SEA-90 Foliar with Reduced Nitrogen

Crop: Milo Grain Kansas 2015

Goal:
Trial production of Milo grain with significantly reduced nitrogen applications combined with SEA-90 Foliar applications.

Parameters:
Total Area: 100 acres (50 acres Test and 50 acres Control). Milo planted into wheat stubble on both 50 acre plots.
All fertilizer applied as liquid: N = Nitrogen SEA-90 = SEA-90 Foliar Fertilizer

Control (Common Practice): 80 lbs N per acre. Three applications: 50 lbs per acre pre-plant and 20 lbs per acre 3-4 leaf stage and 10 lb per acre 6-7 leaf stage.
Trial: (⅓ N + SEA-90): 16 lbs N + 7 lbs SEA-90 per acre . Three applications: 9 lbs N per acre pre-plant. 3.5 lb N plus 3.5 SEA-90 per acre mixed in 9.5 gallons water per acre applied 3-4 leaf and 6-7 leaf stage.

Cost: Nitrogen - $.55 per lb
SEA-90 - $.53 per lb (actual cost - product plus freight)
Total Fertilizer Cost per acre:
Control: 80 lbs N = $44 per acre X 50 acres = $2,200
Trial: 16 lbs N = $8.8 per acre X 50 acres = $440
7 lbs SEA-90 = $3.71 per acre X 50 acres = $185.50
Total = $625.50
Total Saved Test: $1,574.50

Harvest Results:
BPA = Bushels per acre. TW = Test weight
Market price paid per Bushel = $6.10

Control: 99 BPA (99 X $6.10 = $609.90) Paid: $603.90 X 50 acres = $30,195
60 TW
Test: 142 BPA (142 X $6.10 = $866.20) Paid: $866.20 X 50 acres = $43,310
60 TW

Total additional Income plus fertilizer savings: $14,689.50

Income - (Test) $43,310 - (Control) $30,195 = $13,115
$13,115 (additional harvest income) + $1,574.50 (fertilizer savings) = $14,689.50