

**Metadata S1. Guo, Y., C. Schöb, W. Ma, A. Mohammat, H. Liu, S. Yu, Y. Jiang, B. Schmid, and Z. Tang. 2019. Increasing water availability and facilitation weaken biodiversity–biomass relationships in shrublands. *Ecology*.**

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## **Data S1**

**Supplementary dataset and R code for statistical analysis.**

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## File list (files found within DataS1.rar)

DataS1.csv  
code for analysis.R

## Description

DataS1.csv – List of shrubland sites with information about habitat conditions and communities.

site	Code name of each shrubland site
plotarea	Area of each plot (m <sup>2</sup> )
WL.3	Three water availability levels according to GWI
MGT	Mean growing-season temperature (°C)
GPE	Growing-season potential evapotranspiration (mm)
GP	Growing-season precipitation (mm)
GWI	Growing-season wetness index
STN	Soil total nitrogen concentration (mg g <sup>-1</sup> )
STP	Soil total phosphorus concentration (mg g <sup>-1</sup> )
richness.h	Species richness of herbaceous plants
richness.so	Original species richness of shrubs
richness.s	Species richness of shrubs after correction for plot sizes
herbL	Aboveground biomass of herbaceous plants (Mg hm <sup>-2</sup> )
herbR	Belowground biomass of herbaceous plants (Mg hm <sup>-2</sup> )
hbiomass	Total biomass of herbaceous plants (Mg hm <sup>-2</sup> )
shrubR	Belowground biomass of shrubs (Mg hm <sup>-2</sup> )
sabove	Aboveground biomass of shrubs (Mg hm <sup>-2</sup> )
sbiomass	Total biomass of shrubs (Mg hm <sup>-2</sup> )
sID	Individual density of shrubs (m <sup>-2</sup> )

code for analysis.R - R script for structural equation modelling and residual regression.  
Annotations of code are included throughout the script.

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