

***Interactive comment on “Comparisons of stemflow yield and efficiency between two xerophytic shrubs: the effects of leaves and implications in drought tolerance” by C. Yuan et al.***

**C. Yuan et al.**

gygao@rcees.ac.cn

Received and published: 23 November 2016

Dear Prof. Wang,

We have substantially revised our manuscript entitled as “Comparisons of stemflow yield and efficiency between two xerophytic shrubs: the effects of leaves and implications in drought tolerance” after considering all the comments made by Prof. David Dunkerley and another anonymous reviewer. These comments were of great help to improve the overall quality of this manuscript.

Please see the attached supplement (.pdf) for the detailed replies to all the comments of Reviewer #1 and Reviewer #2.

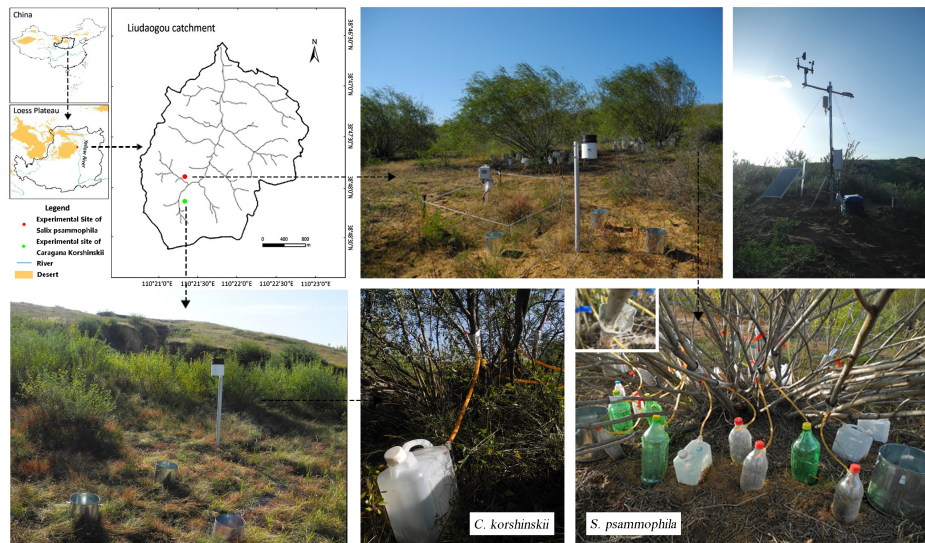
C1

Please also note the supplement to this comment:  
<http://www.hydrol-earth-syst-sci-discuss.net/hess-2016-420/hess-2016-420-AC2-supplement.pdf>

---

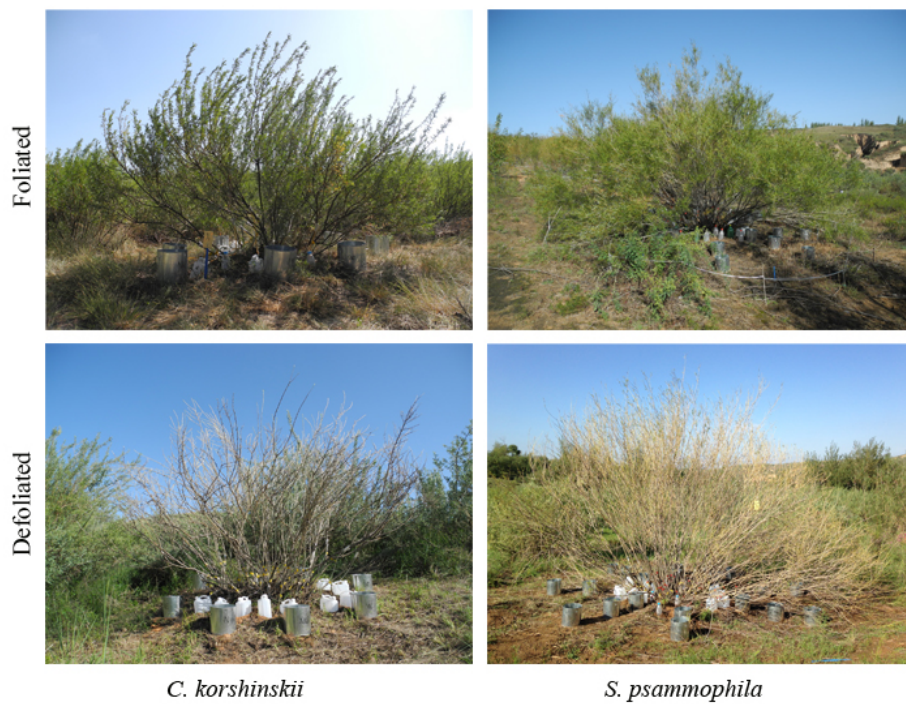
Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-420, 2016.

C2



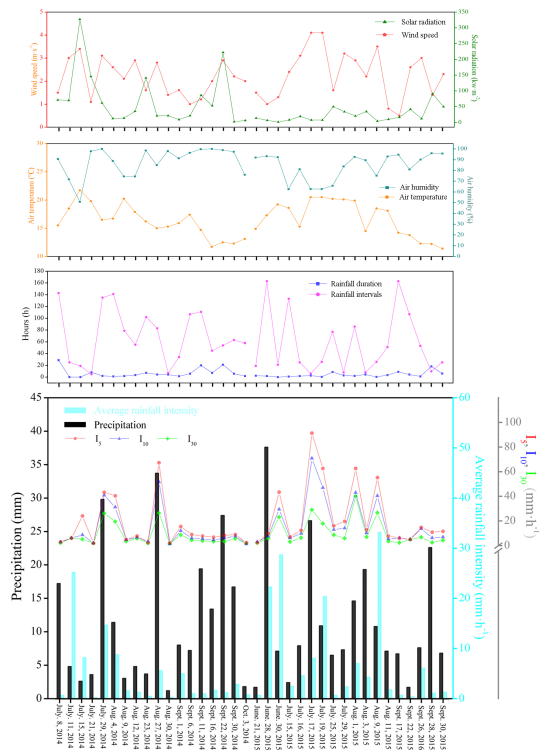
**Fig. 1.** Location of the experimental stands and facilities for stemflow measurements of *C. korshinskii* and *S. psammophila* at the Liudaogou catchment in the Loess Plateau of China.

C3



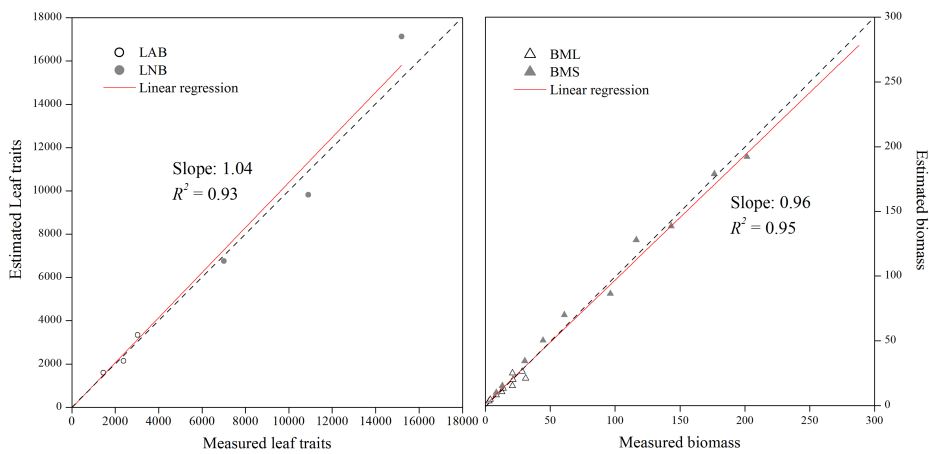
**Fig. 2.** The controlled experiment for stemflow yield between the foliated and manually defoliated shrubs.

C4



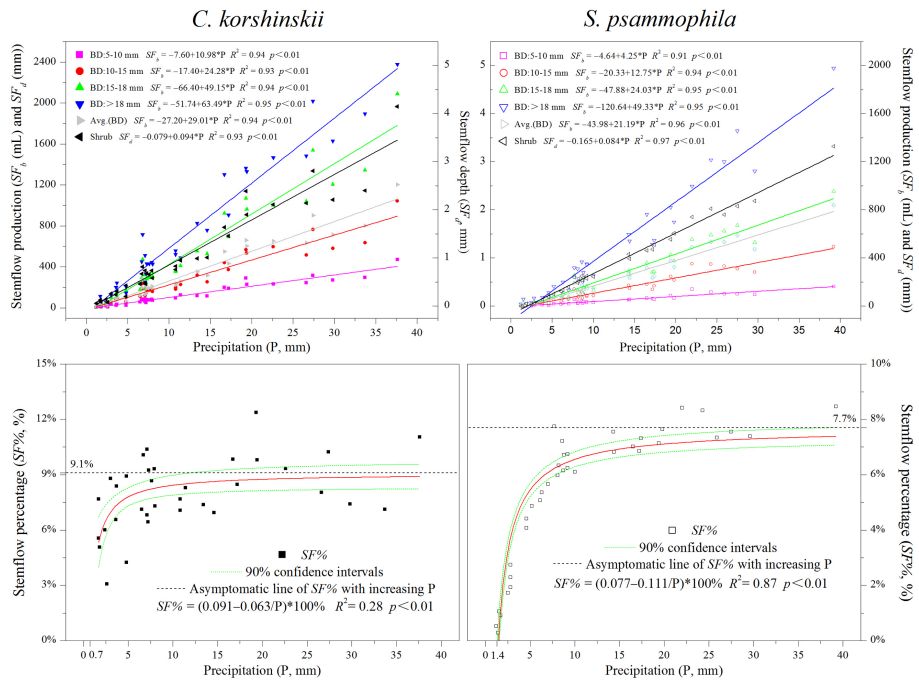
**Fig. 3.** Meteorological characteristics of rainfall events for stemflow measurements during the 2014 and 2015 rainy seasons.

C5



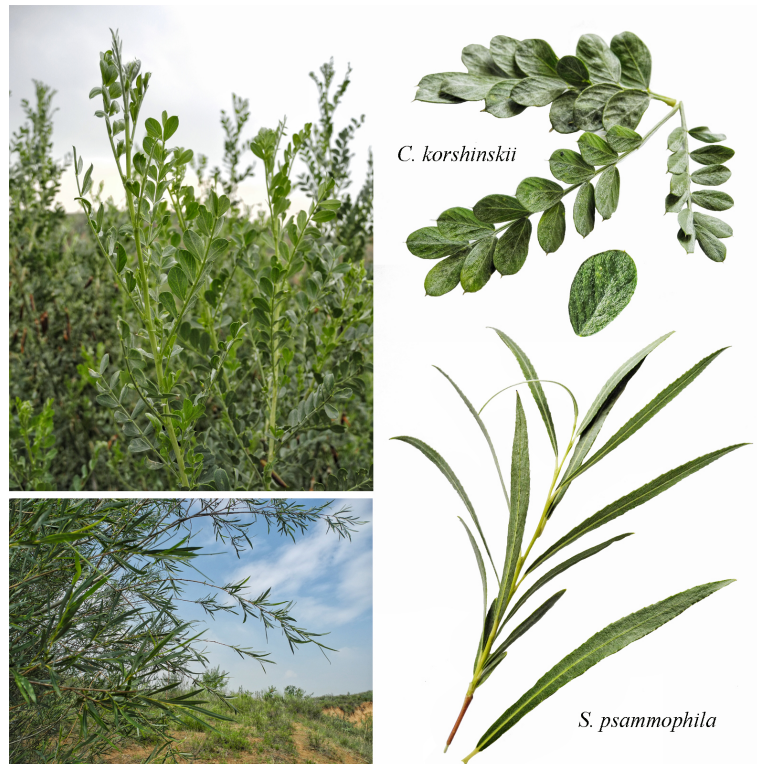
**Fig. 4.** Verification of the allometric models for estimating the biomass and leaf traits of *C. korshinskii*.

C6



**Fig. 5.** Relationships of branch stemflow volume (SFb), shrub stemflow depth (SFd) and stemflow percentage (SF%) with precipitation amount (P) for *C. korshinskii* and *S. psammophila*.

C7



**Fig. 6.** Comparison of leaf morphologies of *C. korshinskii* and *S. psammophila*.

C8