

Editor's Comments:

I see problem with each component of this manuscript (ms). Starting with basic equation used to calculate thermal diffusivity-it has units of m^2/s , but the equation used gives units like m/s [length/time]. Introduction is incomplete-does tell about importance of soil temperature relations on plants but does not tell what the importance of thermal diffusivity is. How this study would help and in what way. Methods and materials used to do these investigations are incomplete and not systematic. No units of measurements are given in diffusivity tables. Soil moisture, hydraulic conductivity, and soil thermal conductivity play a very significant part in thermal diffusivity patterns. I do not see anything said about soil moisture except one temperature of 20°C. Results are not explained systematically. The references are in disarray. They are not properly put in the text of the ms and are not listed as given in scientific publications. There is a little correction on units of diffusivity. The equation used by author gives units of diffusivity as- $s \cdot m / s$, which means m only. But thermal diffusivity is measured in m^2/s and that is what author has used in figures.

Authors' Feedback:

Thank you. As requested, the following correction were made

1. The period of fundamental cycle which is a day was calculated in seconds, hence, this leads to the S.I. unit of thermal diffusivity being m^2/s .
2. The is portable of thermal diffusivity to the study has being included as well as impact of soil moisture has been added
3. The reference have been put in order .
4. The table have added to them the s.i unit of thermal diffusivity.