Beet western yellows virus in *Brassica napus*: yield losses and control with insecticides

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Two field experiments evaluated the effects of infection with beet western yellows virus (BWYV) in decreasing seed yield of canola (oilseed rape, *Brassica napus*). Yield losses of up to 47% were obtained that were directly attributable to BWYV infection. Two further field experiments examined the effectiveness of insecticides applied as seed dressings or foliar sprays in controlling spread of BWYV by its main vector the green peach aphid *Myzus persicae*. Dressing seed with imidacloprid was effective for 2.5 months after sowing in controlling the aphid vector and thereby suppressing virus spread. In contrast, foliar sprays with alpha-cypermethrin applied 3 and 7 weeks after germination were much less effective, especially when the aphids present were resistant to insecticide. The implications of this research for control of BWYV will be discussed.