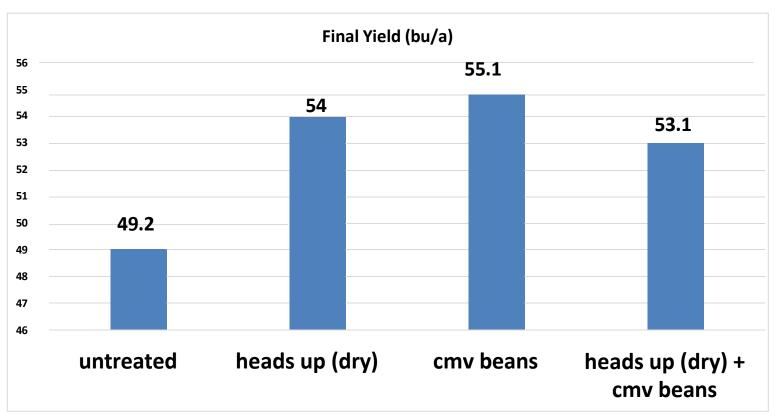
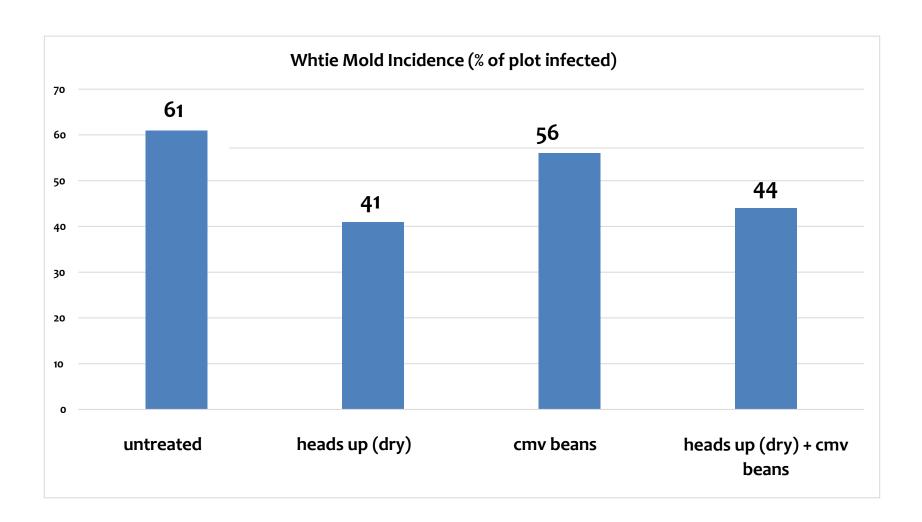


Heads Up 2022 – Soybean trials – Scope: To evaluate various seed treatments for their effect on white mould and yield in Eastern Canada

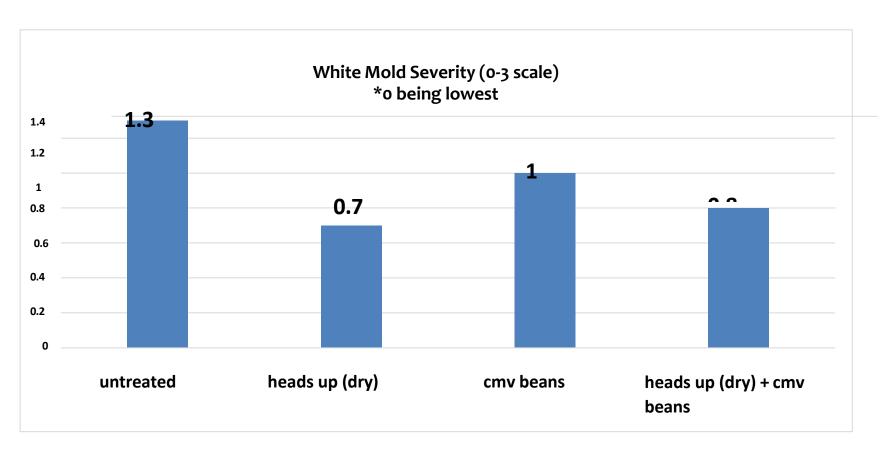
Trial Coordinator: Greg Wilson, Black Creek Research, Bright, ON











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CMV = CruiserMaxx Vibrance. CruiserMaxx Vibrance is a registered trademark of a Syngenta Group Company



Conclusion

The trial was established at the BlackCreek Research main site in Block #2. The field area had experienced excellent while mould pressure in previous years with good natural inoculant present. The field was planted to corn in 2021 and was disced in the fall with an additional disc and cultivation in the spring. On May 18th, soybeans were planted and maintained weed-free with an application of Boundary LQD pre-emergence and Roundup Weathermax post emergent. Growing conditions were hot and dry all season but ample rainfall in July was received. This resulted in high white mould infection levels later in the season.

Seed treatment application was done May-15 using the Hege 11 seed treater. Seed was allowed to air dry and then counted into envelopes for 160 seeds/6 m of row. The seed was then planted using a John Deere cone seeder planter at a depth of 4 cm deep.

Results

There were no phytotoxicity concerns.

At 114 DAP, the R6 invasive white mould evaluation was conducted on 25 plants using the 0-3 severity scale. The incidence of white mould was found to range from 41 to 61%. The highest incidence was in the untreated check and the lowest was in Treatment 2. There were no statistical (Tukey's HSD, p=.10) differences in white mould incidence between any of the treatments and the untreated check. Numerically, all treatments reduced white mould incidence compared to the untreated check.

The disease severity index (DSI) was calculated using the 25 0-3 values from each plot. There were no statistical (Tukey's HSD, p=.10) differences between any of the treatments and the untreated check. Numerically, treatments 2 and 4 reduced the white mould severity compared to the untreated check and treatment 3.

Yields were collected on 6-Oct-2022 by harvesting 1.5 m x 6.0 m from the center of each plot. Yields were calculated using a dry moisture value of 13.5%. At harvest, there were no statistical (Tukey's HSD, p=.10) differences in grain moisture. Treatments 2, 3 and 4 had significantly (Tukey's HSD, p=.10) higher yields compared to the untreated check. Numerically, Treatment 2 yielded the highest at 54 bu/ac.