

## 10% yield increase

### SPRING WHEAT

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#### OBJECTIVE

Evaluate the effect of mycorrhizal inoculation on spring wheat yield in southern Saskatchewan.

#### METHODS

Trials were carried out in the Saskatchewan brown soil zone at Swift Current. The wheat cultivar AC Barrie was seeded on canola stubble. Two fertilization rates were used, the recommended rate for this area and half the rate (120 and 60 lb/a of 30-15-0-5). Two treatments of mycorrhizal inoculant, with inoculation and no inoculation were used. The four treatments were arranged in a randomized complete block design with 8 replicates. Plot size was 8 rows wide and 18 feet long. Powder mycorrhizal inoculant was mixed with the seeds prior to seeding. Fertilizer was applied simultaneously as a

side dress in the furrow. Sowing and harvest dates were May 12 and September 22 respectively.

Plant root colonization was monitored during the season and the yield was recorded at harvest.

#### RESULTS

Increase in root colonisation and yield were observed with mycorrhizal inoculation. Wheat responded to the fertilization by an increase of yield with the 120 lb/a rate. A significant yield increase of 10% was reached with mycorrhizal inoculation compared to the control at the fertilization rate of 120 lb/a.

