

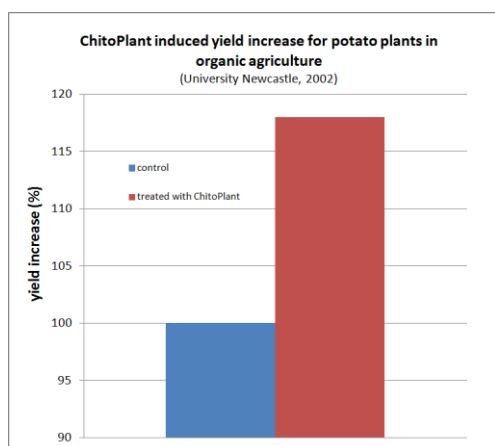
ChitoPlant®

Potato

ChitoPlant® allows improvement of potato farming in various ways:

- Spraying (foliar or band) on potato plants for disease prevention, curative treatments and yield increase. ChitoPlant®-solution can be applied with conventional equipment.
- Seed stock treatment prior to, or while sowing is another way of using ChitoPlant®; it is used to obtain higher yields and enhanced pathogen resistance.

Combine both treatments for best results! In different studies the yield increase through these applications ranged from 17% up to 25%.



Yield increase for potato plants after treatment with ChitoPlant® from university of Newcastle

Phytophthora infestans, *Streptomyces scabies*, and *Rhizoctonia solani* are examples for pathogens that ChitoPlant® has effects on. It reduces the risk of such infections by triggering and activating the plants defence mechanisms as an elicitor*.

In **Micro Propagation** add ChitoPlant® to the tissue culture growth medium prior to autoclaving.

The benefits of this treatment are: increased minituber number, enhanced pathogen resistance, higher seed quality, better acclimatisation after transplanting and generally healthier cultures. Studies showed that ChitoPlant® increases the number of minitubers by 20% to >50%.

Potato				
Purpose	disease prevention / yield increase	disease prevention / yield increase	curative	micro propagation
Mode of application	Spraying of seed stock	foliar/band spraying of plants	foliar spraying of plants	add to culture medium
Concentration	1.0g/L	0.5g/L	1.0g/L	0.01-0.1g/L
Time + No. of application	1 treatment prior to sowing	up to 8 treatments every 14 days, starting before bloom	apply every 10-12 days	before autoclaving growth medium
Notification		If infestation pressure is high the used concentration can be increased to 1g/L	alternating with conventional treatments (e.g. copper-products) is possible	
Preparation	To avoid agglutination dissolve ChitoPlant completely in a small amount of water before filling up to total required volume.			

*For more Information on ChitoPlant and its Mode of Action contact us: Info@ChiPro.de

References:

1. Erste Ergebnisse der Prüfung der Erfolgsaussichten des Einsatzes von löslichem Chitosan bei der Regulierung von wirtschaftlich bedeutenden Schaderregern mit Schwerpunkt Kraut- und Knollenfäule (*Phytophthora infestans*) und Kartoffelschorf (*Streptomyces scabies*)
Britta Kowalski, Universität Rostock, Institut für umweltgerechten Pflanzenbau
2. Effect of *in vitro* chitosan application on growth and minituber yield of *Solanum tuberosum* L.
R. Asghari-Zakaria, B. Maleki-Zanjani, E. Sedghi
3. Application of Soluble Chitosan *in vitro* and in the Greenhouse to Increase Yield and Seed Quality of Potato Minitubers
Britta Kowalski et al. Potato Research (2006)
4. Wirkung von Pflanzenstärkungs- und Pflanzenschutzmitteln auf den *Phytophthora infestans* Befall und Kartoffelertrag unter Freilandbedingungen
Dissertation Umweltwissenschaftlichen Fakultät der Universität Rostock
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For more information on ChitoPlant® and detailed application guidelines please contact us.

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