

Supplementary Materials

Table 1. The p-values of one-way ANOVA for growth parameters and foliar Nitrogen (N), Phosphorus (P) and Potassium (K) concentrations of *Betula platyphylla*, *Larix kaempferi*, and *Chamaecyparis obtusa* in response to different placements of vermicompost (VC) application.

	<i>Betula platyphylla</i>	<i>Larix kaempferi</i>	<i>Chamaecyparis obtusa</i>
Growth parameters			
Height	0.222	< 0.001	0.02
RCD	0.056	<0.001	< 0.001
CoH	0.112	< 0.001	0.013
CoD	0.016	< 0.001	< 0.001
CR	< 0.001	0.013	0.003
FR	0.001	0.017	0.351
Root	< 0.001	0.005	0.033
Leaf	< 0.001	< 0.001	< 0.001
Branch	0.018	< 0.001	< 0.001
Stem	0.001	< 0.001	0.003
Total biomass	< 0.001	< 0.001	< 0.001
Foliar nutrient concentrations			
N	0.018	0.004	0.017
P	0.749	0.508	0.894
K	0.359	0.193	0.768

CoH and CoD are coefficients in linear regression equation of relative tree height and root collar diameter growth, respectively; CR: coarse root biomass, FR: fine root biomass. Significant p-values are in bold.

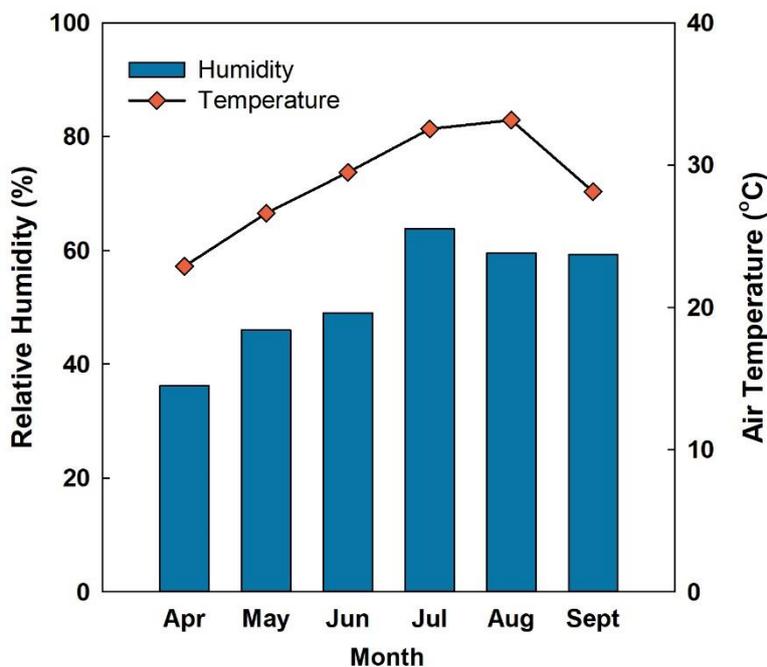


Figure 1. The observed monthly mean temperature and relative humidity in the greenhouse from April (planting time) to September (harvesting time).

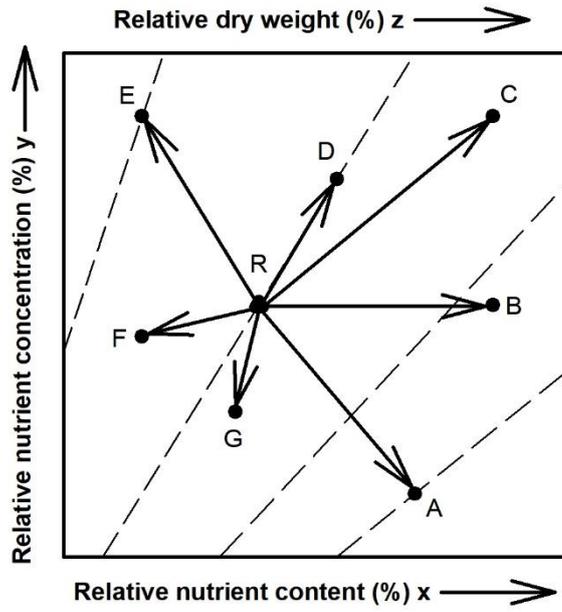


Figure S2. Vector interpretation of directional changes in nutrient concentration (y axis), nutrient content (x axis), and foliar dry weight (z axis) of elements or plants at different treatments. Reference point (R) is normalized to 100% representation of control. Vector shifts (A – G) indicate increase (+), decrease (-), or no change (0) in relative dry weight and nutrient status to the reference point [Error! Reference source not found.].

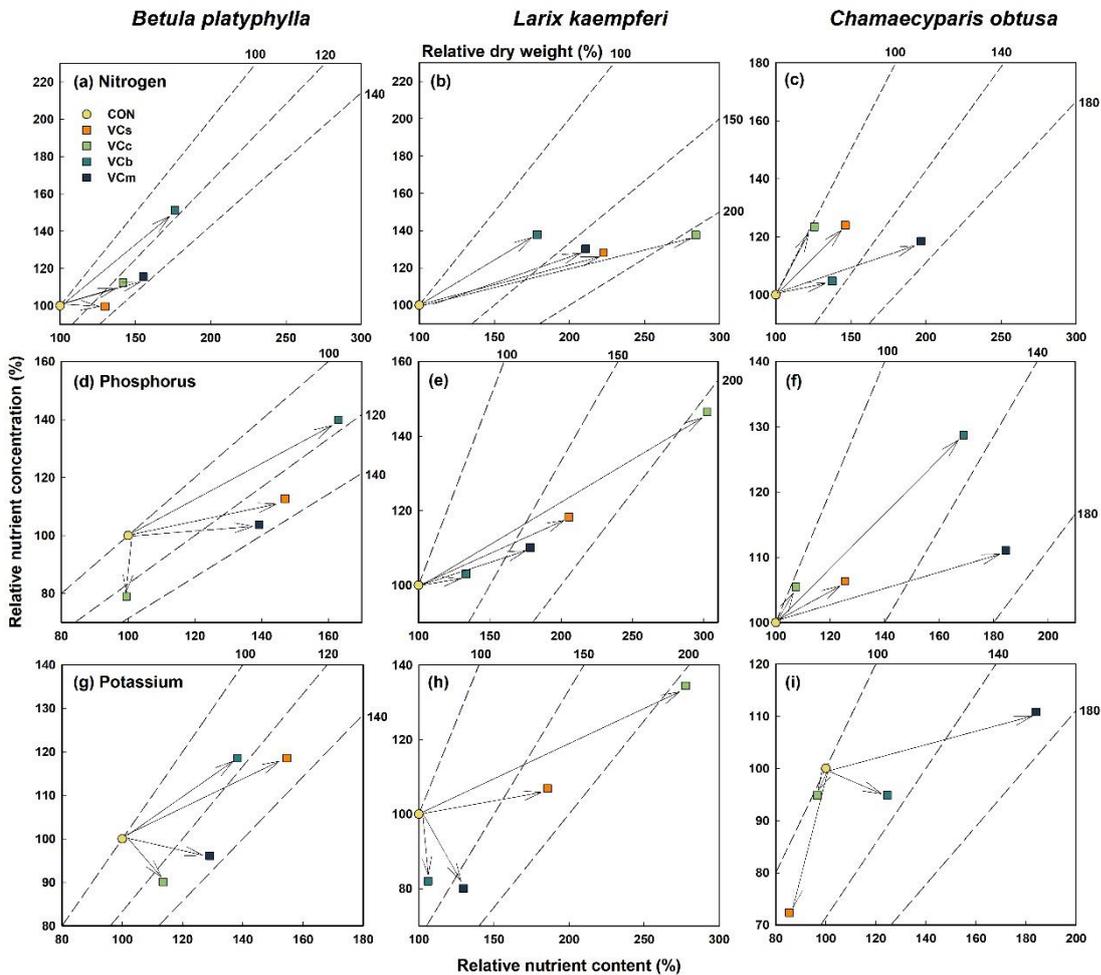


Figure S3. The relationships between foliar Nitrogen (a, b, and c), Phosphorus (d, e, and f), and Potassium (g, h, and i) and foliar dry weight at the end of the experiment after vermicompost (VC) application on *Betula platyphylla*, *Larix kaempferi*, and *Chamaecyparis obtusa* using different placement methods. CON, VC_s, VC_c, VC_b, and VC_m indicate control (no fertilizer), surface placement, subsurface placement at 6-cm depth covered with soil, bottom placement, and mixed VC with soil, respectively.