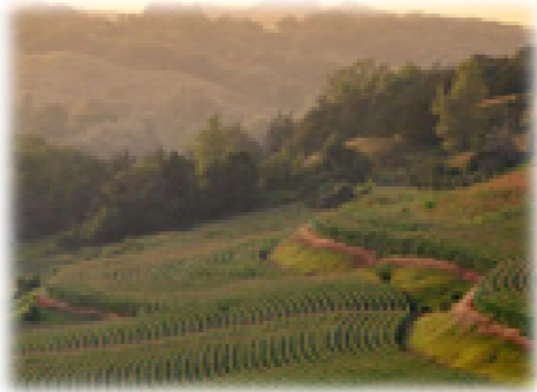


**2009 Cooperative Study with ChannelBio Corp Seed Corn Grower – Greg Reisz,
Missouri Valley, Iowa**



Landscape of Western Iowa Loessal Hills

In Spring 2009 Orthman Manufacturing, Inc got together and arranged for E4 Sons Company to set out a set of comparison plots of Strip Till and Direct Seeded plots in the rolling hills of Harrison County, Iowa area. We at Orthman are working with the ChannelBio Seed group to demonstrate the effects of how strip-till pre-plant tillage has a direct connection to improving stands, early plant and root development, overall health and potentially yield.

In this small study in the loessal hills of the county with E4 Sons Co, the grower and Orthman put down similar - fertility, same hybrid across all plots and planted the same day in May. All plots were treated with fungicide Quilt at tassle time. Below are the results between Direct Seeded corn and the strip-till. Differences were evident with landscape position giving indication of enhanced yield in the Direct Seeding in the more gentle slopes (designated as bottom) . It is to be noted that this is the first year of strip-till for the E4 Sons Farm.

Fertility: in the Soybean stubble prior to plant Mr. Reisz applied 70 units of P2O5 and 70 units K2O dry and 150 actual pounds of N as urea where he was to Direct Seed. In the strip-tilled plots 30 gpa of 32% plus 10-34-0 at a rate of 20gpa.

Results:

<u>No. Plot</u>	<u>Brand</u>	<u>Hybrid</u>	<u>Strip Till</u>	<u>Notes</u>	<u>Plot Yield</u>	
					<u>BPA @ 15.0%</u>	<u>Averages of Till Types</u>
						<u>Yield-BPA</u>
1 Hill	Channel	209-77	YES	Hill	222.21	Plot 1-Strip Till 237.8
1 Bottom	Channel	209-77	YES	Bottom	253.33	Plot 2-No Till 238.4
2 Hill	Channel	209-77	NO	Hill	229.42	Plot 3-Strip Till 228.2
2 Bottom	Channel	209-77	NO	Bottom	247.29	Plot 4-No Till 233.0
3 Hill	Channel	209-77	YES	Hill	220.05	Strip Till-Hills 221.1
3 Bottom	Channel	209-77	YES	Bottom	236.41	No Till-Hills 213.2
4 Hill	Channel	209-77	NO	Hill	196.98	Strip Till-Bottom 244.9
4 Bottom	Channel	209-77	NO	Bottom	269.05	No Till-Bottom 258.2

Note: the 2009 corn crop followed the 2008 soybean crop

We thank Greg Reisz for his cooperation and support with this demonstration plot of 2009