

Program: Casco Bio-solids Spring Application on Corn 2006



W. E. Cumoe, D. C. Irving, & W. R. Hossie

In Partnership With



Objective:

The objective is to determine the effects of spring applied bio-solids produced by Casco, on corn crop development and yield. The levels of soil N-NO₃ as a result of spring application were also monitored.

Background:

The program was field based with an experiment being conducted on Third High Farms, under the direction of W. E. Cumoe, Researcher and former Director at University of Guelph / Kemptville Campus. D. C. Irving, Soil and Environmental Technician, had the responsibility for the day to day supervision of the field program, data collection and report publishing, assisted by W. R. Hossie.

The test was designed and staked out by Kemptville Campus on Third High Farms (Robertson Farm, Lot 9, Conc. 1 of South Dundas Township in Dundas County). The product was transported from the Casco, Cardinal site and applied by Third High Farms. The contact at Casco was Gerry Morand, Process Engineer.

CONCLUSIONS:

- ❖ Treatments 4 & 5 (180 m³/hectare & 240 m³/hectare of Casco bio-solids) produced a better yield than that of the recommended amount of commercial nitrogen.
- ❖ The application of Casco bio-solids generally increases soil organic and promotes higher water holding capacity, better soil aeration and improved soil tilth as well as increased fertility.
- ❖ All measured soil parameters, other than N-NO₃, are higher at the conclusion of the test in 2006 than they were in the spring of 2003.
- ❖ After four years of continuous annual application of Casco biosolids, none of the 3 application rates used in this test elevated soil N-NO₃ levels to areas of environmental concern.



Support Appreciated from:



Community Benefits Include: More efficient use of Casco bio-solids on corn fields