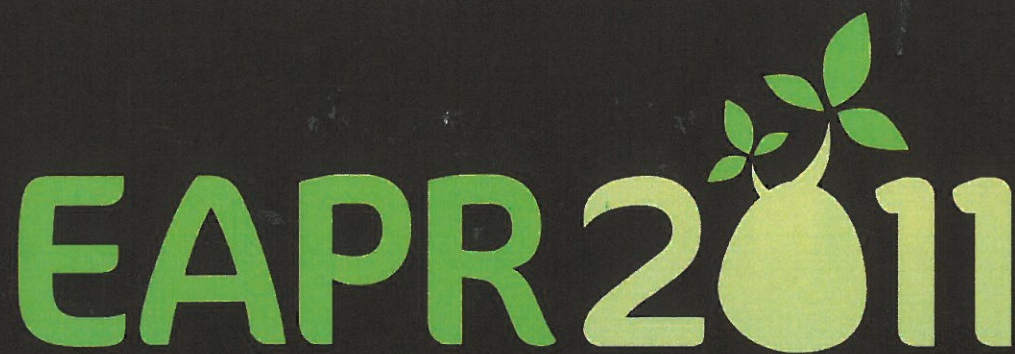


# EAPR 2011



## ABSTRACTS

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## Session 5

### **Benchmarking on organic potato production and the quality and the sensory profile of selected varieties**

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During the years 2007 to 2009 the potato cultivation was checked on 282 organically managed potato fields with the three waxy varieties Princess, Nicola and Ditta in Northern and Southern Germany. For this, cultivation and quality data were collected and fed in a web-based Benchmarking data base. At the harvest samples ratings were accomplished to the outside quality as well as the starch and nitrate content and the sensory quality were measured. The different levels of nitrate and starch contents were often attributed to the length of the growth period and thus to the occurrence of *P. infestans*. The sensory analysis showed different sensory profiles for the three varieties, whereby Princess showed the strongest bitterness and the lowest sweetness; Nicola, however, the most pronounced taste of sweetness and chestnut. In the case of an early haulm dying, as in 2007, showed a more pronounced taste of bitterness, which was associated with lower starch and higher nitrate levels. Using multiple regression models, relationships between production parameters and the parameters collected on yield, quality and sensory evaluation were carried out. The Benchmarking data base serves each farmer for the direct and anonymous comparison of its operational result with its colleagues.