Table S2. Mean assignment rate of individuals into (rows) and from (columns) each population using GeneClass 2 (Piry et al. 2004). Values in bold indicate the proportions of individuals assigned to the source population (self-assignment). Values less than 0.001 were excluded from the table

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 　 | Ag\_CA | Ag\_CE | Ag\_CI | Ag\_CJ | Ag\_CL | Ag\_CM | Ag\_CO | Ag\_CP | Ag\_CT | Ag\_CU | Ag\_EJ | Ag\_EL | Ag\_ER | Ag\_EU | Ag\_FO | Ag\_HI | Ag\_HR | Ag\_IL | Ag\_KA |
| /Ag\_CA | **0.731**  |   | 0.069  | 0.003  |   | 0.008  |   | 0.742  |   | 0.000  | 0.001  |   |   | 0.001  |   | 0.011  |   |   | 0.001  |
| /Ag\_CE |   | **0.432**  | 0.042  | 0.003  | 0.000  | 0.032  | 0.007  |   |   |   | 0.132  | 0.061  | 0.001  | 0.053  | 0.039  | 0.104  |   | 0.000  | 0.000  |
| /Ag\_CI | 0.000  | 0.051  | **0.519**  | 0.002  |   | 0.056  | 0.026  | 0.001  |   | 0.004  | 0.042  | 0.001  | 0.008  | 0.073  | 0.048  | 0.092  |   | 0.000  | 0.012  |
| /Ag\_CJ |   | 0.001  | 0.006  | **0.438**  |   | 0.005  | 0.013  |   |   |   | 0.026  | 0.001  | 0.000  | 0.005  | 0.038  | 0.020  |   | 0.001  |   |
| /Ag\_CL |   | 0.548  | 0.079  | 0.002  | **0.557**  | 0.011  |   |   |   |   | 0.017  | 0.448  |   | 0.309  |   | 0.019  |   |   | 0.000  |
| /Ag\_CM | 0.002  | 0.052  | 0.086  | 0.008  |   | **0.525**  | 0.008  | 0.012  |   | 0.489  | 0.139  | 0.014  | 0.000  | 0.117  | 0.016  | 0.353  |   | 0.003  | 0.072  |
| /Ag\_CO |   | 0.015  | 0.061  | 0.011  |   | 0.028  | **0.426**  |   |   | 0.002  | 0.297  | 0.001  | 0.057  | 0.085  | 0.428  | 0.237  |   | 0.004  | 0.000  |
| /Ag\_CP | 0.532  |   | 0.052  | 0.004  |   | 0.008  |   | **0.713**  |   |   |   |   |   | 0.000  |   | 0.016  |   |   | 0.001  |
| /Ag\_CT |   | 0.253  | 0.170  | 0.006  |   | 0.033  | 0.035  |   | **0.591**  | 0.001  | 0.217  | 0.002  | 0.041  | 0.133  | 0.071  | 0.097  |   | 0.000  | 0.000  |
| /Ag\_CU | 0.000  | 0.000  | 0.047  | 0.008  |   | 0.490  | 0.000  |   |   | **0.569**  | 0.064  | 0.004  |   | 0.035  | 0.000  | 0.246  |   | 0.002  | 0.011  |
| /Ag\_EJ |   | 0.051  | 0.088  | 0.009  |   | 0.077  | 0.214  |   |   | 0.001  | **0.498**  | 0.002  | 0.080  | 0.148  | 0.206  | 0.258  |   | 0.002  | 0.000  |
| /Ag\_EL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| /Ag\_ER |   | 0.012  | 0.295  | 0.008  |   | 0.019  | 0.645  |   |   |   | 0.452  |   | **0.452**  | 0.206  | 0.513  | 0.358  |   | 0.000  |   |
| /Ag\_EU |   | 0.037  | 0.094  | 0.005  |   | 0.035  | 0.112  |   |   | 0.000  | 0.180  | 0.003  | 0.058  | **0.384**  | 0.110  | 0.210  |   | 0.000  |   |
| /Ag\_FO |   | 0.013  | 0.027  | 0.008  |   | 0.028  | 0.445  |   |   | 0.000  | 0.363  | 0.000  | 0.026  | 0.037  | **0.376**  | 0.275  |   | 0.002  |   |
| /Ag\_HI | 0.000  | 0.033  | 0.060  | 0.009  |   | 0.125  | 0.110  |   |   | 0.024  | 0.223  | 0.008  | 0.008  | 0.126  | 0.110  | **0.479**  | 0.000  | 0.005  | 0.007  |
| /Ag\_HR |   | 0.012  | 0.012  | 0.010  |   | 0.126  | 0.038  |   |   | 0.016  | 0.139  | 0.004  | 0.002  | 0.008  | 0.063  | 0.270  | **0.461**  | 0.004  | 0.001  |
| /Ag\_IL |   | 0.001  | 0.020  | 0.009  |   | 0.052  | 0.023  |   |   | 0.006  | 0.074  |   |   | 0.014  | 0.015  | 0.168  |   | **0.702**  | 0.032  |
| /Ag\_KA |   | 0.005  | 0.126  | 0.004  |   | 0.106  |   |   |   | 0.006  | 0.009  | 0.004  |   | 0.013  |   | 0.167  |   | 0.000  | **0.570**  |
| /Ag\_PU |   | 0.015  | 0.045  | 0.004  |   | 0.042  | 0.144  |   | 0.000  | 0.056  | 0.118  | 0.000  | 0.014  | 0.050  | 0.174  | 0.122  |   | 0.001  | 0.000  |
| /Ag\_RH |   | 0.003  | 0.008  | 0.002  |   | 0.004  | 0.012  |   |   |   | 0.024  | 0.001  | 0.003  | 0.004  | 0.031  | 0.024  |   |   |   |
| /Ag\_SN |   | 0.080  | 0.303  | 0.010  |   | 0.053  | 0.581  |   |   | 0.001  | 0.671  | 0.003  | 0.343  | 0.281  | 0.503  | 0.422  |   | 0.002  | 0.001  |
| /Ag\_SO | 0.393  | 0.009  | 0.080  | 0.004  |   | 0.025  | 0.044  | 0.395  |   | 0.001  | 0.086  | 0.000  | 0.011  | 0.039  | 0.084  | 0.079  |   | 0.002  | 0.000  |
| /Ag\_SE |   |   |   | 0.000  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ag\_PE |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ag\_IX |   |   |   | 0.000  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ag\_YO |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ar\_CB |   |   | 0.002  | 0.001  |   | 0.002  |   |   |   | 0.000  | 0.001  | 0.000  |   | 0.001  |   | 0.070  |   |   | 0.000  |
| /Ar\_CO |   |   |   | 0.000  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ar\_LE |   |   |   | 0.000  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ar\_LY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| /Ar\_PH |   |   |   | 0.073  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ar\_RH |   |   |   | 0.001  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ar\_RU |   |   |   | 0.000  |   |   |   |   |   |   |   |   |   | 0.000  |   | 0.001  |   |   |   |
| /Ar\_ST |   | 0.019  | 0.028  | 0.011  |   | 0.186  | 0.005  |   |   | 0.069  | 0.133  | 0.019  |   | 0.139  | 0.009  | 0.531  |   | 0.005  | 0.102  |
| /Ar\_VE |   |   | 0.000  | 0.001  |   |   |   |   |   |   |   |   |   | 0.000  |   | 0.013  |   |   |   |

Table S2. (continued)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 　 | Ag\_PU | Ag\_RH | Ag\_SN | Ag\_SO | Ag\_SE | Ag\_PE | Ag\_IX | Ag\_YO | Ar\_CB | Ar\_CO | Ar\_LE | Ar\_LY | Ar\_PH | Ar\_RH | Ar\_RU | Ar\_ST | Ar\_VE |
| /Ag\_CA | 0.008  | 0.111  |   | 0.732  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_CE | 0.120  | 0.357  | 0.063  | 0.017  |   |   |   |   |   |   |   |   | 0.001  |   |   |   |   |
| /Ag\_CI | 0.195  | 0.485  | 0.042  | 0.155  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_CJ | 0.085  | 0.283  | 0.045  | 0.003  |   |   |   |   |   |   |   |   | 0.123  |   |   |   |   |
| /Ag\_CL | 0.060  | 0.269  | 0.015  | 0.003  |   |   |   |   |   |   |   |   | 0.001  |   |   |   |   |
| /Ag\_CM | 0.164  | 0.354  | 0.017  | 0.112  |   |   |   |   | 0.002  |   |   | 0.001  | 0.001  | 0.000  | 0.000  | 0.004  | 0.003  |
| /Ag\_CO | 0.391  | 0.776  | 0.186  | 0.035  |   |   |   |   | 0.000  |   |   |   | 0.000  |   |   | 0.000  | 0.000  |
| /Ag\_CP | 0.005  | 0.050  |   | 0.590  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_CT | 0.385  | 0.282  | 0.094  | 0.040  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_CU | 0.169  | 0.235  | 0.003  | 0.111  |   |   |   |   | 0.000  |   |   |   | 0.001  |   |   | 0.000  | 0.000  |
| /Ag\_EJ | 0.329  | 0.596  | 0.192  | 0.067  |   |   |   |   |   |   |   |   | 0.001  |   |   |   | 0.000  |
| /Ag\_EL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| /Ag\_ER | 0.602  | 0.886  | 0.399  | 0.142  |   |   |   |   |   |   |   |   |   |   |   |   |   |
| /Ag\_EU | 0.239  | 0.620  | 0.050  | 0.041  |   |   |   |   | 0.000  |   |   | 0.003  | 0.001  |   | 0.000  |   | 0.000  |
| /Ag\_FO | 0.464  | 0.867  | 0.191  | 0.040  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_HI | 0.182  | 0.433  | 0.081  | 0.078  |   |   |   |   | 0.013  |   |   | 0.009  | 0.002  | 0.000  | 0.000  | 0.013  | 0.006  |
| /Ag\_HR | 0.172  | 0.660  | 0.060  | 0.012  |   |   |   |   |   |   |   |   | 0.001  |   |   |   |   |
| /Ag\_IL | 0.218  | 0.277  | 0.045  | 0.095  |   |   |   |   |   |   |   |   | 0.001  |   |   |   |   |
| /Ag\_KA | 0.114  | 0.184  | 0.001  | 0.044  |   |   |   |   |   |   |   |   | 0.001  |   |   |   | 0.001  |
| /Ag\_PU | **0.460**  | 0.655  | 0.089  | 0.051  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_RH | 0.076  | **0.382**  | 0.012  | 0.004  |   |   |   |   |   | 0.001  |   |   | 0.000  |   |   |   |   |
| /Ag\_SN | 0.686  | 0.788  | **0.465**  | 0.179  |   |   |   |   |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_SO | 0.083  | 0.314  | 0.029  | **0.575**  |   |   |   |   |   |   |   |   | 0.001  |   |   |   |   |
| /Ag\_SE | 0.000  | 0.020  | 0.000  |   | **0.416**  |   |   |   |   |   |   |   | 0.001  |   |   |   |   |
| /Ag\_PE |   |   |   |   |   | **0.583**  |   |   |   |   |   |   | 0.012  |   |   |   |   |
| /Ag\_IX |   |   |   |   |   |   | **0.351**  | 0.129  |   |   |   |   | 0.000  |   |   |   |   |
| /Ag\_YO |   |   |   |   |   |   | 0.021  | **0.333**  |   |   |   |   | 0.001  |   |   |   |   |
| /Ar\_CB | 0.000  | 0.016  | 0.000  | 0.000  |   |   |   |   | **0.464**  |   | 0.000  | 0.405  | 0.002  |   | 0.004  | 0.014  | 0.186  |
| /Ar\_CO |   | 0.107  |   |   |   |   |   |   |   | **0.388**  | 0.000  | 0.001  | 0.002  | 0.018  |   |   | 0.000  |
| /Ar\_LE |   | 0.001  |   |   |   |   |   |   |   |   | **0.387**  |   | 0.002  |   | 0.000  |   |   |
| /Ar\_LY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| /Ar\_PH |   | 0.283  |   | 0.001  |   | 0.001  |   |   |   | 0.001  |   |   | **0.565**  | 0.002  | 0.000  |   |   |
| /Ar\_RH |   | 0.284  |   |   |   |   |   |   |   | 0.117  |   |   | 0.002  | **0.322**  |   |   |   |
| /Ar\_RU |   | 0.003  |   |   |   |   |   |   | 0.004  |   | 0.001  | 0.025  | 0.002  |   | **0.491**  | 0.000  | 0.011  |
| /Ar\_ST | 0.035  | 0.212  | 0.025  | 0.013  |   |   |   |   | 0.268  |   | 0.001  | 0.216  | 0.003  |   | 0.008  | **0.482**  | 0.227  |
| /Ar\_VE |   | 0.284  |   |   |   |   |   |   | 0.344  |   | 0.001  | 0.306  | 0.002  |   | 0.012  |   | **0.441**  |