implemented, the product has not yet been used commercially, as in many countries chemical compounds have been made available through temporary emergency authorisations, despite the fact that Article 53 of the EC Regulation 1107/2009 indicates that authorisation should only be given if other reasonable means to contain the danger are not available.

Investigations on residues of *Bacillus thuringiensis* on tomato

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After an incidence of diarrhoea in 2012, high concentrations of presumptive *Bacillus cereus* (including *B. thuringiensis* (Bt)) were found in German lettuce samples. Because of this incidence, in Germany a discussion about the risk of Bt residues started and is still ongoing. Because of limited data on the expected residues of Bt spores after application, experiments on persistence were conducted on tomatoes in glasshouse. Because Bt spores are highly sensitive to UV light (half-life of 16 hours) spores will be killed under field conditions within a short time. In glasshouses, only limited UV light is passing the glass and it is unlikely that Bt spores will be inactivated as quickly as under field conditions. To proof the degradation of Bt spores in glasshouses, experiments were conducted on tomato under laboratory, experimental field station and professional grower conditions. For all experiments the Bt product XenTari® was used. In the glasshouse experiment with five applications of XenTari® applied in a weekly interval the concentration of Bt spores on tomato fruits ranged in all experiments between $4.9x10^4$ und $8.5x10^4$ cfu/ g fresh weight. Within these experiments maximum application rates of five applications within four weeks were used and therefore, these experiments represent a kind of “worst case” scenario. For single application of Bt a max. spore concentration of $4.7x10^4$ cfu/g fresh weight was measured corresponding to the laboratory experiments and the experiments at a commercial farm. To proof the degradation of Bt spores over time under protected glasshouse conditions, samples were taken after the last application over one week. Over all experiments the concentration of Bt spores was reduced up to only 46 to 77% of the initial spore concentration within one week. Therefore, degradation of Bt spores did play a minor role under glasshouse conditions. A distinct reduction of Bt spores on fruits was achieved by modifying the application strategy. When only the upper parts of the tomato plant were treated with XenTari, a maximum concentration of Bt spores of 3.3×10^3 cfu/g fresh weight was recorded. Thus, a reduction of up to 90 % of Bt spores on the marketable tomatoes was achieved.