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Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2013_AJEA_8670
Title of the Manuscript:	Long-Term Fertilization Effect On Agronomic Yield And Soil Organic Carbon Under Semi-Arid Mediterranean Region
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	To the authors: Please see the considerations below. The Manuscript Long-Term Fertilization Effect On Agronomic Yield And Soil Organic Carbon Under Semi-Arid Mediterranean Conditions is a solid long-term study on the development and production of several agricultural crops. Although it is not innovative it shows the results of different kinds of fertilization, as inorganic, organic, as compost, manure, and compost + arbuscular mycorrhizal fungi (AMF). The sections Introduction, Material and Methods and Results are written in an understandable way, and to the point. One question remains on the identification of the AMF fungi, and how this inoculum was obtained and applied. Please give some details on this subject. In the Results section it is not necessary to describe in words and repeat the increases found in the text. The tables should be enough. Discussion and Conclusions are in line with the obtained results and demonstrate again the high value of organic amendments, especially on more or less degraded very poor soils. Augmenting the organic carbon content in soils will result in much better soil attributes and greater fertility levels,	The cocktail inoculum (mixture of sand + soil + spores + hyphae) was produced in sorghum (<i>Sorghum bicolor</i> L.) host plants. The cocktail mycorrhizal inoculum was mixed with the compost before application. Thank you very much for this comment however some time it needs to make explanation. So that's way we used by words as well. We try to put stress on SOC effect on yield and soil quality. Your suggestion is so important. Since we used mycorrhizae as an organic fertilizer more stress done on effect of organic



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	which implies in higher yields and, in the long term, in healthier and better structured soils. And it is important to stress this finding over and over again, to convince mankind of this fundamental truth. I would suggest the authors to reinforce the finding that even when using a lower amount of organic compost, the presence of AMF has a great impact on plant growth. Today we need to stress the positive effect of bio fertilizers and organic materials which can be highly advantageous and are indispensable for a more sustainable agriculture, especially on soils that have been degraded by anthropogenic actions. A discussion in this direction may enrich this article. Correction of words and sentences you can find pointed out in the whole text.	fertilizer compared to inorganic fertilize. In discussion section we reworked the role of mycorrhizal inoculation. And we added following sentences Under the same soil conditions Ortas (2012) during 1997-1999, tested 12 plant species under field conditions and found that plant species are strongly dependent mycorrhizal inoculation. In present experiment although compost alone used 25 Mg ha⁻¹, and compost+mycorrhizae used 25 Mg ha⁻¹ however the effect of both treatments are nearly equal. It seems that mycorrhizal alone have significant effect on yield. Thank you for correction.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		