

Field Test Results (Wheat)-2012



CHI Liquid Carbon 9-5-3 Increased Crop Production of Wheat

Objective: To use organic matter (humic acids) chelated nutrients to increase yield of wheat

Collaborator: Battle River Research Group, Camrose, Alberta, CANADA

Financial support: Canada Revenue Agency (Scientific Research & Experimental Development)

Period: May to September, 2012

Tested product: CHI Liquid Carbon 9-5-3 (source of humic acids and 9-5-3 nutrients)

Tested crop: Wheat - "Harvest" variety

Location: Camrose, Alberta, CANADA

Soil: loam with solonetzic clay underneath, 6% organic matter, pH = 5.8

Test plot: 11 x 22 ft² (3.3 x 6.6 m²)

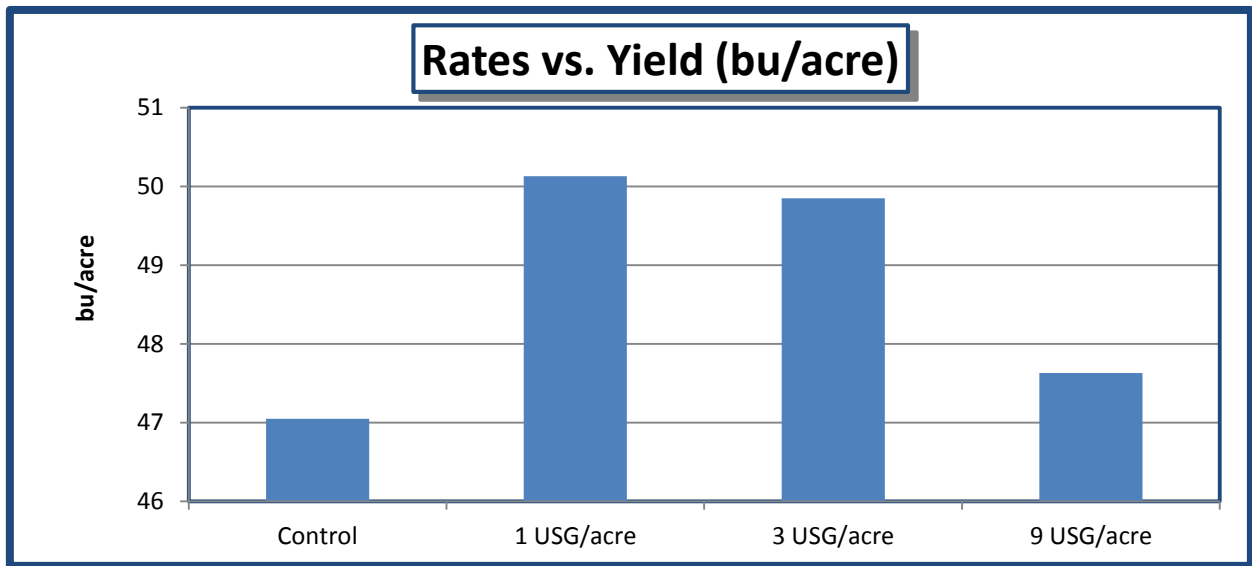
Design of Experiments

- Treatment 1: 30 lbs N/ acre + 10 lbs P₂O₅/acre
- Treatment 2: 30 lbs N/ acre + 10 lbs P₂O₅/acre + 1 USG CHI Liquid Carbon 9-5-3/acre
- Treatment 3: 30 lbs N/ acre + 10 lbs P₂O₅/acre + 3 USG CHI Liquid Carbon 9-5-3/acre
- Treatment 4: 30 lbs N/ acre + 10 lbs P₂O₅/acre + 9 USG CHI Liquid Carbon 9-5-3/acre

- Nutrients and CHI Liquid Carbon 9-5-3 were applied during seeding
- Each treatment was replicated 4 times, i.e. 4 test plots per treatment
- Yield for each test plot was measured, and results from 4 test plots of the same treatment were averaged. Yields were presented as bu/acre (1 bushel = 60 lbs)
- Note: each USG of CHI Liquid Carbon 9-5-3 added 0.9, 0.5, and 0.3 lbs of N, P₂O₅, K₂O / acre, respectively to soil

Results

The best result occurred when 1 USG/acre of CHI Liquid Carbon 9-5-3 was applied, in which over 6.5% yield increase was observed over control. Increased rates did not result in better yields.



Conclusions

The yield of wheat was significantly increased by adding small amount of organic matter (humic acids) chelated nutrients. Recommended rates for CHI Liquid Carbon 9-5-3 were 1 to 2 USG/acre, applied once to soil during seeding or on seedling stage, or sprayed on fully grown plants prior to 10% flowering.