**Table S4** Genetic diversity of populations of *Scutellaria* species in Taiwan estimated using four polymorphic loci. The monomorphic *mat*K in every population is not shown.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species/Populations | Locus | N | Hap | S | Hd ± std | π ± std | θ ± std | Tajima's D | p | Fu's F | p |
| ***S. austrotaiwanensis*** | ***CAD*** | **66‎** | **3** | **2** | **0.671 ± 0.015** | **0.001 ± 4e-5** | **3.7e-4 ± 2.7e-4** | **1.915**  | **0.967**  | **2.024**  | **0.864**  |
| aus1 | *CAD* | 19‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus2 | *CAD* | 33‎ | 2 | 1 | 0.477 ± 0.050 | 4.2e-4 ± 4e-5 | 2.2e-4 ± 2.2e-4 | 1.417  | 0.918  | 1.603  | 0.858  |
|  aus3 | *CAD* | 14‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. indica*** | ***CAD*** | **21‎** | **2** | **6** | **0.514 ± 0.046** | **0.003 ± 2e-4** | **0.001 ± 0.001** | **2.671**  | **0.999**  | **7.641**  | **0.995**  |
|  ind1 | *CAD* | 9‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  ind2 | *CAD* | 12‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. playfairii*** | ***CAD*** | **83‎** | **3** | **2** | **0.545 ± 0.025** | **0.001 ± 4e-5** | **4e-4 ± 3e-4** | **0.739**  | **0.791**  | **1.032**  | **0.739**  |
|  pla1 | *CAD* | 5‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  pla2 | *CAD* | 35‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  pla3 | *CAD* | 43‎ | 2 | 1 | 0.173 ± 0.072 | 2e-4 ± 6e-5 | 2e-4 ± 2e-4 | -0.353  | 0.241  | 0.063  | 0.451  |
| ***S. taiwanensis*** | ***CAD*** | **31‎** | **1** | **0** | **0** | **0** | **0** | **na** | **na** | **na** | **na** |
| ***S. tashiroi*** | ***CAD*** | **68‎** | **3** | **2** | **0.648 ± 0.025** | **0.001 ± 3e-5** | **4e-4 ± 3e-4** | **2.111**  | **0.979**  | **2.203**  | **0.890**  |
|  tas1 | *CAD* | 15‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas2 | *CAD* | 16‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas3 | *CAD* | 15‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas4 | *CAD* | 22‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. austrotaiwanensis*** | ***CHS*** | **132‎** | **2** | **1** | **0.413 ± 0.034** | **0.001 ± 4e-5** | **2e-4 ± 2e-4** | **1.363**  | **0.900**  | **2.011**  | **0.864**  |
| aus1 | *CHS* | 38‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus2 | *CHS* | 66‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus3 | *CHS* | 28‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. indica*** | ***CHS*** | **42‎** | **2** | **4** | **0.502 ± 0.027** | **0.003 ± 1e-4** | **0.001 ± 0.001** | **2.735**  | **0.997**  | **6.824**  | **0.989**  |
|  ind1 | *CHS* | 18‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  ind2 | *CHS* | 24‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. playfairii*** | ***CHS*** | **166‎** | **2** | **1** | **0.491 ± 0.013** | **0.001 ± 2e-5** | **2e-4 ± 2e-4** | **1.868**  | **0.961**  | **2.554**  | **0.908**  |
|  pla1 | *CHS* | 10‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  pla2 | *CHS* | 70‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  pla3 | *CHS* | 86‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. taiwanensis*** | ***CHS*** | **62‎** | **1** | **0** | **0** | **0** | **0** | **na** | **na** | **na** | **na** |
| ***S. tashiroi*** | ***CHS*** | **136‎** | **6** | **4** | **0.652 ± 0.033** | **0.002 ± 1e-4** | **0.001 ± 0.001** | **2.078**  | **0.977**  | **1.362**  | **0.764**  |
|  tas1 | *CHS* | 30‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas2 | *CHS* | 32‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas3 | *CHS* | 30‎ | 2 | 1 | 0.460 ± 0.061 | 0.001 ± 8e-5 | 3e-4 ± 3e-4 | 1.280  | 0.897  | 1.475  | 0.836  |
|  tas4 | *CHS* | 44‎ | 4 | 3 | 0.529 ± 0.065 | 0.001 ± 1e-4 | 0.001 ± 0.001 | -0.328  | 0.384  | -0.563  | 0.366  |
| ***S. austrotaiwanensis*** | ***ndh*F-*rpl*32** | **66‎** | **1** | **0** | **0** | **0** | **0** | **na** | **na** | **na** | **na** |
| aus1 | *ndh*F-*rpl*32 | 19‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus2 | *ndh*F-*rpl*32 | 33‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus3 | *ndh*F-*rpl*32 | 14‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. indica*** | ***ndh*F-*rpl*32** | **21‎** | **2** | **3** | **0.514 ± 0.046** | **0.003 ± 2e-4** | **0.001 ± 0.001** | **2.234**  | **0.991**  | **4.389**  | **0.975**  |
|  ind1 | *ndh*F-*rpl*32 | 9‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  ind2 | *ndh*F-*rpl*32 | 12‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. playfairii*** | ***ndh*F-*rpl*32** | **83‎** | **3** | **3** | **0.360 ± 0.058** | **0.001 ± 2e-4** | **0.001 ± 0.001** | **0.184**  | **0.636**  | **1.328**  | **0.791**  |
|  pla1 | *ndh*F-*rpl*32 | 5‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  pla2 | *ndh*F-*rpl*32 | 35‎ | 2 | 1 | 0.208 ± 0.083 | 4e-4 ± 2e-4 | 4e-4 ± 4e-4 | -0.211  | 0.285  | 0.251  | 0.503  |
|  pla3 | *ndh*F-*rpl*32 | 43‎ | 2 | 2 | 0.450 ± 0.520 | 0.002 ± 2e-4 | 0.001 ± 0.001 | 1.752  | 0.958  | 3.387  | 0.952  |
| ***S. taiwanensis*** | ***ndh*F-*rpl*32** | **31‎** | **2** | **1** | **0.452 ± 0.063** | **0.001 ± 1e-4** | **4e-4 ± 4e-4** | **1.240**  | **0.884**  | **1.459**  | **0.824**  |
| ***S. tashiroi*** | ***ndh*F-*rpl*32** | **68‎** | **5** | **5** | **0.717 ± 0.038** | **0.003 ± 3e-4** | **0.002 ± 0.001** | **1.763**  | **0.963**  | **2.215**  | **0.852**  |
|  tas1 | *ndh*F-*rpl*32 | 15‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas2 | *ndh*F-*rpl*32 | 16‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas3 | *ndh*F-*rpl*32 | 15‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas4 | *ndh*F-*rpl*32 | 22‎ | 3 | 2 | 0.680 ± 0.043 | 0.002 ± 2e-4 | 0.001 ± 0.001 | 1.345  | 0.908  | 1.004  | 0.758  |
| ***S. austrotaiwanensis*** | ***rpl*32-*trn*L** | **66‎** | **1** | **0** | **0** | **0** | **0** | **na** | **na** | **na** | **na** |
| aus1 | *rpl*32-*trn*L | 19‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus2 | *rpl*32-*trn*L | 33‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  aus3 | *rpl*32-*trn*L | 14‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. indica*** | ***rpl*32-*trn*L** | **21‎** | **2** | **6** | **0.514 ± 0.046** | **0.005 ± 5e-4** | **0.003 ± 0.001** | **2.671**  | **0.999**  | **7.641**  | **0.995**  |
|  ind1 | *rpl*32-*trn*L | 9‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  ind2 | *rpl*32-*trn*L | 12‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
| ***S. playfairii*** | ***rpl*32-*trn*L** | **83‎** | **3** | **6** | **0.626 ± 0.023** | **0.005 ± 1e-4** | **0.002 ± 0.001** | **3.018**  | **0.999**  | **8.057**  | **0.986**  |
|  pla1 | *rpl*32-*trn*L | 5‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  pla2 | *rpl*32-*trn*L | 35‎ | 2 | 6 | 0.363 ± 0.078 | 0.004 ± 0.001 | 0.003 ± 0.001 | 1.361  | 0.920  | 6.916  | 0.992  |
|  pla3 | *rpl*32-*trn*L | 43‎ | 2 | 5 | 0.365 ± 0.070 | 0.003 ± 0.001 | 0.002 ± 0.001 | 1.455  | 0.928  | 6.349  | 0.988  |
| ***S. taiwanensis*** | ***rpl*32-*trn*L** | **31‎** | **1** | **0** | **0** | **0** | **0** | **na** | **na** | **na** | **na** |
| ***S. tashiroi*** | ***rpl*32-*trn*L** | **68‎** | **2** | **3** | **0.504 ± 0.015** | **0.003 ± 8e-5** | **0.001 ± 0.001** | **2.728**  | **0.996**  | **6.085**  | **0.982**  |
|  tas1 | *rpl*32-*trn*L | 15‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas2 | *rpl*32-*trn*L | 16‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas3 | *rpl*32-*trn*L | 15‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |
|  tas4 | *rpl*32-*trn*L | 22‎ | 1 | 0 | 0 | 0 | 0 | na | na | na | na |