

**Table S1.** Effect of the fixed factors soil, cultivar and inoculation, and their interactions on the different parameters, analyzed by factorial ANOVA ( $p \leq 0.05$ ). Asterisks (\*) denote significant effects.

	Soil	Cultivar	Inoculation	Soil × Cultivar	Soil × Inoculation	Cultivar × Inoculation	Soil × Cultivar × Inoculation
Chlorophyll a + b	0.212	0.837	0.938	0.98	0.529	0.111	0.952
Stomatal conductance	0.908	0.939	0.518	0.561	0.785	0.454	0.343
Specific nitrogenase activity	0.282	0.71	0.845	0.677	0.741	0.884	0.907
Total nitrogenase activity	<0.001*	0.425	0.393	0.482	0.888	0.489	0.25
Cluster root number	0.415	0.721	0.237	0.659	0.752	0.85	0.348
Cluster root fresh weight	0.712	0.689	0.46	0.341	0.92	0.638	0.677
[Hg] nodules	<0.001*	0.559	0.795	0.588	0.579	0.812	0.831
[Hg] roots	<0.001*	0.137	0.908	0.6	0.79	0.726	0.825
[Hg] cluster roots	<0.001*	0.087	0.712	0.75	0.59	0.663	0.192
Bioaccumulation factors	<0.001*	0.303	0.72	0.307	0.622	0.686	0.303

**Table S2.** Effect of the fixed factors Hg treatment and P concentration, and their interactions on the different parameters, analyzed by factorial ANOVA ( $p \leq 0.05$ ). Asterisks (\*) denote significant effects.

	Hg	[P]	Hg × [P]
Cluster root number	0.816	0.248	0.973
Cluster root fresh weight	<0.001*	0.44	0.392
Aerial parts fresh weight	<0.001*	0.165	0.298
Leaf area	0.012*	0.115	0.39
Nodules number	<0.001*	0.734	0.485
Nodules fresh weight	0.312	0.017**	0.805
Specific nitrogenase activity	0.577	0.069	0.922
Total nitrogenase activity	0.002*	0.016**	0.59
[Hg] in underground tissues		0.122	
Bioaccumulaton factors		0.123	

\*\*The analysis of variance indicated significant effects, but post-hoc one-way ANOVA did not evince significant differences.