

Wilcots, M. E., Taylor, B. N., Kuprewicz, E. K. and Menge, D. N. L. 2018. Small traits with big consequences: how seed traits of nitrogen-fixing plants might influence ecosystem nutrient cycling. – Oikos doi: 10.1111/oik.05798

Appendix 1

Table A1. Sample sizes for N fixers and non-fixers in our dataset for which we have data on seed mass, dispersal vector, plant growth form, and terrestrial biome. Our dataset contained 7890 unique species, but because some species were listed in multiple dispersal vectors, growth forms, and biomes, we list the effective sample size for N fixers and non-fixers in each data category along with the number of unique N-fixing and non-fixing species for each data category in parentheses.

Data category	N-fixer sample size	Non-fixer sample size
Seed mass	328 (328)	3468 (3468)
Dispersal vector	1160 (604)	12 193 (6096)
Growth form	836 (378)	10 608 (4309)
Terrestrial biome	457 (242)	5050 (2588)

Table A2. Samples sizes for N fixers and non-fixers in our dataset for each category of growth form, dispersal vector and biome.

Data category	N-fixer sample size	Non-fixer sample size
Dispersal vector		
animal	338	3405
autochory	377	3048
ballistic	66	441
barochory	59	441
human	72	1147
other	49	518
water	82	1372
wind	117	2262
Growth form		
herb	421	7534
shrub	140	1070
tree	231	1861
vine	44	143
Biome		
deserts	13	202
mediterranean forests	93	836
montane grasslands	9	65
temperate broadleaf forests	216	2731
temperate grasslands	49	620
tropical moist broadleaf forests	77	596

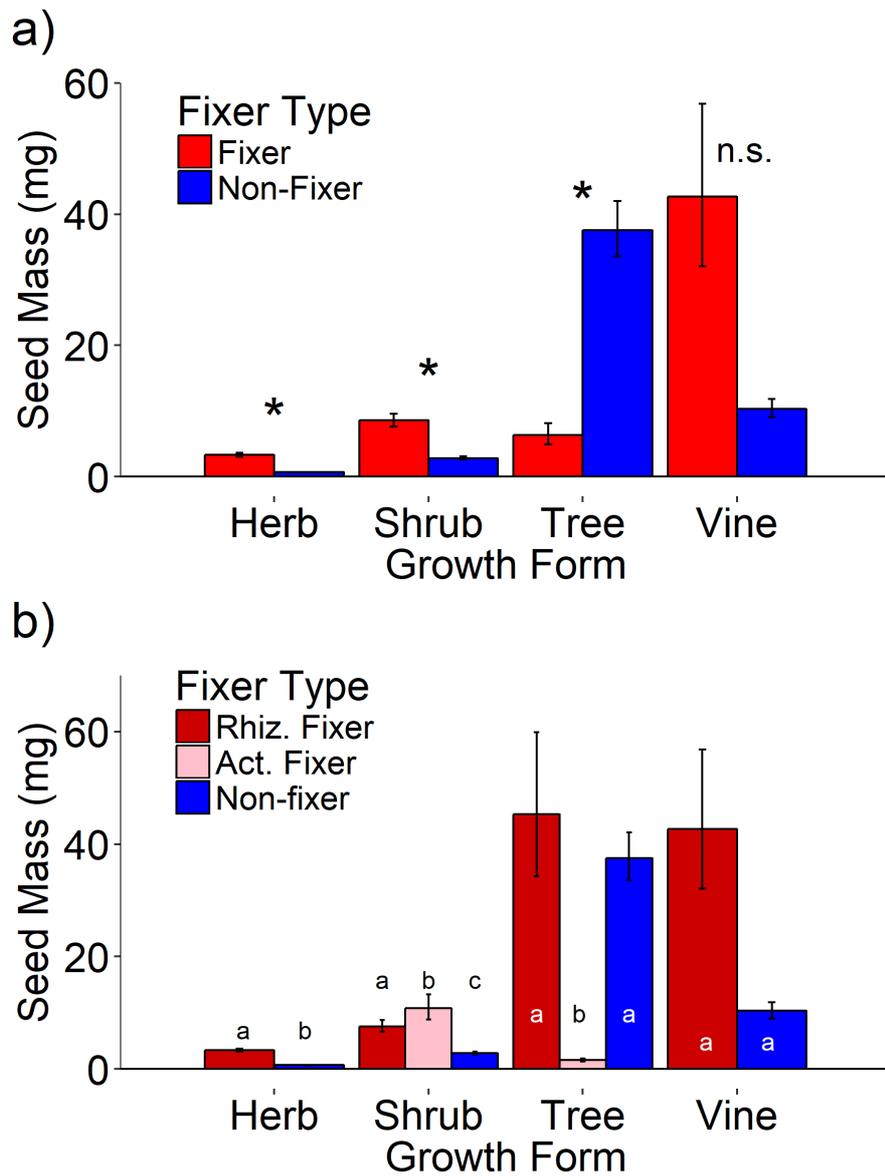


Figure A1. Differences in seed mass (mg) by growth form for N fixers and non-fixers (a), and with N fixers separated by fixer functional type (b). For two-way comparisons (a), a * above a set of bars indicates a significant difference at an alpha of 0.05. For three-way comparisons (b), bars with different letters are significantly different at an alpha of 0.05. Colors are indicated as in Fig. 2 of the main text. Error bars are ± 1 SE.

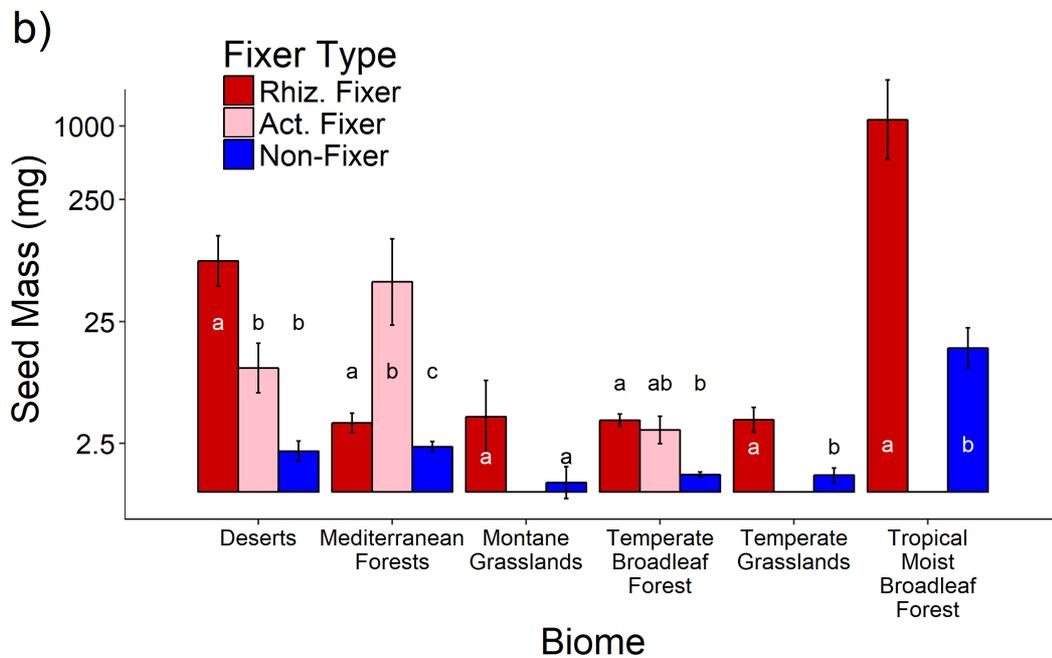
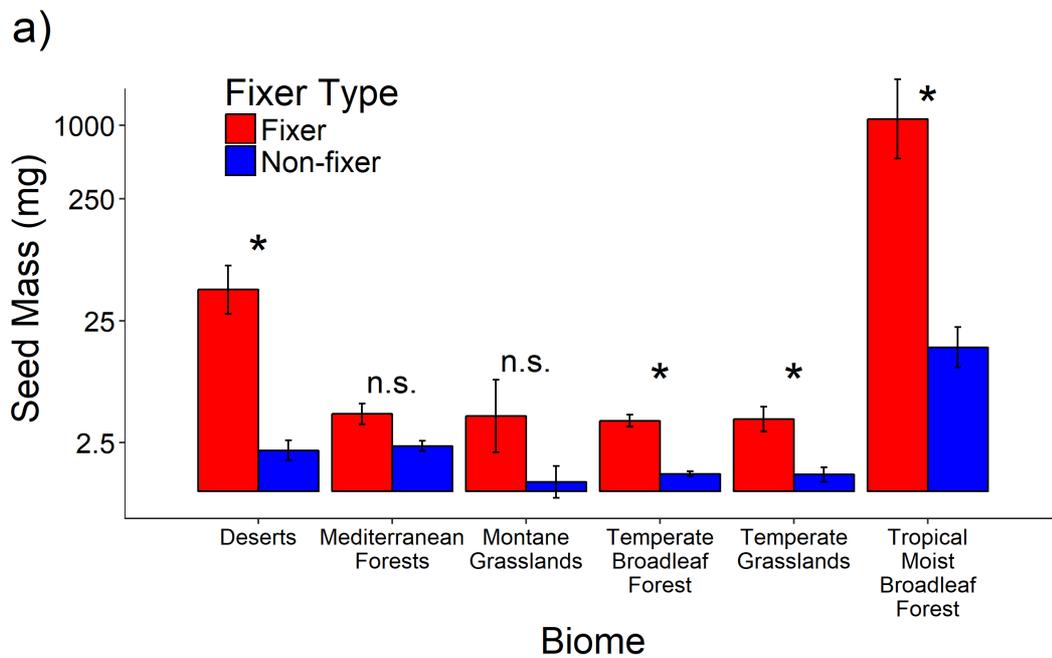


Figure A2. Differences in seed mass (mg) by biome for N fixers and non-fixers (a), and with N fixers separated by fixer functional type (b) presented on a natural-log scale to show both the very large seeds of tropical moist broadleaf N fixers as well as differences between smaller seeds in the other five biomes. Colors and symbols and significance are indicated as in Fig. A1 and Fig. 2 of the main text. Error bars are ± 1 SE.