



## Wheat – North Dakota 2015

**Trial area:** North Dakota  
**Conducted by:** Larson Grain / Gavilon wheat program  
**Crop and cultivar:** Wheat SY Soren  
**Planting date:** 14 April 2015  
**Row spacing:** 7.5 inch  
**Row spacing:** 2.1 inch  
**Planting density:** 5950 seeds/plot  
**Experimental design:** 6x replicated randomised block  
**Plot size sprayed:** 4.5 ft x 30 ft  
**Replications:** 4



### Introduction

Kelpak LSC was applied to wheat seed as a coating prior to planting. Furthermore, granular MAP fertilizer, applied at 60 lb/Ac was also coated with Kelpak to determine if the growth stimulating activity of Kelpak could be transferred via the fertilizer. The studies were conducted in the Marion and Kulm areas of North Dakota (USA).

### Results and discussion

The addition of MAP had no significant effect on wheat yield when applied on its own in both studies. Applying Kelpak LSC at a rate of 6 fl. Oz/cwt seed as a seed coating, significantly improved yields above the respective controls. Similarly, spraying the MAP fertilizer with Kelpak LSC at a rate of 7 pt/ton significantly improved yields above the respective controls in both studies. The increases in yield were not due to an increase in moisture content.

Table 1. The effect of Kelpak LSC on wheat yield in Kulm, North Dakota

Treatment	Application rate	Moisture content	Protein content	Weight	Yield
		%	%	t	BU/Ac
Untreated control		18.53	13.05	4.8 b	4.8 b
Kelpak seed coating	6 fl.oz	18.45	13.20	5.3 a	5.3 a
MAP	60 lb/Ac	18.45	13.05	4.8 b	4.8 b
MAP coated with Kelpak	60 lb/Ac (+7 pts/ton)	18.53	13.33	5.2 a	5.2 a

Table 2. The effect of Kelpak LSC on wheat yield in Marion, North Dakota

Treatment	Application rate	Moisture content	Protein content	Weight	Yield
		%	%	t	BU/Ac
Untreated control		13.40	14.50	4.7 b	70.1 b
Kelpak seed coating	6 fl.oz	13.08	15.28	5.1 a	75.1 a
MAP	60 lb/Ac	13.28	14.50	4.7 b	70.6 b
MAP coated with Kelpak	60 lb/Ac (+7 pts/ton)	13.38	14.50	5.1 a	76.5 a

Means followed by different letters are significantly different from each other according to Duncan's multiple range test. Statistical analysis was conducted at a 95% confidence level.

