

Potato yield increase

POTATO

G. Hamel, agr. Agréco and
J. Francoeur, agr. Premier Tech, 2011

OBJECTIVE

To evaluate the effect of mycorrhizal inoculation and potassium fertilization on potato yield.

METHODS

The trial was conducted in a sandy soil located in Rawdon (region of Lanaudière, QC). The variety Goldrush was planted. The treatments tested were the following:

- mycorrhizal inoculation: with and without (control);
- potassium fertilization: recommended rate (100%), 33% more (133%) and 66% more (166%).

The treatments were arranged in a randomized complete block design with eight replicates. Each plot comprised four rows of 20 seed pieces. The recommended rates of nitrogen and phosphate

fertilizers were applied as well as the recommended pesticides.

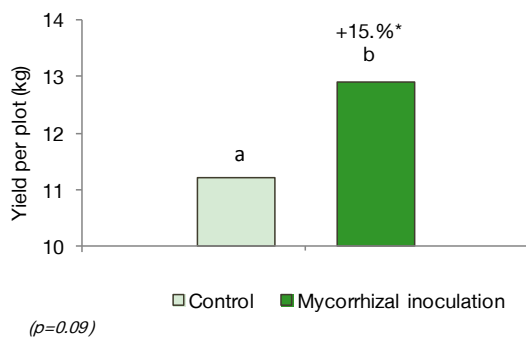
Yields were measured for each plot and analysed with an analysis of variance (ANOVA).

RESULTS

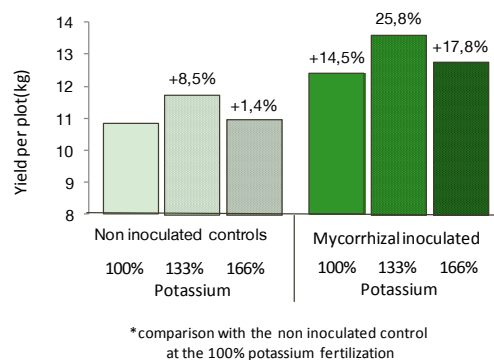
The mycorrhizal inoculation increased the total yield by 6.6%. For its part, the marketable yield (medium and large potatoes) increased by 15.2% (significant at $p=0.09$). Mycorrhizal inoculation increased yield for each potassium fertilization rate, the highest yield being reached at 133%.

The average weight per marketable potato was 10% higher when inoculated (significant at $p=0.02$).

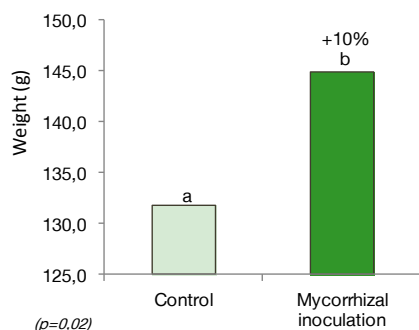
Marketable potato yield



Potato yield* from the marketable category



Average weight per potato in the marketable category



Find mycorrhizae products on
USEMYKEPRO.COM

