TerrHum

November 12-15, 2019
Palermo, Italy

An iOS App for forest humus forms classification

It works on Mac-computers too

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The name *TerrHum* comes from the abbreviation of the words Terrestrial (not submerged soils) and Humipedon (superficial part of a soil, richer in organic matter and composed of organic and organo-mineral soil horizons). This application allows classifying all forest topsoils except submerged ones. The app is built on the indications about humus diagnostic horizons, humus Forms and humus Systems reported and illustrated in 8 articles published in an Applied Soil Ecology Special Issue entitled Humusica.
(https://www.sciencedirect.com/journal/applied-soil-ecology/vol/122/part/P1).

During the field observation and description of the soil upper layers, the user is assisted with touches that may display many photographs corresponding to types of soil horizons (first line-touch in Fig. 1, left). A finger onto the line, and a new screen opens; if the operator wants to display examples of diagnostic horizons, he only has to touch the screen at the level of the name of them (Fig. 1, centre and right). A legend will appear while touching the figure. Enlarging the fingers on the screen allows to magnify the picture.
With the same process, on the first screen (Fig. 1 left) there is a "O/A Transition" touch (second line-command) that allows to display examples of transitions between organic and organo-mineral horizons (Fig. 2).

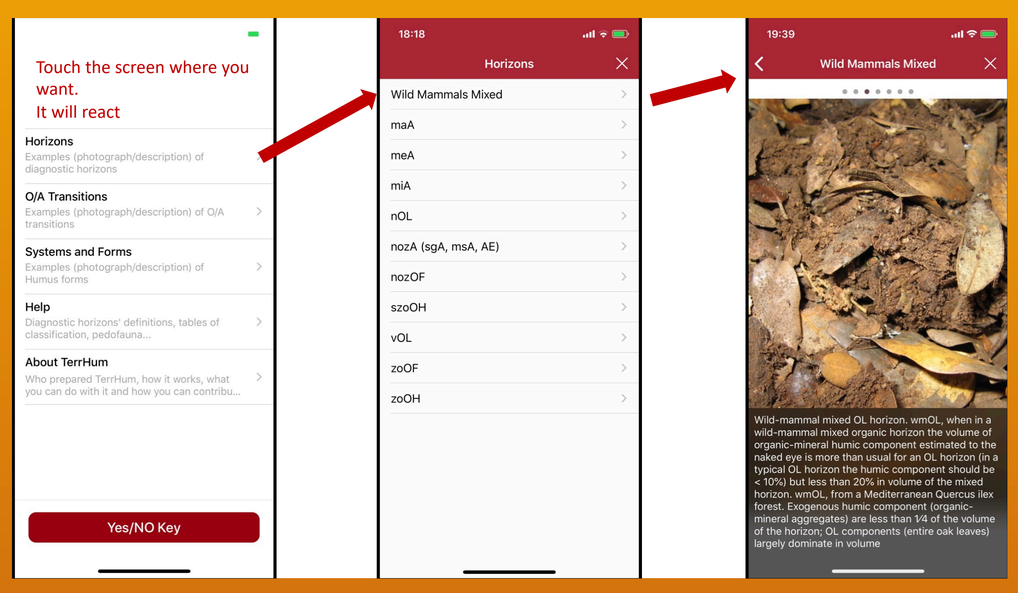

Fig. 1.

To be downloaded from the App Store

TerrHum

6.4 Mo
Including all figures

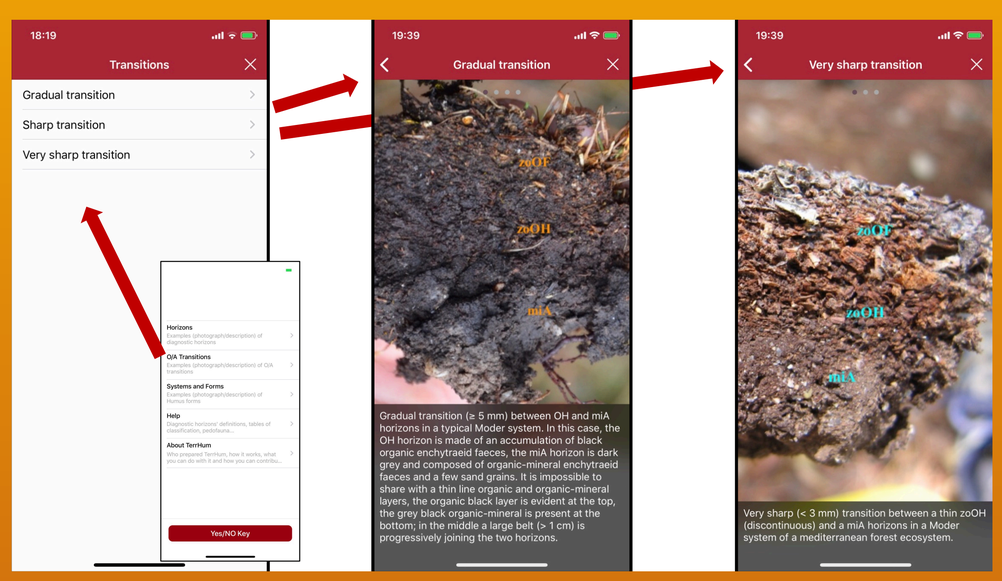

Fig. 2.

TerrHum allows to display examples of Humus Forms (Fig 3) or tables with information related to groups of soil animals (Fig. 4).

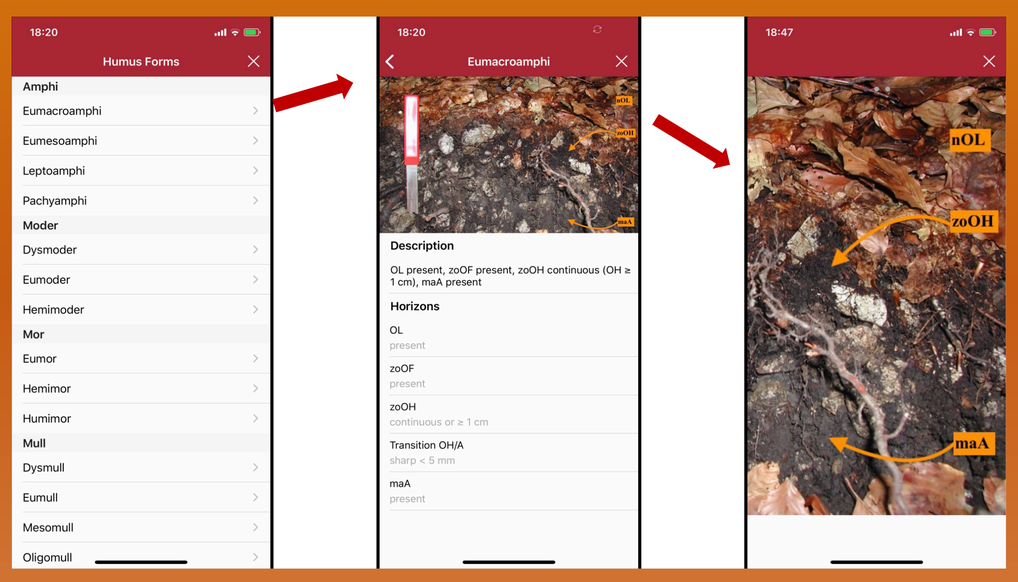

Fig. 3.

App Store

TerrHum

Every time you look at a photo, it is stored on your device and becomes accessible instantly without a network

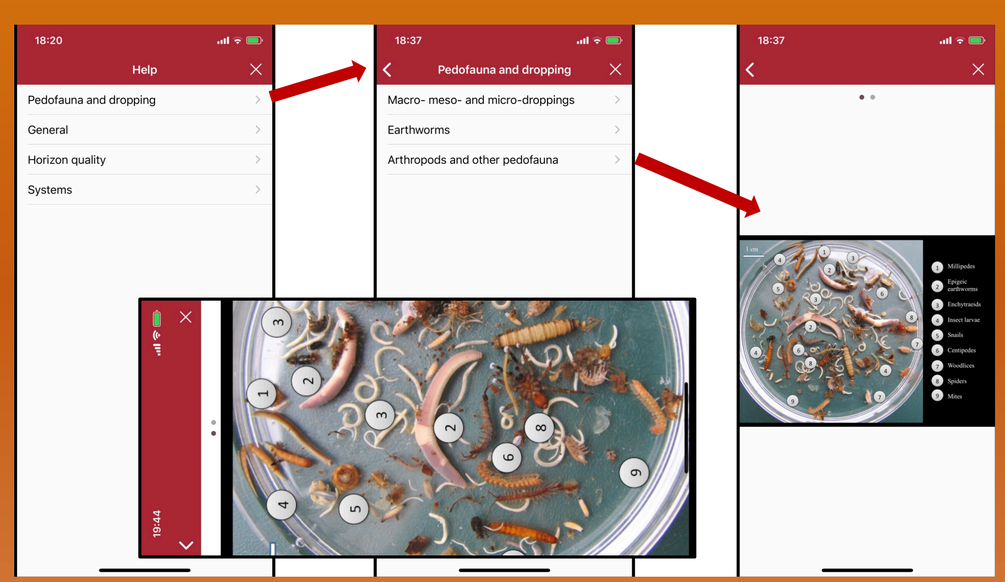

Fig. 4.

"About TerrHum" reaches a web page with information on the main functionalities of the app and its genesis (Fig.5). Figure 6 corresponds to the first screen of the key. It requests to separate the Mull System from others. Then you have to separate (Amphi-Tangel) from (Moder-Mor). Then Amphi from Tangel and Moder from Mor. Finally, the different humus Forms are listed in each System. It's almost funny. Educational, students like it very much.

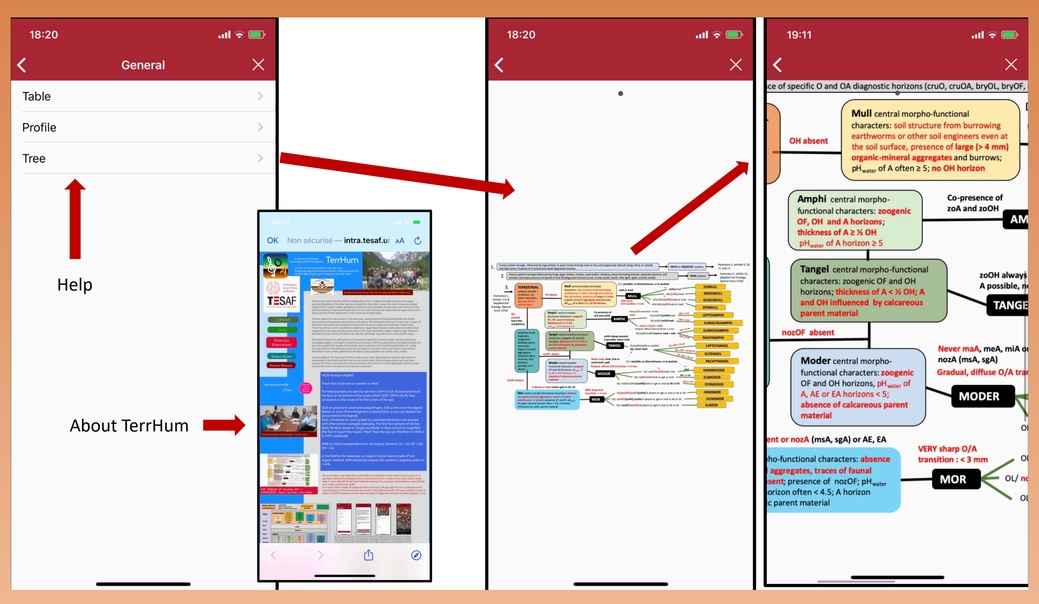

Fig. 5.

App Store

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Periodicals (1-2 times per year) updates. To contribute, contact augusto.zanella @unipd.it

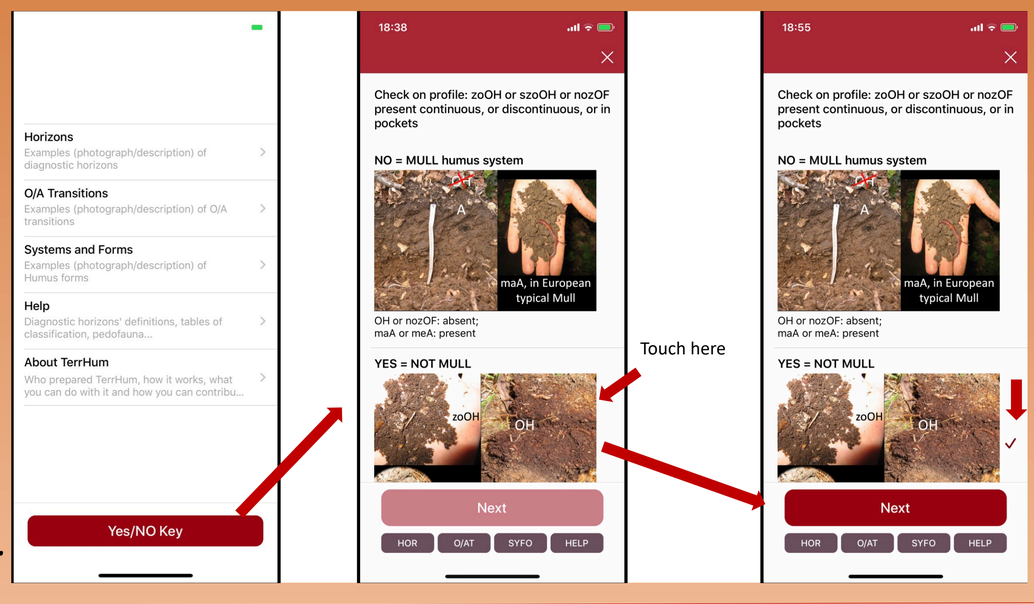

Fig. 6.

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800 1222·2022 ANNI Università degli Studi di Padova
IUFRO International Union of Forest Research Organizations
International Union of Soil Sciences
SIPe Società Italiana di Pedologia Italian Society of Pedology
SISEF Soil Ecology Group
BFW Austrian Research Centre for Forests
University of Natural Resources and Life Science, Vienna
TESAF Dipartimento Territorio e Sistemi Agro-Forestali
DAFNAE Dipartimento di Agronomia, Animali, Alimenti, Risorse naturali e Ambiente