

Authors' responses to reviewers' and editor comments on:

Tree-microbe-soil interactions affecting soil organic carbon fractions in Mediterranean forest soils

Editor:

Dear authors,

I am pleased to accept your manuscript for publication in *Biogeosciences*.

Please consider the last remark from the reviewer and carefully check the manuscript text before submitting your final files. For example, there are still two occurrences of “capacitance” that should be replaced by “capacity” (in the legend of Fig. 1 and in line 591).

Thank you for submitting your work to *Biogeosciences*.

Kind regards

Sara

Response:

Thank you for your kind support and for accepting our manuscript for publication in *Biogeosciences*. We carefully reviewed the manuscript and corrected the terminology throughout. Specifically, “capacitance” was replaced with “capacity” in both the main text and the figure legend. We also addressed the reviewer’s final comment, as detailed below.

Reviewer:

This manuscript represents a study on dryland soils with a comprehensive suite of analyses and an interesting study design. Authors examined how monospecific versus mixed forest stands affect soil and microbial characteristics with an emphasis on the idea of mineral saturation. I reviewed a previous iteration of this manuscript, and my major concerns included communication of transient gains of afforestation, acknowledgement of fire, and acknowledgement of the limitations of mineral capacity measurements. Authors have largely dealt with my comments and I only have a minor clarification to add

Line 208: "No fire has occurred at the study site for the past 50 years" - Authors also mentioned in line 143 that the studied plots are managed by a local forest service. Is there active fire suppression by the local forest service at the site as well?

Response: Thank you for your positive assessment and helpful comment. No active fire suppression has been implemented by the local forest service at the study site. We have clarified this point explicitly in the revised manuscript.

The revised sentence now reads:

Line 208: "Although no active fire suppression has been implemented by the local forest service, no fire has occurred at the study site during the past 50 years."