



# Fall is an Ideal Time to Look Back and Think Ahead

by Dr. Tarlok Singh Sahota, CCA-ON

By the time you see this note, you will have combined all your cereal crops and some corn and soybean as well. You will know how much yield you got and how much your peers got. In case you had less than others, you need to look back at what you might have missed and consider what you could do to correct it. It is time to talk to those who had record-breaking yields and ask them what contributed to such yields. This could help you to maximize your economic yields next year. 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, if you haven't done the soil tests for the last three years. Go for micronutrients tests, especially for zinc and manganese, 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. For details on soil sampling and testing, refer to the Agronomy Guide for Field Crops (Section Soil Testing: <http://www.omafra.gov.on.ca/english/crops/pub811/9soil.htm>) or the 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.* If you don't have time for soil sampling yourself, look for someone providing custom soil sampling/testing services to producers in your area at a reasonable cost.

## 2. Manure testing:

Fertilizers are one of the costliest inputs for crop production. Test manure for its nutrient content to decide on the right rates of manure and fertilizer application. This will minimize your nutrient application costs and environmental impacts, and help obtain maximum economic yields. The following two links could be useful for (i) manure sampling and analysis and (ii) manure management: <http://www.millstonenj.gov/Manure%20Sampling%20and%20Analysis.pdf> <http://www.omafra.gov.on.ca/english/crops/pub811/9manure.htm> for manure management.

## 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 into consideration while planning for an optimum fertilizer program. It may be advisable to apply sulphur to alfalfa in the fall. Indications from research at Thunder Bay Agricultural Research Station (TBARS; [www.tbars.net](http://www.tbars.net)) is that sulphur is even more critical than potassium for winter survival of alfalfa.

## 4. Tillage:

If you are ripping fields under perennial forage crops, ploughing could be beneficial to loosen the soil. Zero tilled fields may be too cold in the spring for early land preparation or seeding, particularly in northern Ontario. 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) in the fall, and go for direct seeding early in the spring, especially for cereals. I have tested this practice at TBARS and found it good. However, it is advisable to follow location specific recommendations on tillage (or even for other crop production practices). Don't hesitate to consult a CCA or a researcher in your area.

*This is going to keep you busy in the fall, but if you do get some free time, don't hesitate to visit a research facility in your area to see what they do or grow in the fall. You may also call a CCA/Consultant and sit with him/her for fertilizer and crop planning for the 2017 season! The earlier the better!*



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Dr. Tarlok Singh Sahota is the Director of Research and Business at the Thunder Bay Agricultural Research Station. For more information call (807) 475-1373 or email [tarloksahota@tbaytel.net](mailto:tarloksahota@tbaytel.net).

There are over 500 Certified Crop Advisers (CCA) in Ontario. Each CCA has demonstrated their knowledge about Ontario crop production by passing the required exams. In addition, they have the crop advisory experience, the education, the commitment to continuing education and have signed a comprehensive code of ethics, which places the grower's interests first.

*This industry driven program helps ensure that Ontario crop producers are well served by those providing their crop production advice. This article was written by one of those CCA's.*