Supplementary Material

Interactions between soybean, *Bradyrhizobium japonicum* and *Soybean mosaic virus*: the effects depend on the interaction sequence

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File S1. Supplementary Table and Figures Supplementary Table 1. List of used primers

Supplementary Figure 1.

Supplementary Figure 2.

Supplementary Figure 3.

Locus/ Accession number	Gene name	Primers sequence (5'-3')				
FJ418596.1	GmNPR1	TAGCAGCAATAGCATAGCAG AAAGGCGAAATTTCGGGGGAT				
BU577813	GmPR-1	AACTATGCTCCCCCTGGCAACTATATTG TCTGAAGTGGTAGCTTCTACATCGAAACAA				
M37753	GmPR-2	TGAAATAAGGGCCACGAGTCCAAATG ATGGTACATGCAGACTTCAAGAATGCAGAT				
AF202731	GmPR-3	AACTACAATTACGGGCAAGCTGGCAA TTGATGGCTTGTTTCCCTGTGCAGT				
AB370233	GmPR5-OLPb	ACCAATTTGGCAACCAGGAT CATTGGTGCAGCAATACTCA				
AB370234	GmPR5-P21e	GTGCACACGTGGCATAAGGT CACACAGCTACCGGAATTGC				
AK243880.1	GmLOX-A	CCGAGAGCATCCAAATACAA GCTCTATTATCGTTTGGACA				
U41998.1	AtACT-2	AACGACCTTAATCTTCATGCTGC GGTAACATTGTGCTCAGTGGTGG				

Supplementary Table 1. List of used primers



▲ SMV 1d ▼ SMV 7d

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Supplementary Figure S1. Biplot of principal components 1 and 2 (PC1 and PC2) of principal components analysis (PCA), (*a*). Normal nitrogen (NN); (*b*). High nitrogen (HN). Measurements were made on first trifoliate leaf of 21 days-old soybean plants. (C) healthy control plants; (*Bj*) *Bj*-inoculated plants 2 dpg; (SMV 1d) Early-SMV infected plants 1 dpg; (SMV-*Bj*) Early-SMV infected plants 1 dpg and inoculated with *Bj* 2 dpg; (SMV 7d) Late-SMV infected plants 7 dpg; and (*Bj*-SMV) *Bj*-inoculated 2 dpg and late-SMV infected plants 7 dpg. Results are from 6 plants \pm s.e.m of three independent experiments.

Experimental setup										
	Bradyrhizobium japonicum (Bj)			1	SMV	74	I I			
1	, Soybean mosaic virus (SMV)	0 1 2 3 7	21 0 1	2372	1	0 1 2 3	7 21			
1	Hydroponic system	Days post germination	1.1				1 1			
	Harvest	Bj	SMV-Bj	237 1	→ <i>Bj</i> -SM 21	WV 0 1 2 3	7 21			

Supplementary Figure S2. Scheme of the experimental setup used in this approach. Soybean plants were growth in hydroponic system with B&D medium supplied with 0.05 g.L⁻¹ NH4NO₃ during 18 days. (C) Healthy control plants; (*Bj*) *Bj*-inoculated plants 2 dpg; (SMV 1d) Early-SMV infected plants 1 dpg, infections were performed on germinated seed radicles performed by inoculating the radicle and cotyledons; (SMV-*Bj*) Early-SMV infected plants 1 dpg on germinated seed radicles, (as in SMV 1d) and inoculated with *Bj* 2 dpg; (SMV 7d) Late-SMV infected plants 7 dpg were performed mechanically on the upper surfaces of both first pair of unifoliate leaves; (*Bj*-SMV) *Bj*-inoculated 2 dpg and late-SMV infected plants 7 dpg (as in SMV 7d). All treatments were transferred to the hydroponic system at 3 dpg and harvested from 21 days-old plants.



Supplementary Figure S3. (*a*) Shoot dry weight, (*b*) root dry weight and (*c*) leaf area of 21 days-old soybean plants. (C) healthy control plants; (*Bj*) *Bj*-inoculated plants 2 dpg; (SMV 1d) Early-SMV infected plants 1 dpg; (SMV-*Bj*) Early-SMV infected plants 1 dpg and inoculated with *Bj* 2 dpg; (SMV 7d) Late-SMV infected plants 7 dpg; and (*Bj*-SMV) *Bj*-inoculated 2 dpg and late-SMV infected plants 7 dpg. (m) indicates mock-

infected plants with buffer. Measurements of leaf area were made on the first trifoliate leaf. Results are means from 9 plants \pm s.e.m of three independent experiments. Bars with different letters are statistically different by one-way ANOVA followed by *post hoc* Tukey test (P≤0.05).