

Effect of treating seeds infected with an aqueous agave extract in order to control common bunt in wheat and loose smut in barley.

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Aqueous extract from the sisal agave, *A. sisalana*, is known to contain antifungal activity. In two small field experiments we have tested the effect of seed treatment using *A. sisalana* extract in order to control common bunt, *Tilletia caries*, in winter wheat and loose smut, *Ustilago nuda*, in spring barley, respectively. Disease incidence of plants from treated seeds was compared to incidences in plants from non-treated seeds and seeds treated with pure water. In comparison to controls, a reduction of disease incidence of *T. caries* by 75% was observed in winter wheat and a reduction of *U. nuda* incidence by 20% was observed in spring barley following seed treatment with *A. sisalana* extract. The observed difference in efficiency towards these two pathogens is likely to reflect that spores of *T. caries* are located on the seed surface and there by immediately exposed to this type of antifungal seed treatment whereas the seed-borne stage of *U. nuda* is located in or near the embryo of the seed, and thereby better protected against antifungal molecules applied from the outside to the seed.