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Screening biocontrol agents for control of seed-borne bacterial pathogens of carrots and brassicas

As part of an EC co-funded project to identify and develop seed treatments for organic vegetable production (STOVE), a number of potential biocontrol agents (BCAs) were examined for their efficacy in controlling *Xanthomonas hortorum* pv. *carotae* and *X. campestris* pv. *campestris*, the causal agents of bacterial blight of carrot and black rot of brassicas, respectively. Seed-borne bacterial pathogens present particular experimental difficulties due the relatively low (but epidemiologically significant) levels of infestation found in naturally infested seed lots. Potential BCAs were initially screened in vitro for inhibition/antagonism against the target pathogens. The best potential BCAs from the first screening were then applied to naturally infested seed and their effects on pathogen transmission (from seed to seedling) were assessed in glasshouse experiments. Finally the most effective was screened in a field trial (carrot) or further glasshouse transmission experiments (brassicas). The results obtained to date had been presented.