

## ***Interactive comment on “Community-weighted mean traits but not functional diversity determine the changes of soil properties during wetland drying on the Tibetan Plateau” by Wei Li et al.***

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Functional traits are the center of recent attempts to unify key ecological theories on species coexistence in communities. This is an interesting work and makes a nice contribution on how vegetation control soil properties through the functional traits and functional diversity. An important finding, I think, was that the functional diversity (functional richness, functional evenness and functional divergence) had not obvious changes with the wetland drying, and it may be not sensitivity in influencing ecosystem processes. The authors also make a detailed explanation in the text, and this is a common or special phenomenon? I think further study should continue to test it in other ecosystem

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or habitat. Overall I like the manuscript, the presented results are valuable and correctly obtained for the relationship between species traits, functional diversity and soil properties. Please see specific comments below.

Abstract P2 Line 34 change comma to period after typical meadow. P2 Line 34 change “four CWM trait” to “Four CWM traits” P2 Line 37 change “functional richness; functional evenness; and functional divergence” to “functional richness, functional evenness, and functional divergence” P2 Line 47 change “soil C/N properties” to “soil C and N properties” Introduction P3 Line 73 change “succession” to “successional” P3 Line 84 please delete “the value of” P4 Line 102 Change “traits diversity” to “trait diversity” P4 Line 112 please add comma after leaf area (LA) Materials and methods P4 Line 142-143 please rewrite the temperature unit P6 Line 151 please add comma after structures. P6 Line 160 please add comma after species and vegetation P7 Line 201 Please rewrite this sentence and make sure it is correct. P7 Line 205 do you mean “some of the indices of functional diversity” P7 Line 208 please add comma after “FEve” P8 Line 216 it should be “a principal components analysis” Results and Analysis P8 Line 223 please delete “the” P8 Line 228 It should be “there were also significant differences...” P9 Line 239 please delete “the” before wetland. P9 Line 244 change totally to completely P9 Line 245 it should be “to the process of wetland drying” P9 Line 250 change “higher” to “greater” P9 Line 252 change that to those P9 Line 255-256 do you mean “the dominant driving factor with wetland drying” P9 Line 267 it should be “significantly positive correlations” Discussions P10 Line 287 change “of” to “for” P10 Line 290 delete “the” before grass species P10 Line 295 It should be taller plants (e.g., *D. caespitosa*) P11 Line 299 delete “the” before functional diversity P11 Line 300 it should be “significant changes” P12 Line 336 it should be “relationships among CWM traits, functional diversity, and soil properties” P12 Line 337 “a PCA analysis” P12 Line 356 change “remained” to “yielding” P12 Line 357 do you mean “some ecosystem models ...” P13 Line 360 please delete positive P13 Line 375-376 I’m not sure I understood what you were trying to say here, do you mean “which would predict that trait diversity would lead to a greater efficiency of nutrient use”, right? Tables and Figures are good.

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