Field Trial

Rolla Ag

For those of you who may be skeptical of sub soiling let me wet your whistle right off the bat. Both the Farmer I visited near spirit River who had purchased and was using an agrowplow and an agronomist named Jason Cattleman from Fairview who did some research work with one near Fairview say they are gaining **5—10 Bushels Increase** in yield over areas that had not been treated.

To me a chance to gain 5-10 bushels an acre with one pass that has four to five years of effectiveness is reason enough to spend around the $50/Ac it costs. If you get 10 bushels more of canola and its priced around $10/BU that's $100 an acre increase for four to five years. So if spending $50 can make you $400- $500 it seems like it is pretty simple economics even if you only get half of that. Of course as always in agriculture some ground will respond more than others, However that risk can be greatly overcome by testing the soil with a penetrometer (compaction probe) and a shovel.

So why the need for a subsoiler? Over time continuous passes from machinery and the use of tillage over soil causes the formation of a hard pan. The pan does not form at the surface but usually 6 to 12 inches below the surface. Different soil types will compact to a different degree of severity. Depending on the severity, the hard pan can completely restrict root growth causing root to grow sideways. Water infiltration is also limited if not completely denied. The shank of the agrowplow penetrates the hard pan and shatters it on six and a half inches on each side. The application requires dryer soils to shatter properly.