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Interactive comment on "Global patterns of leaf nutrient resorption in herbaceous plants" *by* Zhiqiang Wang et al.

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Anonymous Referee 2 Received and published: 28 April 2018 This manuscript addressed the global trends of nutrient resorption in herbaceous species. Nutrient resorption is an important plant internal process for nutrient utilization and with consequences on ecosystem nutrient cycling. We have seen a lot of published literatture about the nutrient resorption changes across large scales from regional to global. The works from Vergutz et al. (2012 Ecological Monographys 82: 205-220) and Yuan Chen (2009 Global Ecology Biogeography 18ïijŽ 11-18) have well presented the global trends of plant nutrient resorption with the changes of MAT and MAP. I found no novelty of the present study.

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Response: We are appreciated your comment. But we, in here, must be pointed out that Yuan Chen (2009) have focused solely on woody species. Never did they consider the global trends of nutrient resorption in herbaceous plant at global scale. Vergutz et al (2012) have examined the plant nutrients resportion in relation to climate, but global relationship of herbaceous plants remain difficult to identify because of a lack of available data (also see figure 1 and 2). In addition, Yuan and Chen (2009) found resorption of N increased with latitude but decreased with MAT and MAP, whereas for P resorption the opposite relationships were true. In contrast, Vergutz et al. (2012) found similar, statistically significant climate trends for N and P. Such mixed findings allow us to further explore the global trends of nutrient resorption, especially for herbaceous plants. In this study, we first quantified the global patterns of nitrogen and phosphorus resorption in herbaceous plants at a global scale, and believe that these important findings can help improve understanding nutrient resorption of different plant growth-forms in relation to various climate ambient factors at the global scale.

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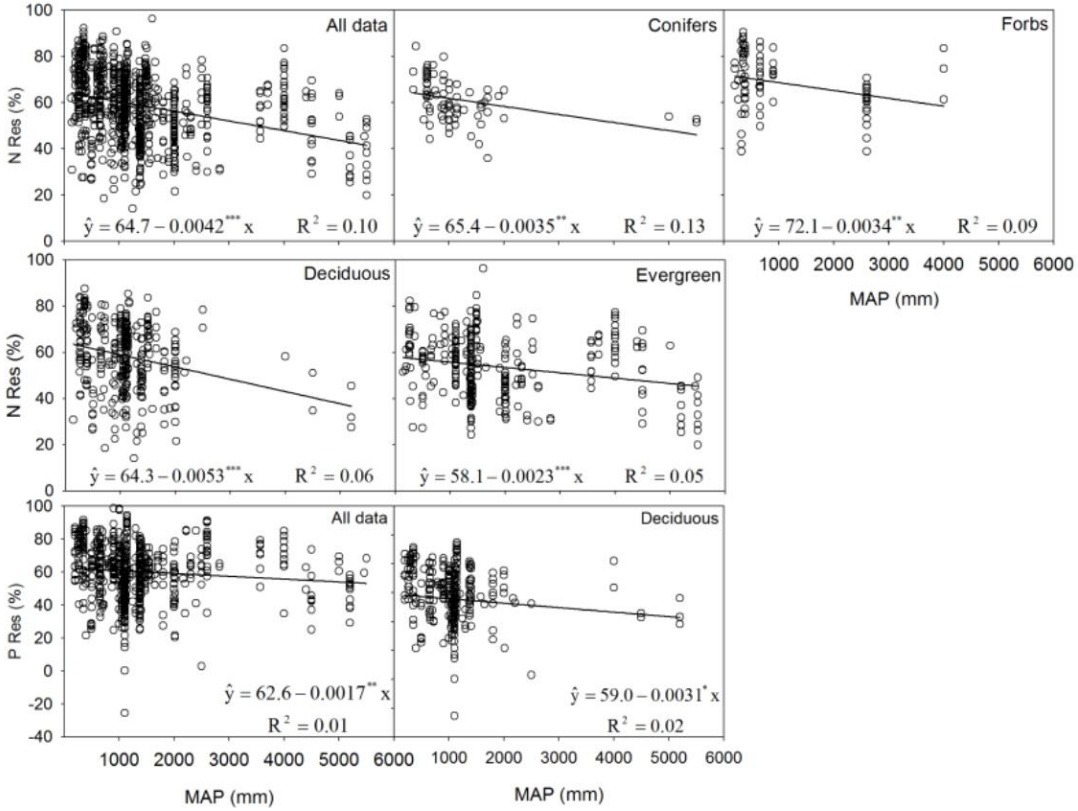

Fig. 1.

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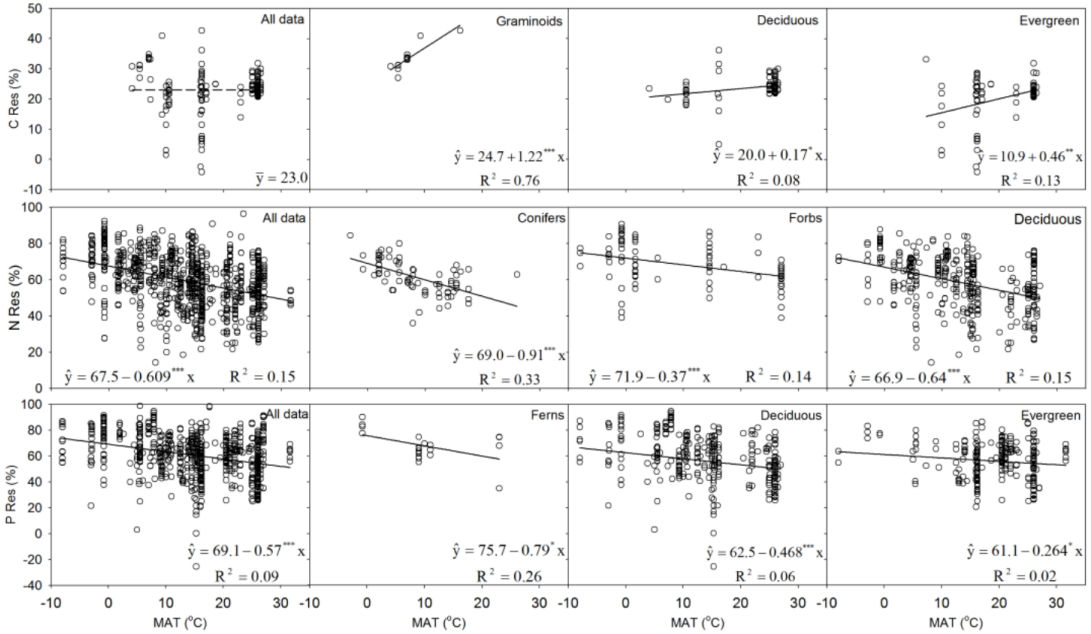

Fig. 2.

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