

Figure S1. Mean monthly temperature and precipitation recorded at the meteorological station during the 2016–2017 growth season. Arrows indicate main experimental steps.

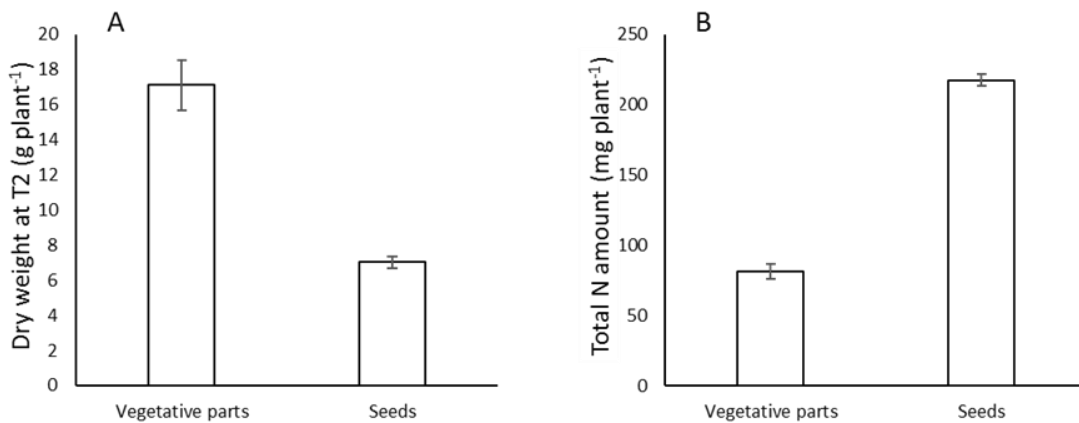


Figure S2. Total dry weight (**A**) and total nitrogen amount (**B**) of vegetative parts and seeds of rapeseed plants cultivated without N supply and harvested at T2 (G5 stage). Values correspond to the mean \pm SE for $n = 3$.

Table S1. Macro (**grey**) and microelement (**white**) concentrations in mature seeds from rapeseed plants harvested at T2 (G5 stage). Plants were cultivated in lysimeter with 60 (60 N) or 160 kg of N ha⁻¹ (160 N) and supplied with or without Si (12 Kg of Si ha⁻¹; 60 N + Si, 160 N + Si). Values represent the mean \pm SE for $n = 3$.

Nutrient	60 N	60 N + Si	160 N	160 N + Si
Ca (mg g ⁻¹)	3.89 \pm 0.08	3.87 \pm 0.18	3.61 \pm 0.19	3.52 \pm 0.21
K (mg g ⁻¹)	5.61 \pm 0.39	5.34 \pm 0.20	5.72 \pm 0.04	5.61 \pm 0.15
Mg (mg g ⁻¹)	1.83 \pm 0.07	1.74 \pm 0.07	1.82 \pm 0.06	1.72 \pm 0.04
P (mg g ⁻¹)	4.12 \pm 0.13	3.93 \pm 0.20	3.62 \pm 0.17	3.54 \pm 0.09
S (mg g ⁻¹)	3.04 \pm 0.05	2.86 \pm 0.08	3.45 \pm 0.12	3.17 \pm 0.11
B (mg g ⁻¹)	11.22 \pm 0.25	10.84 \pm 0.14	11.73 \pm 0.33	11.30 \pm 0.55
Cu (mg g ⁻¹)	2.61 \pm 0.07	2.58 \pm 0.06	2.90 \pm 0.35	2.79 \pm 0.17
Mn (mg g ⁻¹)	25.46 \pm 0.61	25.40 \pm 1.16	27.26 \pm 0.58	26.10 \pm 0.61
Mo (mg g ⁻¹)	0.38 \pm 0.06	0.40 \pm 0.02	0.35 \pm 0.01	0.35 \pm 0.02
Se (mg g ⁻¹)	37.20 \pm 0.66	30.21 \pm 4.27	25.80 \pm 3.37	29.90 \pm 1.85
Zn (mg g ⁻¹)	28.77 \pm 0.64	27.89 \pm 0.66	36.43 \pm 5.33	33.41 \pm 4.13