Herbicide Carryover Considerations for 2019

Last minute crop rotation changes happen, but when making those changes keep in mind the potential for herbicide carryover issues, especially after a dry year. Typically 150 mm of in-season rainfall is considered adequate to facilitate herbicide degradation resulting in a “normal” risk for herbicide carryover. Areas that received less than that amount of precipitation are at a higher risk of residual herbicide persistence and potential crop injury that can cause delayed maturity, patchy emergence or potentially crop failure.

The rainfall map below indicates rainfall accumulated from June 1, 2018 to September 3rd, 2018 which is a generalization on the period of time when precipitation and temperatures would be most conducive to herbicide breakdown and when most residual herbicides may have been applied. This is not always the case, in situations where there was a late application of a residual herbicide, there is greater risk of carryover. Based on 2018 rainfall accumulation, the areas of light yellow on the map are at a higher risk of herbicide carryover, although not extreme (usually 75 mm or less of accumulated precipitation). Areas with the lowest precipitation include:

- Central Manitoba: Treherne, Elm Creek and Elie;
- Northwest Manitoba: Eden, McCreary, Ste.Rose and Rorketon;
- South-Central Manitoba: Altona and Gretna.

Looking back at 2018, herbicide carryover injury did have an impact on a number of different crops including wheat, canola, corn and peas. The symptoms were most obvious in areas where the residual herbicide was applied at higher rates or overlap areas including headlands and in areas where the applicator slowed down due to rough terrain or turning. In addition to moisture, field areas of low organic matter and high or low pH soils may exhibit more residual herbicide activity. Recropping restrictions for all herbicides are listed on labels and in the Field Guide to Crop Protection. Check your field records to ensure that herbicide rotation and accumulated precipitation are adequate to prevent herbicide carryover. When in doubt, consult your agronomist or local chemical rep to ensure that you aren’t taking a risk with growing a particularly sensitive crop.