



## Wheatland Conservation Area Inc.

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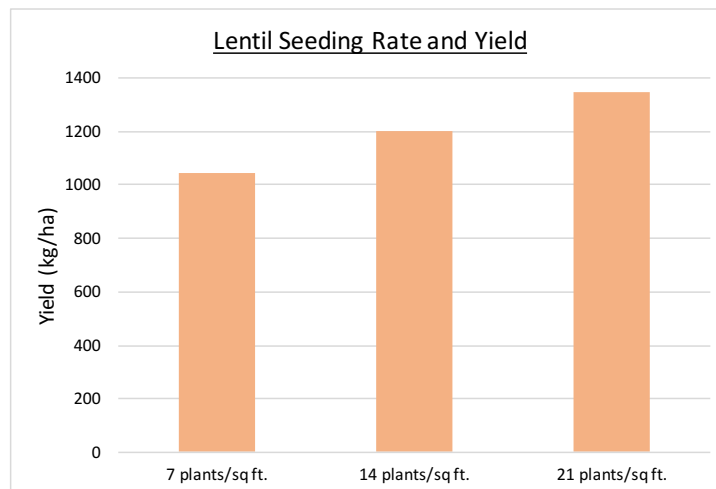
January 25, 2018

### Demonstrating Management Practices to Control Sclerotinia in Lentils

In 2017 a trial was established to demonstrate the effects of fungicide and timing of application at three different seeding rates to managing white mould, known as sclerotinia in lentils. Widespread in 2016 due to wet conditions throughout the year and severe lodging of the crop, sclerotinia was a problem for producers since the disease doesn't usually occur until later in the growing season when the crop canopy has closed off, preventing foliar fungicides from penetrating deep into the canopy where it needs to be in order to be beneficial. Due to the dry conditions of 2017, fungicide timing, reduced seeding rates and the biological fungicide application of Contans WG that were targeted to improve fungicide efficacy along with manage sclerotinia did not result in a great response. As expected in a crop with little to no disease pressure, seeding rate was the only variable to show a significant effect between treatments with a positive response as the rate increased.

A dense lentil canopy and late season rain are both required in order for sclerotinia to develop. If fall conditions are dry with a dense canopy, like what we saw in the 2017, mould will likely not appear. Therefore, fungicide applications of Priaxor at early flower, Priaxor at early flower plus Lance 7-14 days later, as well as Lance alone at late flower had no effect on yield since disease was very limited. Fungicide applications were considered a preventative measure since if present, disease at this point in the season would have been difficult to eliminate from the closed canopy.

Lentil seed rate was the only variable to have a significant effect between treatments showing a positive response to increased rates. At a seed rate of 21 plants/ft<sup>2</sup>, the average yield was 1345.9 kg/ha and decreased with decreasing seed rate. The additional variable of decreasing seed rate to provide aeration between and within rows was expected to increase Lance productivity.



Due to the less than ideal growing conditions for disease to be present, the trial should be repeated in the future to further understand the relationship between fungicide timing and application in response to a decreased seeding rate in order to properly demonstrate management practices to control sclerotinia in lentils.

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