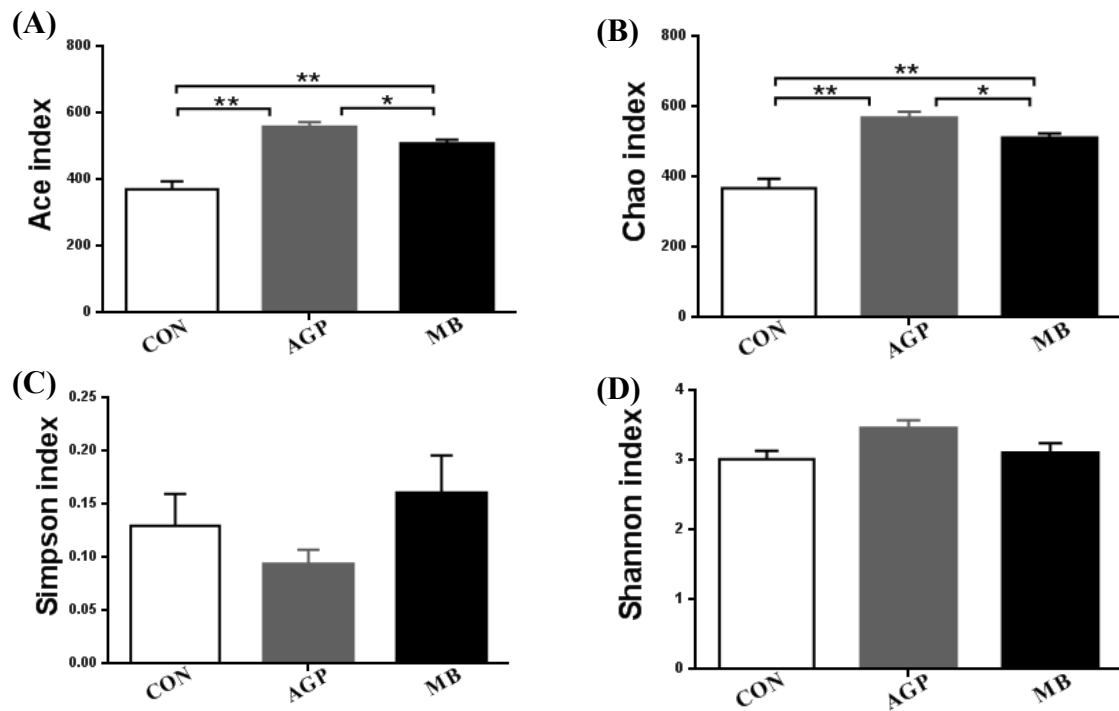
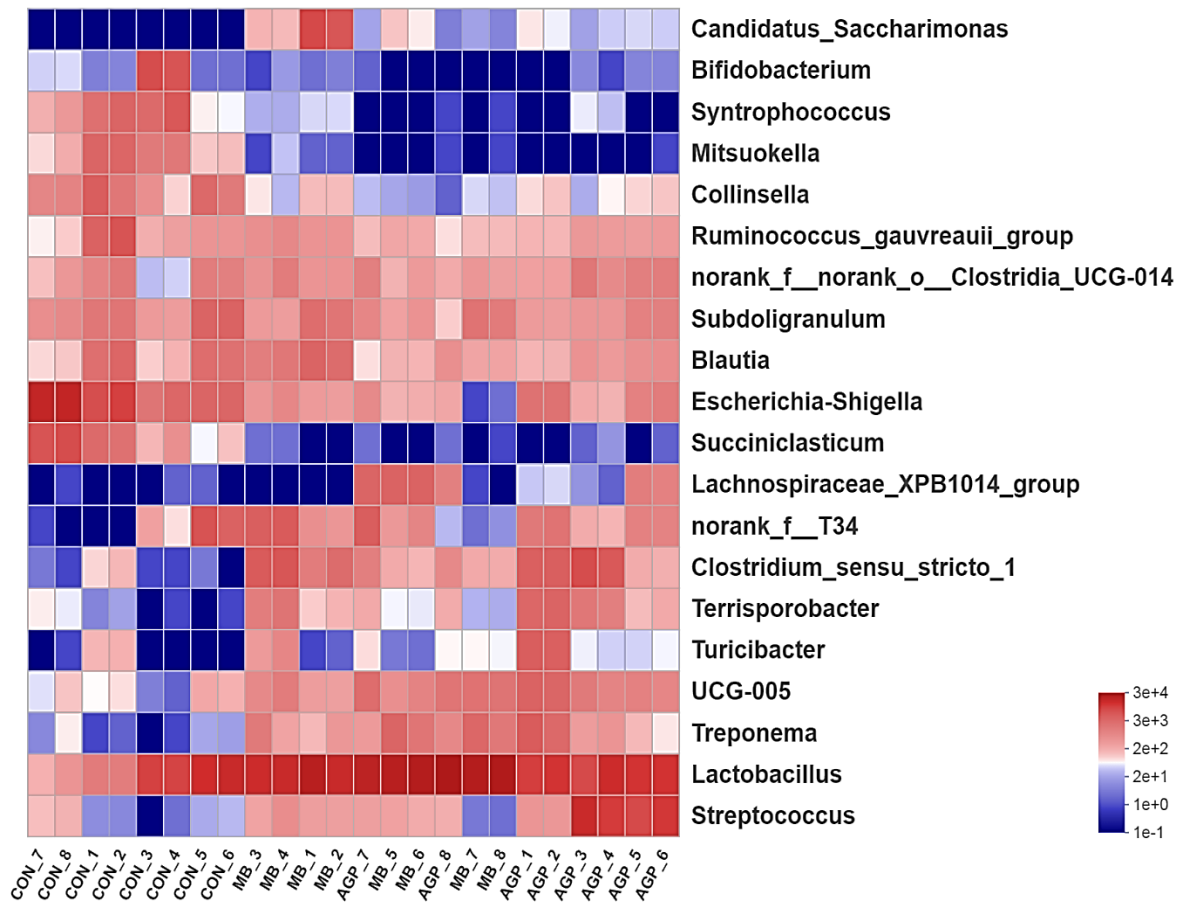


Supplementary Figure S1. Rarefaction curve for caecum digesta samples of pigs fed with CON, AGP and MB. CON: basal diet; AGP: basal diet + 20 mg/kg flavomycin + 50 mg/kg quinocetone; MB: basal diet + 50mg/kg *Macleaya cordata* extract +1000mg/kg benzoic acid.



Supplementary Figure S2. The richness and diversity index of species at 97% similarity level: Ace index (A), Chao index (B), Simpson index (C) and Shannon index (D). CON: basal diet; AGP: basal diet + 20 mg/kg flavomycin + 50 mg/kg quinocetone; MB: basal diet + 50 mg/kg *Macleaya cordata* extract +1000mg/kg benzoic acid. Asterisks indicate statistical differences between different groups: * $0.01 < P \leq 0.05$, ** $P \leq 0.01$.

Community heatmap analysis on Genus level



Supplementary Figure S3. Heat map based on genus for caecum digesta samples of pigs fed with CON, AGP and MB. CON: basal diet; AGP: basal diet + 20 mg/kg flavomycin + 50 mg/kg quinocetone; MB: basal diet + 50mg/kg *Macleaya cordata* extract +1000mg/kg benzoic acid.