**RESULTS**

**Ammonia-oxidizers alpha diversity**

* Sequencing summary (Figure S1: Rarefaction curves of the 3 genes)
* Alpha diversity (Figure 2: Alpha diversity (richness, inverse Simpson, Shannon diversity) of the 3 communities)

**3. Structure and composition of ammonia-oxidizing communities**

* Beta diversity (Fig.3: PCoA plots of Bray-Curtis and/or Weighted)
* Taxonomic composition (Fig.4: Mean relative abundance bar plots)

Drought

The group (AOA, AOB, Comamox)

Fertilization regime

date

**4. Differentially abundance of ammonia-oxidizing ASVs in response to drought**

* DAA analysis result (Fig.6: Heatmap of the significant changes ASVs)

**5. amoA gene abundances of ammonia-oxidizing communities in response to drought**

* qPCR results (Fig.5)

1. **Effects of drought on N pools (ammonium/nitrate)**

Drought

Fertilization regime

date

**5. Relationship between environmental factors and ammonia-oxidizing community structure (?)/drivers of AO ?**

* Correlation analysis of environmental variables with ammonia-oxidizing community structures (Fig.1)

**Relqtionship between AO in bulk soil and their activity (nitrate) : diablo (what is important (qPCR (both g soil and ratio) and sequence data) for the nitrate pool**