



**Primefit**<sup>®</sup>

Unique biostimulant that strengthens the plants' defences and increases yield and quality.



<b>Ingredients</b>	Clinoptilolite zeolite
<b>Formula</b>	WP - wettable powder
<b>Organic farming</b>	Suitable
<b>CE certified</b>	Yes
<b>Package size</b>	15 kg paper bag

 **lithos protect**

protecting plants.  
empowering nature.



Unique biostimulant that strengthens the plants' defences and increases yield and quality.

**Activates the plants' defences, provides valuable nutrients and enables healthier growth with higher yields and improved quality.**

Primefit® supplies nutrients that are available to plants and essential for healthy, robust plants in crucial growth phases such as flowering and fruit formation. It is during these phases that the foundation is laid for a high-yield and high-quality harvest.

Primefit® also activates the natural defences of your plants and supports them throughout the entire growing season. This helps them to stay vital and resistant to abiotic stress such as drought and temperature fluctuations.

## Facts & Advantages

- stimulant for activating natural defences
- increases yield and quality through higher resilience
- 100% natural product
- suitable for organic and biodynamic agriculture

## Application

### Correct use of Primefit®:

Fill the tank halfway with water. Slowly add the required amount of Primefit® via the induction sieve with agitator running, then top up with remaining water. Apply at intervals of 2-3 weeks.

### Potatoes

1.5 % Primefit® in 150-400 litres of water per ha  
4 leaf applications, starting from full development of the leaves



A reapplication is recommended after heavy rainfall.

Increasingly intense environmental influences require plants to be highly resistant to abiotic stress factors. Primefit® activates natural defence mechanisms, promoting healthy growth, increasing yield and improving quality.

### Vegetables

1 % Primefit® in 150-400 litres of water per ha  
2-4 leaf applications

### Viticulture

1 % Primefit® in 250-400 litres of water per ha  
5 leaf applications, starting from BBCH 55 – increase the size of the shoots

### Pome fruits and stone fruits

1 % Primefit® in 200-600 litres of water per ha  
5 leaf applications, starting from BBCH 55 – flower buds become visible

### Cereals, legumes and oilseeds

1 % Primefit® in 150-400 litres of water per ha  
2-3 applications, starting when the leaves have fully developed

Approved for use in the following crops, among others: potatoes, vegetables, viticulture, cereals, legumes, pome fruits and stone fruits

**Further information:**  
at [www.lithosprotect.at/en/primefit](http://www.lithosprotect.at/en/primefit)  
or simply scan here

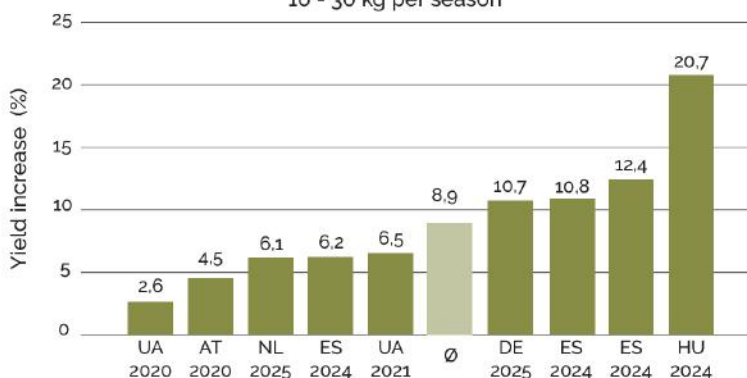


## Summary field trials

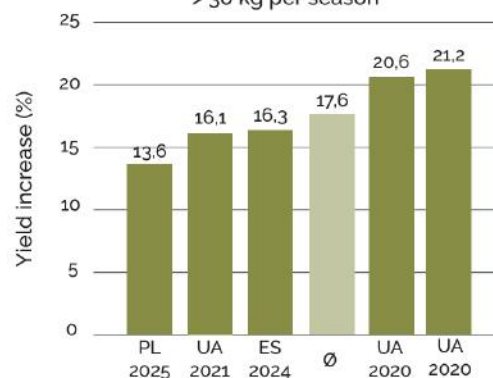
The aim was to test the effect of Primefit® in potato cultivation in terms of yield parameters.

**Application information:** 14 trials in Austria, Germany, Netherlands, Hungary, Spain, Ukraine and Poland  
**Trial period:** 2020 - 2025  
**Varieties:** Potato - different varieties  
**Applicationen:** Application using conventional spraying technology  
**Variants:** Untreated control  
 Variant 1: 10 - 30 kg/ha per season  
 Variant 2: > 30 kg/ha per season

**Effects of Primefit® on yield increase (%)**  
10 - 30 kg per season



**Effects of Primefit® on yield increase (%)**  
> 30 kg per season



### Conclusion

- Average yield increase of 8.9 % (10-30 kg/ha) and 17.6 % (> 30 kg/ha)
- Acceleration of the vegetation process and root formation
- Increase in the number and size of tubers
- Increase in leaf mass and area
- Increase in resistance and plant health

## Primefit®: Mode of Action

Primefit® act as a defence activating agent in plant leaves, via the activation of ROS/NO and SA signalling pathway as well PR1 gene expression. This effect is essential for plant immunity, inducing Systemic Acquired Resistance (SAR), and ensuring that plants can effectively respond to potential threats and maintain their viability.

Primefit® treatments elevated markedly PR1 expression in tomato plant leaves

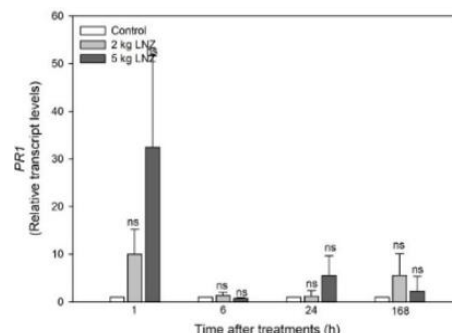


Figure: Time dependent changes in the expression of PR1 in the leaves of intact tomato plants treated foliar with 2 kg/200 L/ha and 5 kg/200L/ha Primefit®, control: water.

## We are Lithos Crop Protect

We naturally ensure vital plants. From research and development to sales, we dedicate ourselves daily to our goal of offering natural solutions of the highest quality for agriculture. Through innovative technologies and products, we set new standards for sustainable plant strengthening and natural plant protection. This makes us a pioneer and reliable partner for agriculture. We live and promote an appreciative approach to nature, the environment and people. Our aim is to use our nature-based products to ensure good yields, a secure food supply and, at the same time, thriving biodiversity in modern agriculture.



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