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**Genetic structure of the endangered, relict shrub *Amygdalus mongolica* (Rosaceae) in arid northwest China**

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**Table S1. The added distribution records and the details of *Amygdalus mongolica***

| Distribution records                                      | Longitude/<br>Latitude | Specimen<br>numbers | Source of specimen  |
|---|------------------------|---------------------|---|
| Daqing Mountains in Hohhot City of Inner Mongolia         | 111.43/40.75           | 032113              | Herbarium of Central South Forestry Institute, Hunan, China |
| Northern Wujia temple in Hanggin Banner of Inner Mongolia | 108.73/39.82           | 01640770            | Institute of Botany, Chinese Academy of Sciences            |
| Nuomuhong farm of Alxa Right Banner of Inner Mongolia     | 105.28/38.85           | 00563755            | Institute of Botany, Chinese Academy of Sciences            |
| Ordos national nature reserve of Inner Mongolia           | 106.96/39.09           | 1228460             | Institute of Botany, Chinese Academy of Sciences            |
| Sunan Yugur Autonomous County of Gansu Province           | 99.81/38.84            | 00563758            | Institute of Botany, Chinese Academy of Sciences            |

**Table S2. Determinant environmental variables reflecting the cumulative contributions and standard deviation (SD) for the potential distribution of *Amygdalus mongolica***

| Determinant environmental variables                  | Contributions (SD)  |
|--|---------------------|
| Precipitation of the warmest quarter                 | 27.8 ( $\pm 0.12$ ) |
| Min temperature of the coldest month                 | 22.2 ( $\pm 0.26$ ) |
| Precipitation seasonality (coefficient of variation) | 19.1 ( $\pm 0.28$ ) |
| Air temperature seasonality                          | 11.5 ( $\pm 0.24$ ) |
| Precipitation of the driest quarter                  | 7.5 ( $\pm 0.28$ )  |
| Min air temperature of the coldest month             | 5.3 ( $\pm 0.40$ )  |
| Mean air temperature of the coldest quarter          | 4.2 ( $\pm 0.12$ )  |
| Annual precipitation                                 | 2.4 ( $\pm 0.29$ )  |

**Table S3. Variable nucleotide sites for two chloroplast DNA regions in 12 haplotypes of *Amygdalus mongolica***

■, TTATTTT; ▲, TATTAC; ●, TACAAA; ▼, CAAGT; ◆, AAAGA; ★, TTTTTA

Open symbols, i.e. □, △, ○, ▽, ◇, and ☆ represent the indels format text, with a length > 1 bp. '-' represents indels with a length equal to 1 bp

| Haplotype | <i>trnL-trnF</i> |        |        |             |             |             |             |             |             | <i>psbK-psbI</i> |             |        |             |             |             |             |
|-----------|------------------|--------|--------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|--------|-------------|-------------|-------------|-------------|
|           | 3<br>6           | 5<br>0 | 9<br>2 | 1<br>0<br>6 | 1<br>1<br>5 | 1<br>8<br>9 | 2<br>2<br>3 | 2<br>9<br>0 | 3<br>3<br>8 | 3<br>4<br>5      | 3<br>5<br>7 | 2<br>3 | 1<br>4<br>2 | 1<br>4<br>3 | 1<br>4<br>6 | 1<br>4<br>7 |
| H1        | C                | □      | G      | ▲           | ○           | ▽           | C           | G           | ◆           | G                | A           | ★      | T           | -           | -           | -           |
| H2        | .                | ■      | .      | △           | ○           | ▽           | .           | .           | ◇           | .                | .           | ★      | .           | .           | .           | .           |
| H3        | .                | □      | .      | △           | ○           | ▽           | A           | A           | ◇           | A                | .           | ★      | .           | .           | .           | .           |
| H4        | .                | □      | T      | △           | ○           | ▽           | .           | .           | ◇           | .                | .           | ☆      | .           | .           | .           | .           |
| H5        | .                | ■      | .      | △           | ○           | ▽           | .           | .           | ◇           | .                | .           | ★      | .           | T           | .           | .           |
| H6        | .                | □      | .      | ▲           | ○           | ▽           | .           | .           | ◆           | .                | .           | ★      | .           | T           | .           | .           |
| H7        | A                | □      | .      | ▲           | ○           | ▽           | .           | .           | ◆           | .                | .           | ★      | .           | .           | .           | .           |
| H8        | .                | □      | .      | ▲           | ○           | ▽           | .           | .           | ◆           | .                | .           | ★      | -           | .           | .           | .           |
| H9        | .                | □      | T      | ▲           | ●           | ▽           | .           | .           | ◆           | .                | .           | ★      | -           | .           | .           | .           |
| H10       | .                | □      | .      | △           | ○           | ▽           | .           | .           | ◇           | .                | .           | ★      | .           | .           | .           | .           |
| H11       | .                | □      | .      | ▲           | ○           | ▽           | .           | .           | ◆           | .                | .           | ★      | .           | .           | .           | .           |
| H12       |                  |        |        |             |             |             |             |             |             |                  | -           |        |             |             | T           | T           |