

Captions for Supplementary Tables:

Table S1

File name: S1_Weight-to-Weight_Shapiro_Breusch_JBehrisch & NZwerschke.xlsx

Results of Shapiro-Wilk (SW) and Breusch-Pagan (BP) tests applied to residuals of linear models relating wet mass (WM), dry mass (DM), and ash-free dry mass (AFDM) [g] across families. P-values (p) < 0.05 indicate significant (*) deviation from normality (Shapiro–Wilk) or heteroscedasticity (Breusch–Pagan). “n” represents the number of samples included in the calculations.

Table S2

File name: S2_Size-to-Weight_Shapiro_Breusch_JBehrisch & NZwerschke.xlsx

Results of Shapiro-Wilk (SW) and Breusch-Pagan (BP) tests for residuals of linear models relating body size (mm) to biomass measures (wet mass (WM), dry mass (DM), ash-free dry mass (AFDM)) [g] across families. P-values (p) < 0.05 indicate significant (*) deviation from normality (Shapiro–Wilk) or heteroscedasticity (Breusch–Pagan). “n” represents the number of samples included in the calculations.

Table S3

File name: S3_Spearman_Weight-to-Weight_JBehrisch & NZwerschke.xlsx

Caption:

Results of Spearman rank correlations tests investigating the relationship between wet mass (WM), dry mass (DM), and ash-free dry mass (AFDM) [g] of 43 macro- and mega-zoobenthic families. Significant correlations are shown in bold text. “n” represents the number of samples included in the calculations. The result table contains the rho, S and p-value per biomass-body size Spearman correlations test for each family. In the results, rho indicates the nature (strength and direction) of the relationship between the variables (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904). A rho of 1 indicates a positive monotonic relationship, 0 indicates no monotonic relationship, and -1 indicates a negative monotonic relationship (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904). The value S, in the correlations results, represents the sum of squared rank differences (measure of disagreement) between the paired values (ranks) within a family (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904). A small S indicates similar ranks and a strong correlation (leads to a high rho), while a high S suggests large rank differences and a weaker or no correlation (leads to a low rho) (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904).

Table S4

File name: S4_Spearman_Size-to-Weight_JBehrisch & NZwerschke.xlsx

Caption:

Results of Spearman rank correlations tests investigating the relationship between wet mass (WM), dry mass (DM), and ash-free dry mass (AFDM) [g] and body size [mm] of 43 macro- and mega-zoobenthic families. Significant correlations are shown in bold text. The column “Morphometrics (size)” indicates the body part measured to evaluate organism size, which varies according to the morphology of organisms within a family. “n” represents the number of samples included in the calculations. The result

table contains the rho, S and p-value per biomass-body size Spearman correlations test for each family. In the results, rho indicates the nature (strength and direction) of the relationship between the variables (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904). A rho of 1 indicates a positive monotonic relationship, 0 indicates no monotonic relationship, and -1 indicates a negative monotonic relationship (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904). The value S, in the correlations results, represents the sum of squared rank differences (measure of disagreement) between the paired values (ranks) within a family (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904). A small S indicates similar ranks and a strong correlation (leads to a high rho), while a high S suggests large rank differences and a weaker or no correlation (leads to a low rho) (Dodge, 2008; Glasser and Winter, 1961; Spearman, 1904).