**Remote research experiment reveals changes in plant rhizobiome communities across diverse geographic regions within the central United States**

Root-associated microbes are important for plant health and may be harnessed to improve crop performance. It is poorly understood to what degree microbial communities are affected by local variation in climate and soil composition in different geographic locations. Under the unusual circumstances of the COVID-19 pandemic, a remote research experiment was devised as a collaboration between the University of Nebraska and the University of Alabama. We employed 16 pre-college high school students with limited to no scientific training from various locations in both states. The students were tasked with planting and curating a small plot of two maize (*Zea Mays L.)* and two sorghum (*Sorghum bicolor L.*) varieties in their backyard, using seeds shipped by mail. At the end of a 6-week growing period, rhizobiome samples were collected from all experimental sites for 16S sequencing and microbial community analysis. These data revealed that the same plant genotypes recruit significantly distinct consortia of rhizosphere microbiota depending on location (PERMANOVA p < 0.001).