

Plocher K Application at a Compost Site in Québec, Canada

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Date: 28 January 2004

General observation: Increased activity in the compost, even in winter, with Plocher K application. The temperature in the Plocher K section was 6°C higher than in the untreated control section. Outside temperatures were averaging -24°C !

Plocher K was applied November 6 and 7, 2003, on two rows of apple pulp residues and rice husks, mixed on site with grass and/or branch materials.

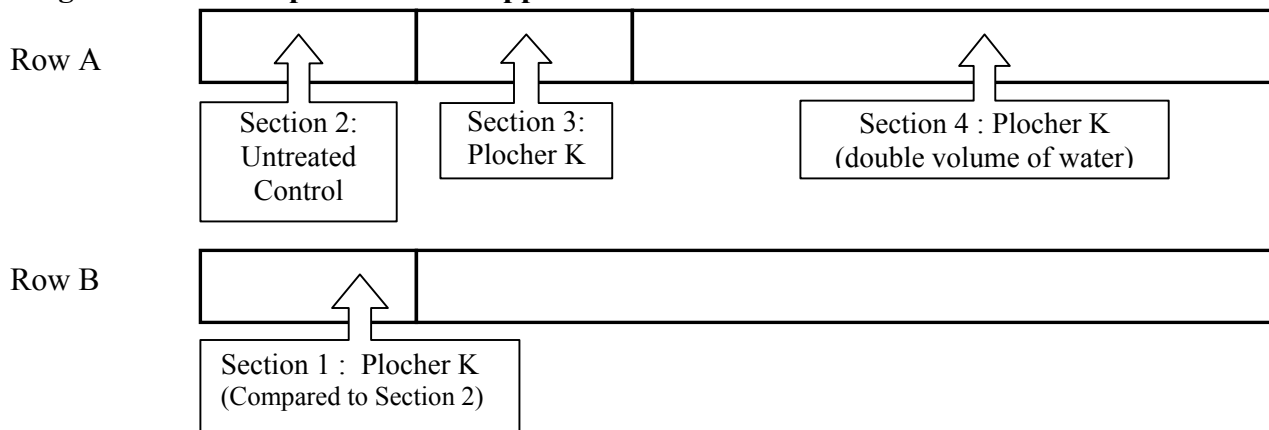


Equipment for application of Plocher K



Plocher K application on Row A (left)

Diagram of the compost rows and applications



Detailed observations:

To evaluate the impact of Plocher K, both visual observations and temperature readings at 3-foot depths were made in all sections.



Rows A and B: January 2004



Placing the thermometer



Taking temperature readings

Sections 1 and 2 were kept for purposes of comparison, both rows having similar substrata at the beginning of the composting process. The average temperature of section 2 (without Plocher) was 15.6°C, compared to an average temperature of 21.6°C in section 1 (with Plocher K). The difference of 6°C demonstrates more intense composting activity in the Plocher section. We also noted that the thickness of frozen soil matter was less (2-4 cm) in the Plocher section than in the control section (25-30 cm), indicating more heat generated and held in the Plocher swath. At the time, there was no significant difference in the texture of the compost material.



With Plocher K: frozen earth at 2 to 4 cm



Without Plocher : frozen earth at 25-30 cm

Section 3, with a higher percentage of branch material, showed significant activity. The temperature was 42°C at a depth of 3 feet.

Section 4 : Product was very decomposed and the temperature was 10°C. Slower activity was probably due the advanced stage of the composting process. The absence of control and evaluation of decomposition at 3 feet at the start of application calls for some caution in evaluation, but the results seem very positive nonetheless. It's noted that this section received double the volume of water per m³. This may have had a positive impact on the Plocher K's composting efficiency.

