**Predicting potential and quality distribution of *Anisodus tanguticus* (Maxim.) Pascher under different climatic conditions in the Qinghai–Tibet plateau**

**Chen Chen a, #, Bo Wang b, #, Jianan Li b, Yuanming Xiao b, Kaiyang Chen b, Na Liu b, Guoying Zhou b\***

*a Anhui Provincial Engineering Laboratory for Efficient Utilization of Featured Resource Plants, College of Life Sciences, Huaibei Normal University, Huaibei, Anhui 235000, PR China*

*b**Chinese Academy of Sciences Key Laboratory of Tibetan Medicine Research, Northwest Institute of Plateau Biology, Xining, 810008, China*

# Chen Chen and Bo Wang contributed equally to this manuscript

\* Correspondence: Guoying Zhou, PhD, CAS Key Laboratory of Tibetan Medicine Research, Northwest Institute of Plateau Biology, 23# Xinning Road, Xining, 810008, China. Email: zhougy@nwipb.cas.cn

Table S1 Percentage Contribution and Permutation Importance of environment variables for *A. tanguticus* in the Maxent

|  |  |  |
| --- | --- | --- |
| Variable | Percent contribution | Permutation importance |
| Alt | 59.6 | 61.7 |
| Bio 18 | 21.5 | 17.5 |
| Bio 1 | 6.7 | 12.3 |
| Bio 7 | 4.6 | 1.5 |
| human activities | 2.6 | 0.7 |
| Bio 15 | 1.6 | 2.7 |
| Bio 3 | 1.0 | 1.9 |
| AN | 1.0 | 0.3 |
| Bio 2 | 0.6 | 0.7 |
| pH | 0.4 | 0.2 |
| TP | 0.3 | 0.2 |
| AK | 0.2 | 0.3S |