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Journal Name:	**International Journal of Plant & Soil Science**
Manuscript Number:	**2015_IJPSS_16063**
Title of the Manuscript:	**The lowermost Chara locality in the world near Dead Sea, Israel**
Type of the Article	**Original Research Article**

General guideline for Peer Review process:

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.
To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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)*
Compulsory REVISION comments	**-I am not a native speaker, but even for me the English style is terrible to read, the grammar is really bad! Such articles should not be sent out for review. I will not comment of the many, many spelling errors, but focus on scientific questions. If the editorial board agrees with a re-submission, the authors are highly advised to contact a professional copy editor!** **Abstract: you give a wrong impression, if you state that the study took place between Jan 2012 and Dec 2014. In reality, you just sampled 2 times in 2012.** **Abstract: you give a wrong impression, if you explain that 54 species were obtained. (1) you recorded 39 "species" (L100), the others were added from historical data. (2) you obtained not species, but taxa of different taxonomic levels.** **L32 to 34: You state that you collected 9 live samples and 9 fixed samples (subsamples of the live samples???) and then 4 samples of charophytes. Your Chara samples are however also algae, so were they part of the 9 samples or additionally taken?** **L35 to 37 and L131/132: You only sampled the benthic zone, but you did not consider the pelagial! In the results you interpret this lack of sampling however as a typical feature of you sampling site – this is really misleading!**	

	L40: Why did you mount air-dried Chara in Naphrax, which is used as mountant of diatoms? I see no reason to do so. **L51 and Table 1: maximum conductivity range of probe is below the values given in table 1 – how can this be the case?** **L53 and results on NaCl: the refractometer may be used for an estimation of the salt content (salinity), but for sure NOT for obtaining ion concentrations – this is rubbish!** **L54 –please consider the specifications of the photometer: the accuracy is +-0.5 mg L-1 NO3-N +-10% of the readings! For your environment, this is too low, I therefore suggest to give just an information of "< 1mg L-1 NO3-N".** **If the editor decides to keep your NO3-N values (I highly scrutinize them…): please provide more details, especially for the "rank N-NO3-index". I never heard of the WESI index. Why are you going for saproby and not for trophy, which would be much more intuitive for algae?** **L137: "alkaliphilic species prevailed". An alkaliphilic species has usually a pH minimum > 7.5, an optimum of around 8.5 and a maximum > 10.0! Most of your taxa (if not all) cannot be considered as alkaliphilic, they are alkalitolerant.** **L150: "mesotrophic to eutrophic"…based on what? NO3-N is flakey, phosphorus, chl-a, productivity were not measured…**	

	L151: it is misleading, if you state that autotrophs prevailed in the benthic zone, because you did not consider macrozoobenthos, heterotrophs,… **L153: you did not analyse alkalinity!** **L169-191: this paragraph is absolutely speculative and for me a no-go!** **L181: "…each charophyte species evolved in the presence of UV…"??? Not clear to me…** **L183: Krause did not mention the sun exposition, but deeper, persistent water bodies (preferred by C. contraria) and shallow, ephemeric ponds (C.vulgaris) – this is contrary to your findings!** **L184: It seems that Charophytes are NOT able to develop protection mechanisms against UV radiation (e.g. Bakker et al 2005, New Phytologist).**	

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Minor REVISION comments	**L46: highest magnification of objectives is 100x, usually 10x or 12.5x oculars are used, which is in total 1000 – 1250x magnification. Maybe you mixed the ocular opening (18.5 mm) with the magnification – check!** **L44: Give details on the "6-score scale". Is it based on relative abundances?** **L46: DC abbreviation not clear DC = digital camera?** **L49: you did not measure "acidity", you measured pH! Acidity and alkalinity analyses are usually done by means of titrations!** **L49: explain abbreviation** **L68 and 70: contradiction "no rainfall" and "annual rainfall"** **L73: air or water temp?** **L79: include "nearby city Beer-Sheva…"** **Fig. 1 enlarge font size, especially for the right map** **Fig 2 not needed, delete** **Table 1:** - **give TDS in g L-1 – this is the common unit** - **Delete Na% and Cl%** - **Number of taxa** **Table 2:** - **what does column "S" represent?**	

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	- **"Reo" is a wrong term** - **Fig 3: scale bars are certainly wrong, much too small – correct!!!** - **L 135: "…more species…" of what?** **L 166: you took samples only in 2012, how can you then explore reconstruction in 2013**	
Optional/General comments	**What can we learn from this manuscript after resubmission? It is the occurrence of Chara contraria and other phytobenthic algae in a remote pool located at very low altitude.**	

Reviewer Details:

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