

**Fig. S1**. Positive images of 6% polyacrylamide gels after electrophoresis in vertical electrophoresis chambers stained in a solution of ethidium bromide under ultraviolet light for 10 microsatellite markers in 1-9 samples of *Abies sibirica*. The single digit numbers depict the sample numbers underneath the images, and three digit numbers depict the fragment sizes within the images. DNA fragments of the pBR322 *E. coli* plasmid digested by the *Hpa*II restriction enzyme were used as standard length markers and are presented on the edge lanes.

**Table S5**. Fixation Index (FIS) for 14 microsatellite markers in four populations of Abies alba (A, B, C and D) and in a sample of Abies nordmanniana

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Locus** | **A** | **B** | **C** | **D** | **Mean** | ***A. nordmanniana*** |
| *As\_1898225* | 0.09 | -0.07 | -0.04 | 0.04\* | 0.00 | 0.00 |
| *As\_1356647* | 0.04 | 0.36 | 0.24 | -0.09 | 0.14 | - |
| *As\_404145* | -0.10 | 0.01 | 0.17 | 0.11 | 0.05 | -0.10 |
| *As\_563614* | 0.38\*\* | 0.31 | 0.45\*\*\* | 0.11\* | 0.31 | -0.03 |
| *As\_2612077* | 0.44\*\* | 0.73 | 0.56 | 0.59 | 0.58 | 0.32\*\* |
| *As\_2631734* | -0.03 | -0.30 | -0.03 | -0.33 | -0.17 | - |
| *As\_3458593* | -0.09 | 0.29 | -0.22 | -0.23 | -0.06 | - |
| *As\_3602348* | 0.71 | 0.44\*\* | 0.76 | 0.69 | 0.65 | - |
| *As\_154813* | -0.04 | 0.02 | -0.03 | 0.10 | 0.01 | -0.08 |
| *As\_2280886* | -0.14 | 0.25\*\* | -0.02 | -0.10 | 0.00 | -0.21 |
| *As\_420232* | -0.06 | 0.46 | -0.23 | #N/A | #N/A | -0.25 |
| *As\_878430* | 0.20 | 0.24\* | 0.37\* | 0.23\* | 0.26 | - |
| *As\_1089795* | 0.31\* | 0.44\*\*\* | 0.37 | 0.42\*\* | 0.39 | 0.46 |
| *As\_1970306* | -0.21 | -0.37 | -0.03 | -0.27 | -0.22 | -1.00 |
| Mean | 0.11 | 0.20 | 0.17 | 0.10 | 0.14 | -0.10 |

\* *P*< 0.05, \*\* *P*< 0.01, \*\*\* *P*< 0.001

**Table S6**. Frequency of null alleles in four Abies alba populations (A, B, C and D) found by MICRO-CHECKER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Locus** | **A** | **B** | **C** | **D** |
| *As\_1898225* | no | no | no | no |
| *As\_1356647* | no | no | no | no |
| *As\_404145* | no | no | no | no |
| *As\_563614* | 0.169 | no | 0.204 | no |
| *As\_2612077* | 0.223 | 0.348 | 0.263 | 0.276 |
| *As\_2631734* | no | no | no | no |
| *As\_3458593* | no | no | no | no |
| *As\_3602348* | 0.316 | 0.206 | 0.346 | 0.296 |
| *As\_154813* | no | no | no | no |
| *As\_2280886* | no | 0.125 | no | no |
| *As\_420232* | no | no | no | no |
| *As\_878430* | no | no | 0.181 | no |
| *As\_1089795* | 0.158 | 0.205 | 0.169 | 0.198 |
| *As\_1970306* | no | no | no | no |