PLANT MICROBIOTA

BLUEBERRYMICROBIOTA FILLING

EFFICACY EVALUATION

RESULTS FROM USING BIOFERTILIZER ON **BLUEBERRY**

BlueberryMicrobiota Filling, owned by Microendo Inc., is the first product developed from selecting the best microorganisms obtained from the *Vaccinium corymbosum* plant. This unique and patented bio-inoculant consists of a probiotic blend that stimulates fruit filling in the reproductive phase of *Vaccinium corymbosum*. It strengthens the plant's immune system, reduces stress, and recovers the original microbiota of the crop, increasing the diameter and thickness of the fruit by up to 20%.

FIELD INFORMATION

Location

Rancho Monte Largo Ayotlán municipality, Betania delegation (20°35'20.2"N 102°24'18.6"W).

Owner

Luis Alberto Hernandez

Size

10 hectares

Analysis Design

- The analysis was conducted through the distribution of various treatments, and comparisons were made based on fruit weight.
- The diameter of both the fruit and the peduncle was measured.
- Randomly selected comparative photographs presented.

INDUCTION TRIALS

The product was tested in a tunnel containing 100 plants. Each plant was inoculated with 100 ml of the **BlueberryMicrobiota Filling** treatment, injected directly into the substrate near the plant's roots. A total of 3 applications were performed immediately after the differentiation from flower to fruit, spaced over three weeks (one application per week).

Five plants were randomly selected, and once they began to bear fruit, all mature berries were collected, counted, weighed, and measured. In total, 9 collections of mature fruits were conducted post-inoculation. The results obtained from the mature fruit collections are summarized in **Table 1.**

Treatment	No. of Berries	Weight (g)	Diameter (cm)
BlueberryMicrobiota Filling	**1,407.4**	**1,309.6202**	**1.42**
Chemical fertilization	**1,242.8**	**1,017.7584**	**1.42**

Table 1. Results Obtained from Blueberry harvests post-bacterial inoculation.

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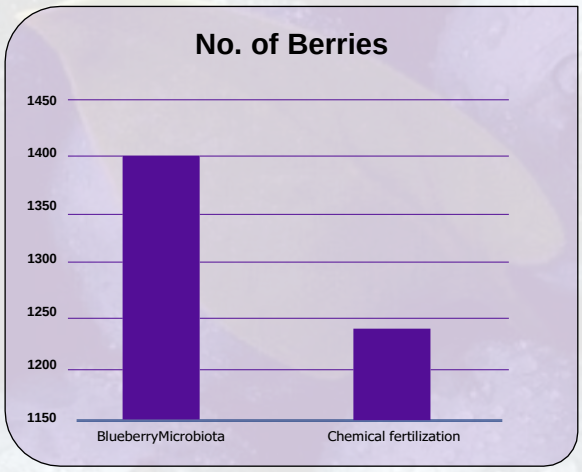

Figure 1. Graph of the average total number of ripe fruits collected by treatment.

As shown in Figure 1, the bushes treated with **BlueberryMicrobiota Filling** produced a greater number of fruits compared to those treated with conventional chemical fertilization, achieving **13%** more berries.

Regarding the weight of the collected berries, those from bushes treated with **BlueberryMicrobiota Filling** exhibited greater weight compared to those obtained from bushes treated with chemical fertilization. **BlueberryMicrobiota Filling** achieved **28%** more weight in fruits, as shown in **Figure 2.**

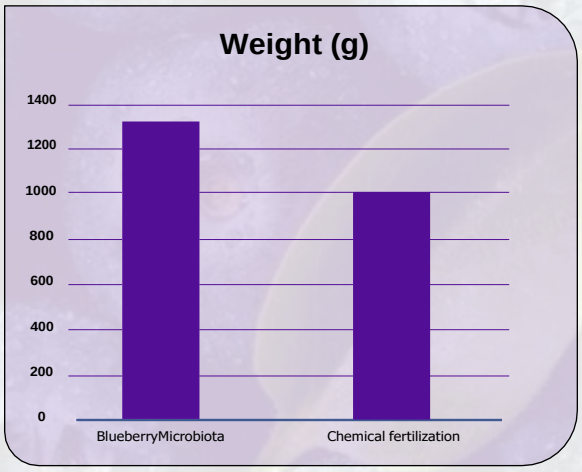

Figure 2. Graph of the average total weight of ripe fruits collected by treatment.

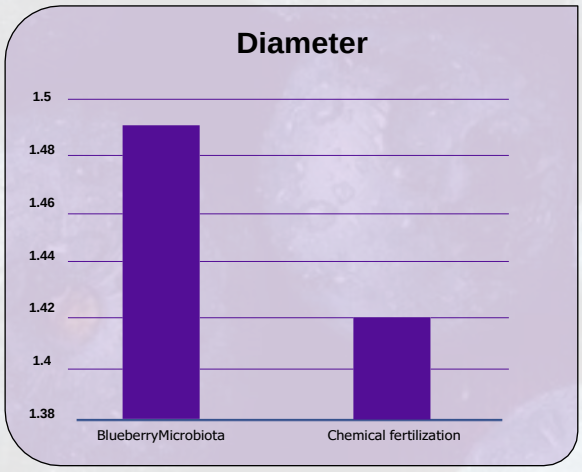

Figure 3. Graph of the average total diameter of the ripe fruits collected by treatment.

The last parameter measured was the fruit diameter. Similar to the previous parameters, the comparison between bushes treated with **BlueberryMicrobiota Filling** and those treated with chemical fertilization showed that the **BlueberryMicrobiota Filling** product resulted in a greater diameter in the fruits, achieving **5%** more diameter.

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Figure 4. Images obtained from the blueberries collected from bushes treated with Blueberry Microbiota.

Conventional

Blueberry MicrobiotA