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State of knowledge of earthworm communities in German soils as a basis for biological soil quality assessment

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Electronic supplement

In this electronic supplement, sampling sites and ecological profiles of the 10 most common earthworm species in Germany are compiled (basis: data from 294 German sites analysed in this study).

Allolobophora chlorotica (Savigny, 1826)



Fig. 1: Records of *A. chlorotica* from the sites in Germany analysed in this study.



Fig. 2: Relative frequency of *A. chlorotica* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Aporrectodea caliginosa (Savigny, 1826)



Fig. 3: Records of *A. caliginosa* from the sites in Germany analysed in this study.



Fig. 4: Relative frequency of *A. caliginosa* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Aporrectodea longa (Ude, 1885)



Fig. 5: Records of *A. longa* from the sites in Germany analysed in this study.



Fig. 6: Relative frequency of *A. longa* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Aporrectodea rosea (Savigny, 1826)



Fig. 7: Records of *A. rosea* from the sites in Germany analysed in this study.



Fig. 8: Relative frequency of *A. rosea* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Dendrobaena octaedra (Savigny, 1826)



Fig. 9: Records of *D. octaedra* from the sites in Germany analysed in this study.



Fig. 10: Relative frequency of *D. octaedra* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Dendrodrilus rubidus (Savigny, 1826)



Fig. 11: Records of *D. rubidus* from the sites in Germany analysed in this study.



Fig. 12: Relative frequency of *D. rubidus* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Lumbricus castaneus (Savigny, 1826)



Fig. 13: Records of *L. castaneus* from the sites in Germany analysed in this study.



Fig. 14: Relative frequency of *L. castaneus* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Lumbricus rubellus Hoffmeister, 1843



Fig. 15: Records of *L. rubellus* from the sites in Germany analysed in this study.



Fig. 16: Relative frequency of *L. rubellus* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Lumbricus terrestris Linnaeus, 1758



Fig. 17: Records of *L. terrestris* from the sites in Germany analysed in this study.



Fig. 18: Relative frequency of *L. terrestris* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).

Octolasion tyrtaeum (Savigny, 1826)



Fig. 19: Records of *O. tyrtaeum* from the sites in Germany analysed in this study.



Fig. 20: Relative frequency of *O. tyrtaeum* in sites with different soil properties. Data basis: number of sites at which this species was found (Table 2). Star: statistically significant difference (Chi²-Test).