

# Supplementary Materials: Comparison of Hierarchical and Non-Hierarchical Bayesian Approaches for Fitting Allometric Larch (*Larix. spp.*) Biomass Equations

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**Table S1.** A and b values of 36 biomass equations (total, root, stem wood, stem bark, branch, and foliage biomass) in 6 reported literature for larch in China.

| No. | Total  |       | Root   |       | Stem Wood |       | Stem Bark |       | Branch |       | Foliage |        | Reference |
|-----|--------|-------|--------|-------|-----------|-------|-----------|-------|--------|-------|---------|--------|-----------|
|     | a      | b     | a      | b     | a         | b     | a         | b     | a      | b     | a       | b      |           |
| 1   | -1.378 | 0.760 | -0.929 | 0.368 | -2.957    | 0.911 | -4.962    | 0.913 | -1.448 | 0.307 | -4.017  | -1.378 | [1]       |
| 2   | -1.952 | 0.844 | -4.075 | 0.915 | -2.797    | 0.888 | -3.352    | 0.670 | -2.957 | 0.633 | -3.817  | -1.952 | [2]       |
| 3   | -2.087 | 0.892 | -4.510 | 0.981 | -2.465    | 0.849 | -3.381    | 0.684 | -4.423 | 0.990 | -5.521  | -2.087 | [3]       |
| 4   | -2.079 | 0.901 | -4.510 | 0.982 | -2.659    | 0.927 | -3.352    | 0.694 | -3.037 | 0.628 | -3.058  | -2.079 | [4]       |
| 5   | -1.091 | 0.735 | -5.116 | 1.024 | -1.845    | 0.789 | -1.917    | 0.389 | -1.514 | 0.318 | -0.942  | -1.091 | [5]       |
| 6   | -2.419 | 0.929 | -3.474 | 0.866 | -3.170    | 0.960 | -4.269    | 0.813 | -5.298 | 0.972 | -4.962  | -2.419 | [6]       |

## References

1. Wang, H.Q. *Research on the Biomass Model of Larix kaemferi Plantation in Northern Sub-Tropical Alpine Area Based on Sample Plots and Remote Sensing*; Chinese Academy of Forestry: Beijing, China, 2010.
2. Shen, Y.Z.; Sun, X.M.; Zhang, J.T. Study on the individual tree biomass of *Larix kaempferi* plantation in xiaolong mountain Gansu province. *For. Res.* **2011**, *24*, 517–522.
3. Liu, Y.Q. *The Study of Single Biomass, Carbon Storage and Distribution of Larix principis-Rupprechtii mayr. and Populus in Hebei Province*; Agricultural University of Hebei: Baoding, China, 2012.
4. Zhang, H. *Study on the Dominant Tree Biomass and Carbon Storage in Daqing Mountain*; Inner Mongolia Agricultural University: Huhehaote, China, 2010.
5. Min, Z.Q. *Study on Biomass Estimation Model of Larix olgensis*; Beijing Forestry University: Beijing, China, 2010.
6. Li, Z.F. *Biomass and Carbon Storage of the Larix gmelinii Forest's Research*; Inner Mongolia Agricultural University: Huhehaote, China, 2013.