0.031 |  | 0.141 |  | 0.123 |  | -0.027 |  | -0.061 |  |
| Egm16822 | -0.186 |  | -0.315 |  | -0.400 | \* | 0.025 |  | -0.518 | \*\* | -0.405 | \* | 0.376 |  | 0.195 |  | -0.049 |  | -0.335 |  |
| Egm26233 | -0.445 | \* | -0.519 | \*\* | -0.484 | \* | 0.155 |  | -0.017 |  | 0.048 |  | 0.146 |  | 0.598 | \*\* | 0.297 |  | 0.023 |  |
| Egm4191 | 0.114 |  | 0.022 |  | -0.042 |  | -0.304 |  | -0.161 |  | 0.063 |  | -0.176 |  | -0.100 |  | 0.267 |  | 0.059 |  |
| Egm4389 | -0.521 | \*\* | -0.559 | \*\* | -0.448 | \* | 0.229 |  | -0.116 |  | -0.018 |  | 0.125 |  | 0.471 | \* | 0.209 |  | -0.108 |  |
| Egm5979 | 0.241 |  | 0.105 |  | -0.030 |  | -0.245 |  | -0.361 |  | -0.151 |  | 0.037 |  | -0.307 |  | 0.121 |  | -0.189 |  |
| Egm55338 | -0.312 |  | -0.224 |  | -0.230 |  | 0.136 |  | -0.114 |  | 0.040 |  | 0.178 |  | 0.010 |  | 0.007 |  | -0.394 |  |

\*, 0.5 > *p* > 0.1; \*\*, 0.1 > *p*; Aat15 was omitted because all populations were Na = 2.