

Table S1. Plant nutrients of spring barley (C_{tot} : total carbon, N_{tot} : total nitrogen) affected by fertilization (P0 – no additional P, TSP - triple superphosphate; COM - compost; COM+TSP - compost + TSP) and treatment with/without Serradella in May and July 2019 on the test site Rostock. Mean values \pm standard deviation; post hoc test Tukey HSD $p < 0.05$; abc = differences between fertilization and treatment within the sampling date.

Sampling Date	Fertilization	Treatment	C_{tot} (g kg $^{-1}$)	N_{tot} (g kg $^{-1}$)	P_{tot} (g kg $^{-1}$)
May 2019	P0	Serradella	390.6 \pm 3.5a	51.8 \pm 3.6a	4.4 \pm 0.6b
		Bare fallow	384.5 \pm 5.5a	52.9 \pm 2.6a	4.3 \pm 0.4b
	TSP	Serradella	386.3 \pm 4.2a	53.1 \pm 1.8a	5.3 \pm 0.7ab
		Bare fallow	387.4 \pm 9.2a	47.3 \pm 8.2a	4.9 \pm 1.1ab
	COM	Serradella	382.6 \pm 6.8a	53.9 \pm 0.8a	5.5 \pm 0.5ab
		Bare fallow	387.2 \pm 2.5a	52.0 \pm 1.9a	5.1 \pm 0.6ab
	COM+TSP	Serradella	386.9 \pm 4.1a	54.8 \pm 2.7a	6.2 \pm 0.7a
		Bare fallow	385.0 \pm 2.1a	54.3 \pm 2.1a	6.2 \pm 0.3a
July 2019	P0	Serradella	405.0 \pm 5.0ab	18.2 \pm 1.8b	2.9 \pm 0.6b
		Bare fallow	404.5 \pm 8.3a	16.1 \pm 1.9b	3.2 \pm 0.5ab
	TSP	Serradella	405.6 \pm 18.4a	18.3 \pm 3.3b	2.4 \pm 0.3c
		Bare fallow	386.6 \pm 33.5ab	24.4 \pm 3.3a	3.7 \pm 0.7a
	COM	Serradella	404.6 \pm 13.6a	19.3 \pm 2.6ab	3.0 \pm 0.3b
		Bare fallow	376.5 \pm 9.0b	17.8 \pm 1.5b	2.9 \pm 0.1b
	COM+TSP	Serradella	403.4 \pm 16.2a	16.9 \pm 1.9b	2.8 \pm 0.2b
		Bare fallow	405.5 \pm 8.9a	18.7 \pm 3.8b	3.1 \pm 0.7b