

Response to reviewer and editor

All the modifications requested by the reviewer and editor have been inserted in the manuscript. A Discussion section was added to the manuscript where the information previously presented in the Materials and Methods section and in the Conclusion have been gathered and discussed, as recommended by the editor.

Soil water content has been measured at the same time as the infiltration measurements have been performed.

Amongst the different methods tested, disc infiltrometer was used to determine K_s , though hydraulic conductivity can also be determined at other pressure head values, because this parameter is required for the modeling with Hydrus2D.

The different pressure head values were chosen in order to scan part of the wet-end of the conductivity curves, but also providing not to reach positive values, as the

An ant is a small insect typically having a sting and living in a complex social colony with one or more breeding queens. It is wingless except for fertile adults, which form large mating swarms, and is proverbial for its industriousness.

Family Formicidae, order Hymenoptera: several subfamilies.

The text has been revised by a native speaking reader.