BECK'S Down Force Precision Planting Study - Continued

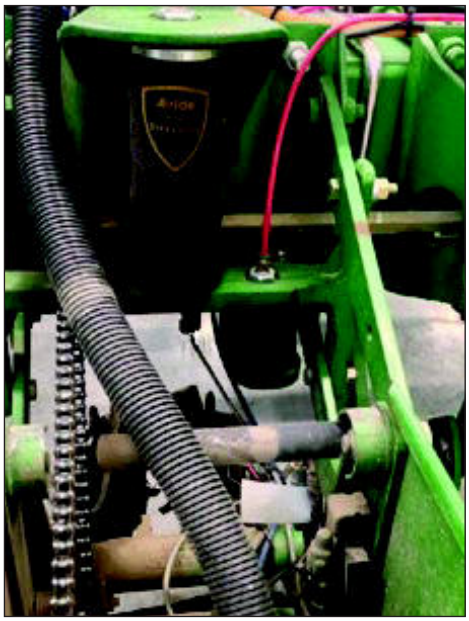

Photo 1. Precision Planting® AirForce®

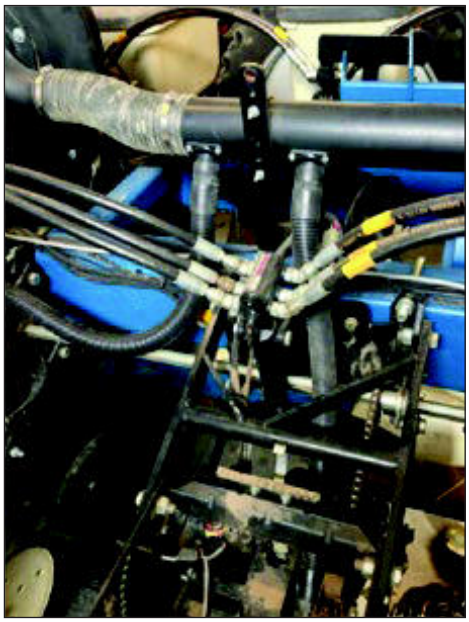

Photo 2. Precision Planting DeltaForce™

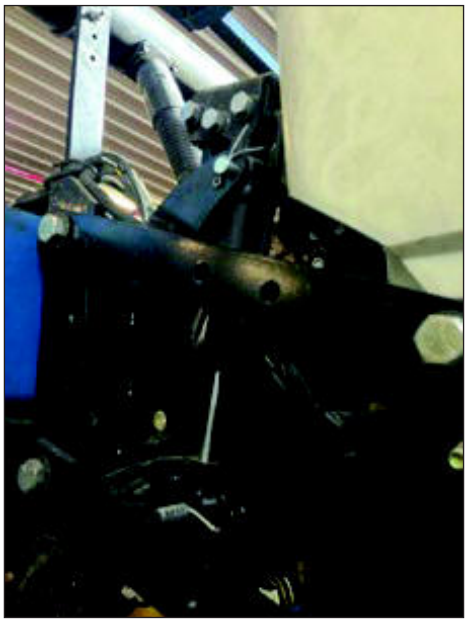

Photo 3. Precision Planting DeltaForce

SUMMARY:

In 2014, higher down force was needed to obtain optimum yields. In regards to AirForce down force, the highest yields resulted from variable rate down force from the AirForce system action. On average, manual T-Spring settings incurred yield losses of -5.8 Bu./A. with net average losses of -$24.28/A. compared to the AirForce variable rate system. Zero pounds of manual down force caused the highest yield loss of -8.4 Bu./A, while 250 lb. of down force was determined to be the ideal manual down force setting, but still yielded -1.6 Bu./A lower than variable rate AirForce.

Six years of Beck's Central Illinois PFR data revealed in Figure 1 indicates that 125 lb. of row unit down force has on average obtained the highest non-AirForce yields in this performance study. Figure 1 also illustrates that AirForce has outyielded manual T-Spring settings by an average of +7.8 Bu./A. As down force was lowered and increased from the 125 lb. setting, yields fell accordingly.

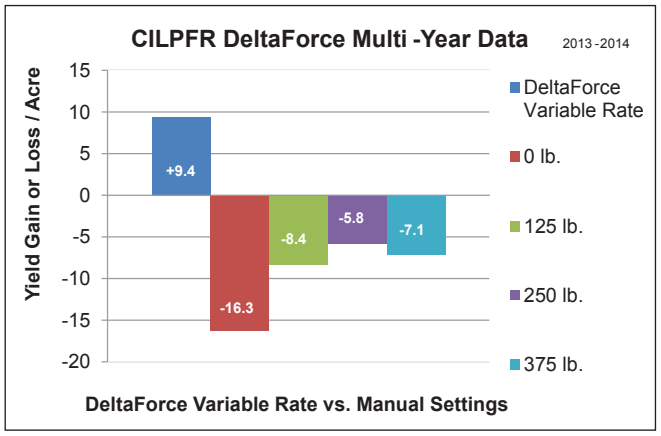

Figure 2.

In regard to 2014 DeltaForce testing, the highest yields resulted from variable rate down force with DeltaForce variable rate action. On average, manual DeltaForce settings incurred yield losses of 8.1 Bu./A. with net average losses of $33.72/A. compared to the DeltaForce variable rate system. Figure 2 reveals that 0 lb. of row unit down force incurred the highest yield losses of 16.3 Bu./A., and 250 lb. of down force was confirmed to be the ideal manual down force setting, identical to our AirForce results.

Two-year DeltaForce testing (figure 2) has revealed that DeltaForce outyielded all manual settings by an average of 9.4 Bu./A. It also indicates that as down force was lowered or increased from the 250 lb. row unit setting, yields fell accordingly.