

QUANTUM GROWTH EXPERIMENTAL WORK CARRIED OUT WITH BRAZILIAN POTATOES GROWERS

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INTRODUCTION

In the year 2010 five potatoes producers were involved to test the Quantum Growth product in the State of São Paulo.

These experiments were supervised for the Professor André Palermo Tonietti from UNIPINHAL, University of Pinhal located in the city of Espírito Santo do Pinhal. Four students also participated on the development of this experiment as a part of training program from this University.

OBJECTIVE

The experiment work was designed to test initially the productivity of the cultivars Monaliza and Agata, using the production system upland and irrigated.

MATERIAL AND METHODS

Farm and cultivar. Table 1 summarized the farms cultivar and productions system in which the experiments work were developed.

Table 1. Farm, name of the farmer, production system and potato cultivar

Farm	Name of the farmer	Production system	Cultivar
Rosário	Laercio Berbamasco	Irrigated	Monaliza
Momboca	Jair varaldo	Upland	Monaliza
Casa Branca	Toninho Gomes	Irrigated	Agata
Jeriquara	José Carlos Bergamasco	Irrigated	Monaliza
Casa Branca	José Pai do Paulinho	Irrigated	Monaliza

Quantum Growth Application. Each farm was visited 5 times during the experiment, except farm Jeriquara from Jose Carlos Bergamasco, since the students and the Professor were committed at the University and could not follow the experiment locally. As a consequence some mistakes were done during the application and the results were compromised.

The application of the products followed the instructions from Applied Microbiology Company with some modifications when required. In the first visit to the farm normally an explanation on the product application was done. The second visiting, so called potato seeding, was administered one gallon per hectare of VSC (root system). Thirty days later VSC was applied again and 30 days later was sprayed Light at the leaves. Finally the harvesting was proceeded 30 days later.

Each visiting besides the application done by the students some notes were done in order to describe the difference between the control and the treated potatoes.

RESULTS AND DISCUSSION

Tables 2 and 3 summarized the influence of Quantum Growth technology on the productivity and the economics aspects of the potatoes production.

In general the productivity results expressed in Table 1 demonstrated the efficiency of the tested product on productivity resulting approximately 679 more bags in favor of the tested technology. Thomas A. Selvig C.A. (2009) reported the availability of photosynthetic purple bacteria, along with the purple photosynthetic bacteria's ability to produce sugar, indicates that sugar producing microorganisms would be able to increase crop production on a mathematically proportional ratio, commensurate with sugar levels produced.

The economic aspects showed in Table 3 confirm the advantages of the Quantum Growth technology in this experiment. The average commercial cost indicated a return on investment favoring the tested technology since the economic advantage demonstrated to cover the production cost substantially.

CONCLUSION

Based on the results of the present experiment it can be concluded that the Quantum Growth Technology demonstrated its potential as a productivity enhancer and it can be indicated to be used on Brazilian Potato Production System with success.

REFERENCE

Selvig, T.A. (2009). QUANTUM GRO, Sudden and Significant Energy for Growth.

Table 2. Productivity of the potatoes measured in number of bags per hectare

Farm location	Farmer name	Production system	Cultivar	Potato bags	Potato bags	Productivity
				Control	Quantum Growth	Potatoes bags (1 hectare)
Rosário	Laercio Bergamasco	Irrigated	Monaliza	600	914	314
Momboca	Jair varaldo	Upland	Monaliza	327,29	594,34	267,05
Casa Branca	Toninho Gomes	Irrigated	Agata	873	951	78
Jeriquara***	José Carlos Bergamasco	Irrigated	Monaliza	1339	1232	-107
Casa Branca	José Pai do Paulinho	Irrigated	Monaliza	721	848	127
				3860,29	4539,34	679,05

*** Please note that applications were done incorrectly at this farm, as stated on the previous page, and the data are compromised.

Table 3. Economic aspects of potatoes in accordance of the productivity on the harvesting day selling.

Farmer name	Farm location	Productivity Bags (1 hectare)	Bag value*	Return on investment
Laercio Berbamasco	Rosário	314	R\$ 26,70	R\$ 8.383,80
Jair varaldo	Momboca	267,05	R\$ 26,70	R\$ 7.130,24
Toninho Gomes	Casa Branca	78	R\$ 35,00	R\$ 2.730,00
José Carlos Bergamasco	Jeriquara	-107	R\$ 26,00	-R\$ 2.782,00
José Pai do Paulinho	Casa Branca	127	R\$ 30,00	R\$ 3.810,00
Mean values		135,81	R\$ 29,88	R\$ 4058,00
			* mean values on harvesting day selling	R\$ 19.272,04 USD 11,336.50