

**Effect of Contans WG and burial of sclerotia on survival of sclerotia of *Sclerotinia sclerotiorum* in the Columbia Basin of central Washington**

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White mold, caused by *Sclerotinia sclerotiorum*, is the main disease affecting sunflower seed crops in central Washington. A microplot trial was initiated in fall 2015 near Ephrata, WA to assess the effects of drenching Contans WG (*Coniothyrium minitans*, a mycoparasite of *S. sclerotiorum*) at 0, 0.56, and 4.48 kg/ha on survival of sclerotia on the soil surface or buried 15 cm deep. Sclerotia viability was tested at ~2 month intervals. In plots not drenched with Contans WG, <10% of buried sclerotia were viable after 7 months vs. >70% for surface sclerotia. Contans WG reduced survival of surface sclerotia, not buried sclerotia, but only 12 months after application (from 99% at application to  $42 \pm 8$ ,  $6 \pm 3$ , and  $1 \pm 1\%$  in plots with 0, 0.56, and 4.48 kg Contans WG/ha, respectively). Results were similar for a repeat trial initiated in spring 2016. Contans WG also was applied by spray boom at 0 and 4.48 kg/ha to residues in large, replicated plots after harvest of a sunflower seed crop with >50% incidence of white mold. Viability of sclerotia in buried residues decreased faster than that of sclerotia in surface residues ( $73 \pm 4$  vs.  $88 \pm 2\%$ , respectively, after 5 months). The Contans WG application had no effect on survival of sclerotia in infested crop residues or sclerotia sampled from soil after residues had decomposed. In summary, Contans WG only reduced survival of sclerotia on the soil surface, and was never as effective as burial at reducing sclerotium survival.