

Soil temperature as affected by tile drainage in heavy clay soils of Manitoba

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The influence of tile drainage on soil temperature is not well documented in heavy clay soils of Manitoba. In the current study, soil temperature measurements were done at 1- & 6-inch soil depths to determine temperature differences between tilled (15-, 30- & 45-foot wide tilled plots) and untilled plots during spring 2022. Drainage plots were relatively warmer than non-tiled plots but this trend was not consistent. Significant differences in soil temperature were recorded only in the last week of study (June 13-17). Exceptionally high rainfall (187% of the normal) during the course of study might have contributed to lack of soil temperature differences between tilled and non-tiled plots.