

P-treatments	Replications											
	I			II			III			IV		
Without plant protection (-PP)												
No P	SP ₁	SP ₂	SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	PR ₁	SP ₂	PR ₃
SP ₁	SP ₂	SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SSAB ₁	SSAB ₂	SSAB ₃
SP ₂	SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₁	PR ₂	PR ₁	SP ₂	PR ₃
SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₁	SP ₂	PR ₃	SSAB ₁
PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₁	PR ₂	PR ₁	SP ₃	SSAB ₁	SSAB ₂	SSAB ₃
PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₁	SP ₂	PR ₃	SSAB ₁	SSAB ₂	SP ₁
PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₂	PR ₁	SP ₃	SSAB ₁	SSAB ₂	PR ₃	SP ₂
With plant protection (+PP)												
No P	SP ₁	SP ₂	SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	PR ₁	SP ₂	PR ₃
SP ₁	SP ₂	SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₂	PR ₃
SP ₂	SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₁	PR ₁	SP ₂	PR ₃	SSAB ₁
SP ₃	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	PR ₂	PR ₁	SP ₃	SP ₂	SP ₁
PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₁	PR ₁	SP ₂	PR ₃	SP ₁	PR ₂	PR ₃
PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₂	PR ₁	SP ₃	SP ₁	PR ₃	SP ₂
PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₁	SP ₂	PR ₃	SP ₁	PR ₂	PR ₃	SP ₃
SSAB ₁	SSAB ₂	SSAB ₃	No P	SP ₁	PR ₂	PR ₁	SP ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₂	PR ₁
SSAB ₂	SSAB ₃	No P	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₁	PR ₂	PR ₁	SP ₃
SSAB ₃	No P	PR ₁	PR ₂	PR ₃	SSAB ₁	SSAB ₂	SSAB ₃	SP ₁	PR ₂	PR ₁	SP ₃	SP ₂

Figure S1. Scheme of experimental design. Explanations in Table 1.

Table S1. Earthworm (*Lumbricidae*) occurrence in the 0–40 cm layer of soil under spring wheat

Treatments		Density (no./m ²)	Weight (g/m ²)
P-fertilisation	No P	5.0a	1.41a
	SP ₁	1.0a	0.42a
	SP ₂	5.0a	0.75a
	SP ₃	3.0a	1.20a
	PR ₁	2.0a	0.41a
	PR ₂	0.0a	0.00a
	PR ₃	5.0a	0.63a
	SSAB ₁	6.0a	1.97a
	SSAB ₂	4.0a	0.95a
	SSAB ₃	7.0a	1.59a
Plant protection	– PP	3,4A	0.48A
	+ PP	4,2A	1.38A

Different letters within columns indicate significant differences at p<0.05: small letters for P-fertilisation treatments, capital letters – for plant protection treatments