Effect of homeopathy on soybean germination through soil and seed treatment

Mônica Filomena Assis de Souza², Kácio Gomes de Macedo¹, David Junior de Oliveira Pereira¹, Graciela Andreia Glis Machado¹, Leonardo Américo Souza Barbosa², Larissa Wolff Gonçalves², Pedro Henrique de Souza Cucco², Marco Antonio Cucco², Karine Bonucielli Brum³

¹Associate Degree in Agriculture, Escola Estadual São Gabriel, MS

E-mail of the corresponding author: monica.rt@sigohomeopatia.com.br

Background: Homeopathy is a technique approved by the MAPA for organic production systems. Experiments demonstrating the effectiveness of homeopathy in agriculture are essential. Aims: To evaluate the effects of homeopathic treatment on soybean seed germination. Methodology: The experiment was performed in MS-Brazil. An area of 70 m² was used, divided into two comparison plots of 30 m² each. The soil of plot 1 (treated group) was treated with 5.25 kg of powdered Lithothamnium mixed with 250 ml of 30% hydroalcoholic solution (HS) containing homeopathic ingredients. The soil of plot 2 (control group) was treated withthe same preparation but without homeopathic ingredients. Additionally, the 400 seeds assigned toplot 1 were treated with 0,3 ml of a solution made up of 10 ml of 30% HS with homeopathic ingredients diluted in 300 ml of water. The 400 seeds assigned toplot 2 were treated with 0.3 ml of a solution made up of 10 ml of HS without homeopathic ingredients diluted in 300 ml of water. The homeopathic ingredients Sulph 9C, Mag-c 12C, and Calc-p 9C were used on soil and seed treatment. The selection and prescription of those ingredients followed Materia Medica instructions. The experiment was conducted using randomized design and 400 seeds per group were sown. Results and discussion: In plot 1, an average of 11 seeds per m² germinated, adding up to 330 germinated seeds at a percentage of 82.5%. In plot 2, an average of 7 seeds per m² germinated, adding up to 210 germinated seeds at a percentage of 52.5%. The frequency of seedgermination in both groups was assessed by the Chi-square test to check for significant difference (p<0.05). There was a statistical difference (p<0.05) in the seed germination in the treated group (n=330) compared to the control group (n=210). Conclusion: Homeopathic compounds can be used as a viable treatment for soybean germination.

Keywords: Glycine max, seed quality, agroecology, agrohomeopathy, quantum agriculture

²Sigo Procedimentos Homeopáticos LTDA

³Universidade Federal de Mato Grosso do Sul