

## Fall is an ideal time to look back and think ahead

*Dr. Tarlok Singh Sahota CCA*

By the time you see this note, you would have combined all cereal crops/and some corn and soybean as well. You would know how much yield you got and how much your peers got. In case you got less than others, you need to look back what did you miss and what you could do. It is time to talk to those who got record breaking yields and what contributed to such yields. Some of the other important tasks that you could do in the fall are as follows:

**1. Soil testing:** Take soil samples from your fields (0-15 cm soil depth for basic soil tests and micronutrients, and 0-30 cm for nitrate nitrogen and sulphur), if you haven't done the soil tests for the last 3 years. Go for micronutrients tests, especially for zinc and boron, if you haven't tested your soils for micronutrients in the recent past. Remember sustaining crop yields with the application of NPK fertilizers alone isn't possible any more. You may wish to test alfalfa, soybean and corn fields for nitrogen and sulphur too, as soon as the soil temperature comes to 10-14° C or below, so that you are able to discount some residual/or fixed N from these crops next spring. At low temperatures, there is no significant transformation/or losses of nutrients. For details on soil sampling and testing, refer to Agronomy Guide for Field Crops (Section Soil Testing: <http://www.omafra.gov.on.ca/english/crops/pub811/9soil.htm>) or Soil Fertility Guide. *The economic and environmental benefits from a sound fertilizer program, based on soil tests, could be many times the cost of soil testing.* TBARS is considering providing custom soil sampling/testing services to our producers at a reasonable cost (see details on another page).

**2. Manure testing:** Fertilizers are one of the costliest inputs for crop production. Test manure for its nutrients content, to decide on the right rates of manure and fertilizers application to minimize costs on nutrients application/and environmental impacts, and to obtain maximum economic yields. Visit <http://www.gov.mb.ca/agriculture/livestock/poultry/bba01s24.html> for details on manure sampling and testing.

**3. Fertilizer application:** Fall application of P and K to perennial forage crops is recommended. Take soil and manure tests, targeted yields, crop removal of nutrients and soil test based fertilizer recommendations in to consideration while planning for an optimum fertilizer program. It may be advisable to apply sulphur to alfalfa in the fall. Indication from research at TBARS is that sulphur is even more critical than potassium for winter survival of alfalfa.

**4. Tillage:** If you are ripping of fields under perennial forage crops, ploughing could be beneficial to loosen the soil. Zero tilled fields may be too cold in the spring for an early land preparation or seeding. Disking the fields twice in the fall or once in the fall and once in the spring followed by cultivation and seeding in the spring may be a better option as compared to conventional/or zero tillage, more so if you don't have the no till drill or planter. You may also experiment doing all tillage operations, including pre-seeding cultivation (after disking or ploughing) in the fall, and go for direct seeding early in the spring, especially for cereals. We have tested this practice at TBARS and found it good.

This is going to keep you busy in the fall, but if you do get some free time, don't hesitate to visit TBARS to see what we do/or grow in the fall. You may also call me and sit with me for fertilizer and crop planning for the season 2014!

*Published in Northwest Link, October 2013, Page 10-11!*