

Supplemental Figure 1 The field design of circular plots (radius = 1.0 m) receiving minor, localized rainfall events. An example of five biocrust (BC) and *Achnatherum hymenoides* (AH) samples occurring randomly along eight axes (e.g., N, NE, E, SE, S, SW, W, and NW) radiating from the center of each plot (A). An isotopically labeled (0.30 mg ^{15}N) rainfall event (2.5 mm) was sprayed onto a central circle (radius = 5 cm). Rainfall events occurred on the surfaces of cyanobacteria-dominated (B) and moss-dominated biocrust.

