

Appendix S14. Histograms showing results of randomization tests (i.e., null distributions) for an association between GCFR or desert sites and novel, putative endemic *Trebouxia* species.

Vertical black lines indicate the empirical proportion of samples representing novel species in each dataset (GCFR-consensus, GCFR-97%, desert-consensus, and desert-97%). For all comparisons, the empirical value is not significantly greater than the null distribution.

