**Supplementary method and results: Influence of preservative time**

**Method**

A key confounding factor which can affect predictive allometric models for insects is the time specimens spend within preservative (i.e. ethanol, see Leuven et al. 1985). As a trade-off between including greater species diversity and those that had been preserved, we assessed the impact of preservative time using Australian and German specimens (species n = 20), where there was considerable overlap in preserved and unpreserved specimens in species. We fitted a linear model with y = ln(Specimen weight) ~ ln(ITD) + sex + preservative time.

**Result**

There was a significant effect of preservative time on specimen weight (t-value -4.23, p <0.001). Applying the formula: y = 1.273+1.852\*ln(ITD) + -0.0013\*Preservative time + Species-coefficient. where y = ln(Dry weight), for an *Andrena flavipes* with an ITD of 2.43mm (female species mean) preservative time of 1, 50 and 100 days results in weight loss of 0.019, 0.93 and 1.81mg.