

## **Effects of different plant protection treatments regulating late blight (*Phytophthora infestans*) in organic potato production**

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The effects of different plant protection treatments on foliar infestation by *Phytophthora infestans* and on tuber yield were tested in field trials from 1999 to 2001 under organic farming conditions.

Foliar treatments with plant extracts of *Potentilla erecta*, *Salvia officinalis*, seaweed extracts, potassium oleate, some other plant vigorisers and combinations with an adjuvant as well as copper hydroxide resulted in different **Area Under Crop Health Curves** and tuber yield increase. Experiments were conducted at an ecologically-managed farm in the North of Germany (near Hamburg) on a sandy soil or loamy sand (pH 5.2 – 5.7) with the possibility of sprinkler irrigation.

In all field trials copper hydroxide showed the lowest AUCHC and the highest yield (+17.7-25.9 %) compared to the control. According to the application of plant extracts there was no significant effect on late blight infestation of leaves and the yield increase of up to 15 % was not significant. Also the seaweed extracts and the other plant vigorisers showed no significant effect on the AUCHC and the tuber yield. At the moment there is no effective alternative for the use of copper to reduce late blight infestation in organic potato production.