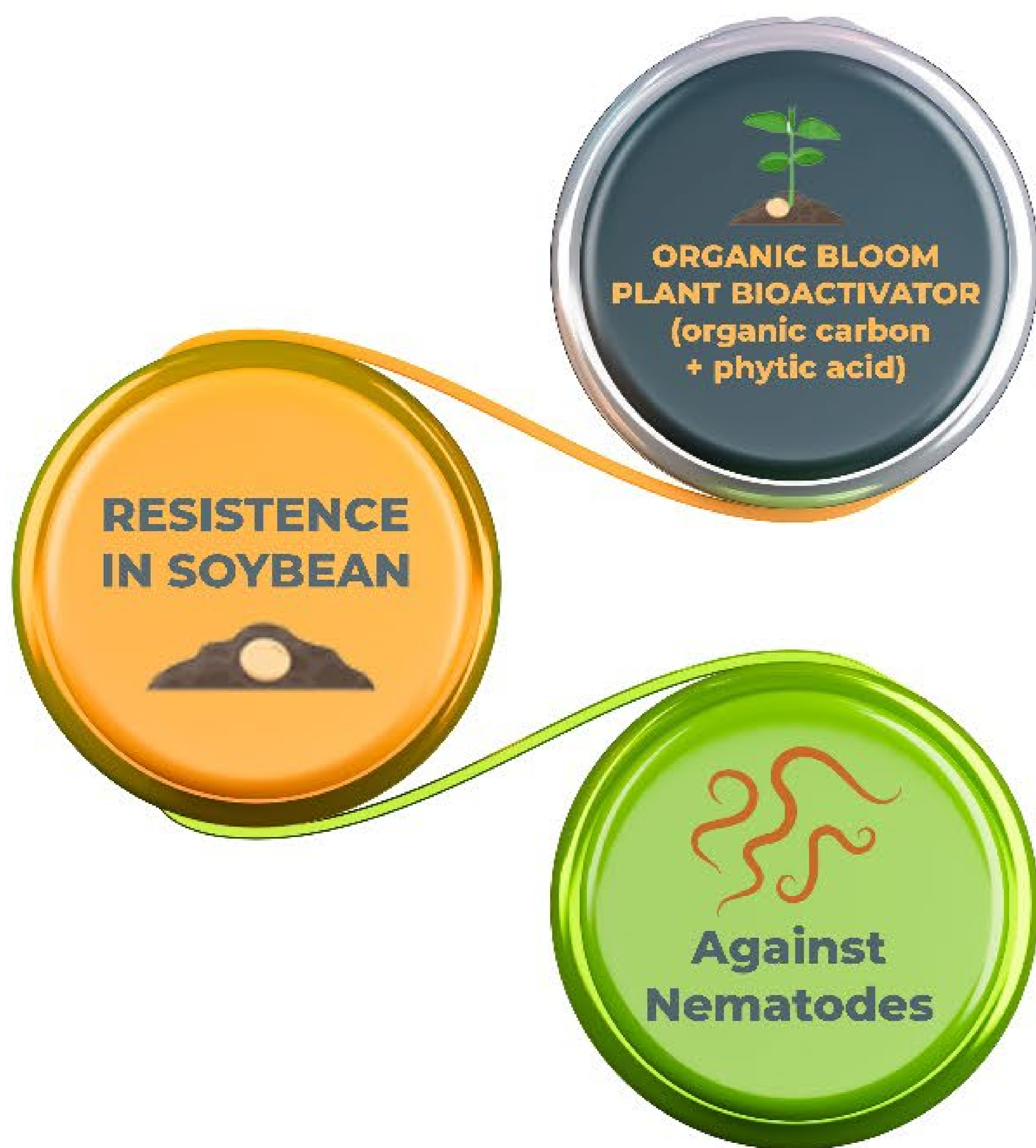


INTRODUÇÃO



METODOLOGIA

The objective was to evaluate whether OB can trigger the process of induction of resistance in soybean against nematode infection and reduce the reproduction of *Meloidogyne javanica* and *Pratylenchus brachyurus*.

The experiment was conducted in ITAM, Maringá/PR, in a DIC design with 4 treatments and 8 repetitions. The treatments consisted of the following application forms:

TREATMENTS:

- 1) Witness;
- 2) TS (seed treatment) (0.25 L ha⁻¹) + V4 (aerial application at V4) (0.3 L ha⁻¹) + R1 (aerial application at R1) (0.3 L ha⁻¹);
- 3) TS (0.25 L ha⁻¹) + Furrow (0.5 L ha⁻¹) + V4 (0.3 L ha⁻¹) + R1 (0.3 L ha⁻¹);
- 4) Furrow (0.5 L ha⁻¹) + V4 (0.3 L ha⁻¹) + R1 (0.3 L ha⁻¹).

TESTEMUNHA	ORG. BLOOM -TS
MJ TOTAL	MJ TOTAL
142362	14662
%RRT	%RRT
--	19,46
MJ/G RAIZ	MJ/G RAIZ
11113 a	3976 b
%RRT	%RRT
--	64,22
FR	FR
71,25	57,25

TESTEMUNHA	ORG. BLOOM -TS
Pb Total	Pb Total
3075 a	1200 b
%RRT	%RRT
--	60,98
Pb/g RAIZ	Pb/g RAIZ
185 a	69 b
%RRT	%RRT
--	62,70
FR	FR
6,15	2,40 b

RESULTADOS



Enzymatic activity of soybean roots, parasitized by *Meloidogyne javanica* treated with Organic Bloom

Enzimas	Dias após a inoculação			
	6	9	12	Média
Fenilalanina amônia-liase ¹	0,0049 bB	0,0134 bA	0,0114 aA	0,0099
	0,0465 aA	0,0225 aB	0,0102 aC	0,0264
	0,0257	0,0179	0,0108	
Peroxidase ²	8,7841 bA	9,3904 aA	6,2230 aA	8,1325
	14,2753 aA	11,0229 aA	6,3141 aB	10,5374
	11,5297	10,2066	6,2686	
Polifenol-oxidase ²	4,1725 bA	4,2425 aA	2,8312 aA	3,7487
	8,6794 aA	4,4560 aB	2,8756 aC	5,3370
	6,4259	4,3493	2,8534	
Catalase ³	39,2397 bA	36,2065 aB	23,8060 aB	66,4174
	75,1717 aA	53,1646 aB	24,6825 aB	84,3396
	157,2057	44,6855	24,2442	

CONCLUSÃO

All forms of application of the ob treatment promoted a reduction in the number of *M. javanica* (g/root), with maximum percentage of reduction of 64.22% in the application via seed treatment. Treatment 3 reduced the highest number of *P. brachyurus* nematode, 60.98% and 62.70% for the total nematode number and nematode per gram root, respectively. OB promoted increase in the specific enzymatic activity of phenylalanine ammonia lyase (PAL), peroxidase (POX), polyphenol oxidase (PPO) and catalase (CAT), especially at 6 days after inoculation. The commercial product Organic Bloom can be considered potential to control *M. javanica* and *P. brachyurus* in soybean, activating defense mechanisms in the plant.