

ABSTRACT

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Grain weight and number of pods per plant in a soybean bed (*Glycine max*) treated in the planting furrow with a similia-based agronomic product prepared by magnetic printing

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The use of products prepared by magnetic printing with polar solvents in agriculture has gained popularity in recent years, following a trend to increase agricultural production while minimizing toxic residues. Obtaining these products is based on three steps: a) application of the Goethianistic observation method of “indicator plants” present in specific terrains and comparison with different materia medica [1,2,3], b) collection of water from springs close to the observed plants, followed by exposure to the sun for 2 hours and preparation of a 30% hydroalcoholic solution (for preservation) in corn cereal alcohol, c) serial fabrication of products using the Potentizer II™ device (Curitiba, Brazil), whose function is to identify ultra-long waves with amplitudes ranging from 1 to 20,000 Hertz of a polar vehicle, as a magnetic field identity, and store it in software. This process allows for the reproduction of this field on an industrial scale. This study aimed to evaluate the effects of applying AQ RESIST™, a product prepared by this method, on the number of pods per plant and the weight of soybean grains from land that was transitioning from traditional to organic cultivation, with a history of decades of pesticide use. AQ RESIST™ is produced by mixing water samples collected from four different sources located in the Bodoquena mountain range, MS, Brazil, called *Argilus teluricum*, *Aqua pleiadianus*, *Magnetum terrestris*, and *Aqua telassensis* whose “indicator plants” are found in areas submitted to chronic intoxication, soil infertility and greater susceptibility to pests. The study was conducted in an experimental area of the Technical Course in Agriculture, São Gabriel do Oeste, MS, on clay soil classified as a “Dystroferic Red Latosol,” which is predominant in the region. The plots were determined in the same area and under the same climatic conditions. None of the plots were close to water sources. The region’s climate corresponded to the typical patterns of the Brazilian Savannah (“Cerrado”), with very distinct divisions between the dry and rainy seasons. The experiment was implemented after verifying the one hundred millimeters of rain indicated for the beginning of sowing on October 25, 2022, during the southern hemisphere spring. Climatic conditions were not controlled during the experiment; however, cultivation occurred during a

favorable period for soybeans, following the established agricultural routine in the region. Two plots were created (test and control), each with 30 m², with 10 m² space for irrigation between them. In the test plot soil, 100 mL of AQ RESIST™ diluted in 20 L of water was applied to the planting furrow using a backpack pump. The same process was used in the control plot's soil, but only the vehicle (30% hydroalcoholic solution) was used without blinding. Sequential plant sampling was performed on interspersed rows in 70 plots, resulting in 35 plants harvested from each plot (test and control). The number of pods per plant was then counted. Student's t-test for independent samples (one-tailed) indicated a significant difference ($t = 1.69$, $p < 0.05$) between the pod production of the test samples (57.6 pods/plant) and the control samples (51.3 pods/plant). Subsequently, the grains obtained from each plant were weighed on an analytical balance (Shimadzu Unibloc, GR). SENS. 0.1mg (Kyoto, Japan) to calculate the average weight of each grain and, finally, the weight of a thousand grains (a unit commonly used in agricultural production metrics). In the context of agricultural production, the weight of a thousand grains can have a direct impact on crop yield. In the treated group, the total weight of the seeds was 174.5 g, compared to 167.8 g in the control group, resulting in seeds that were 3.84% heavier in the treated sample. This difference predicts a more significant yield potential for the crop subjected to this treatment. Thus, the treatment with the AQ RESIST™ product resulted in more outstanding production of pods and heavier grains. The data obtained are promising, but additional research is still needed to evaluate the effectiveness of the product in various situations, including with a larger number of plants, in less favorable soil conditions, with different strains of the plant, and at different times of the year. Additionally, the reproducibility of this product also needs to be tested, and its validation should be done by comparing its effects with those of classic dynamized (homeopathic) dilutions. The literature on such products is still scarce, and no comparative study has been found between these products and classical homeopathic ones in the agronomic context. However, an experimental study comparing *Arnica montana* 6cH prepared in a classical manner and using similar equipment showed similar results; however, the shape of the time-dependent inflammatory edema inhibition curve and the pain behavior differed [4].

Keywords: Agroecology, Organic production, Magnetic printing, Similia principle

Conflict of interest:

The AGROQUANTUM Company declares a conflict of interest since a commercial product was used in this study.

References

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