Methods S1. Details for plant treatment and data analysis

Production of F1-generation seeds: We germinated seeds of *Bunias orientalis* populations already available in 2013 (AL, T3, T4, JE, WU, DR, DI; for population codes see Table 1) and grew the plants (n = 4–9 per population) outside near Bielefeld University (Germany; latitude: 52°2.022'N, longitude: 8°29.718'E; 146 m a.s.l.) arranged by population. In the following spring, we covered plants belonging to one population with a semi-transparent fleece to prevent pollinator access. When the plants flowered, we manually pollinated them with a brush transferring pollen only between plants within each population. We collected the first filial generation of silicles from these plants in autumn 2014 to use them in the experiments.

Composition of mineral nutrient fertiliser solution: Mineral nutrient solution used for fertilisation of *Bunias orientalis* plants contained 1 (low nitrate treatment), 4 (high), or 2 (intermediate) mM $Ca(NO_3)_2$, 1 mM KCl, 1 mM $MgSO_4$, 0.5 mM KH_2PO_4, 0.5 mM, 0.05 Fe(III)-citrate, 0.01 mM H_3BO_3, 1 µM $ZnSO_4$, 0.5 µM $CuSO_4$, 0.2 µM Na_2MoO_4, 0.2 µM $NiCl_2$, 0.2 µM $MnCl_2$ and 0.2 µM $CoCl_2$.

Transformation selection for linear mixed-effect models: For all focal traits, we calculated LMMs on (a) the raw data, (b) the log-transformed data, and (c) square root-transformed data. We computed all possible models for each trait and selected for the best fit, i.e., the highest residual normality (Shapiro-Wilk-test). For two traits, we added 1 to the values to remove zero-values before transformation. Count data could not be analysed with a generalised LMM assuming a Poisson distribution, because the data revealed overdispersion. As datasets did not show typical count data phenomena (zero-inflation) and could easily be transformed to meet linear model assumptions, we treated all count data as continuous data.