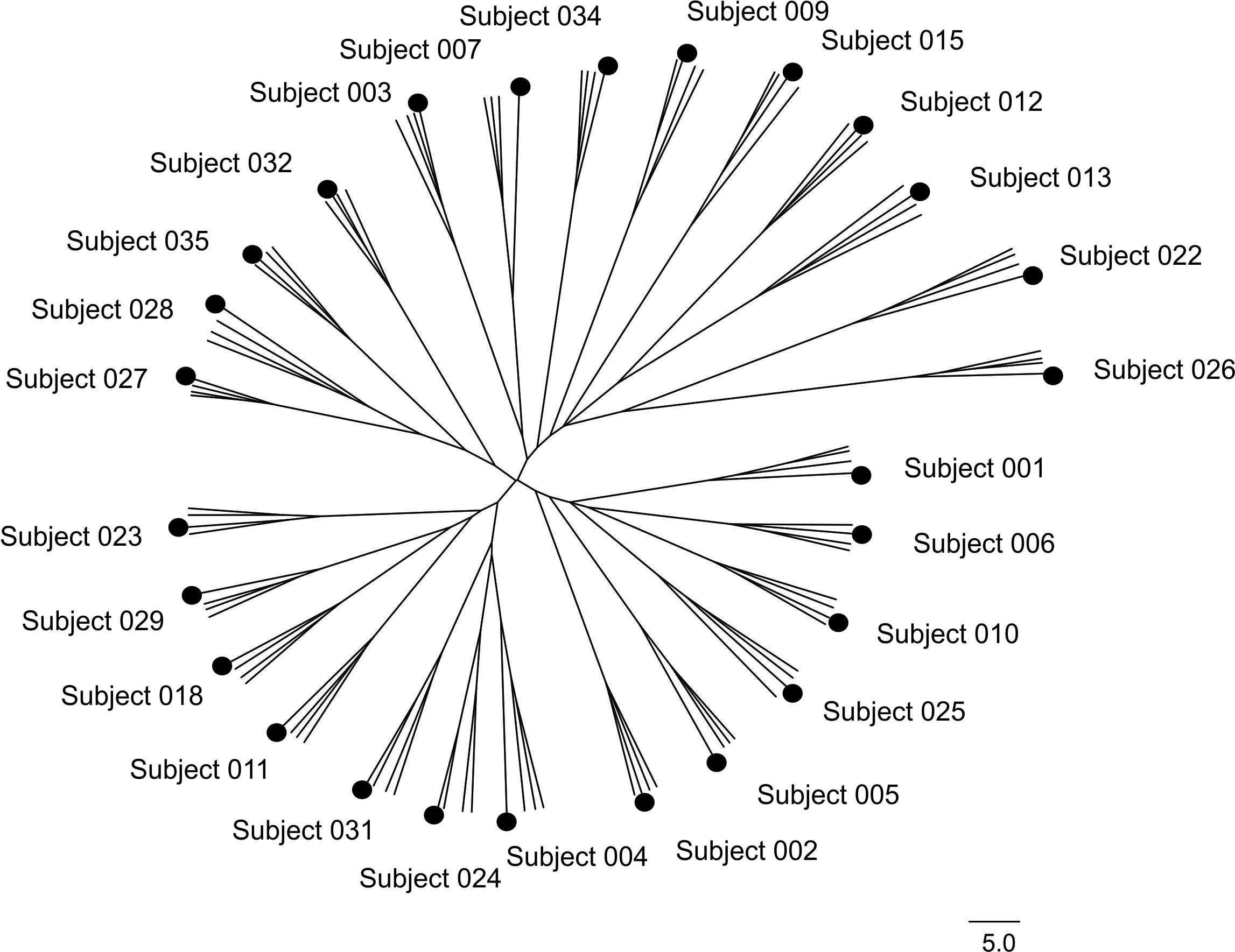
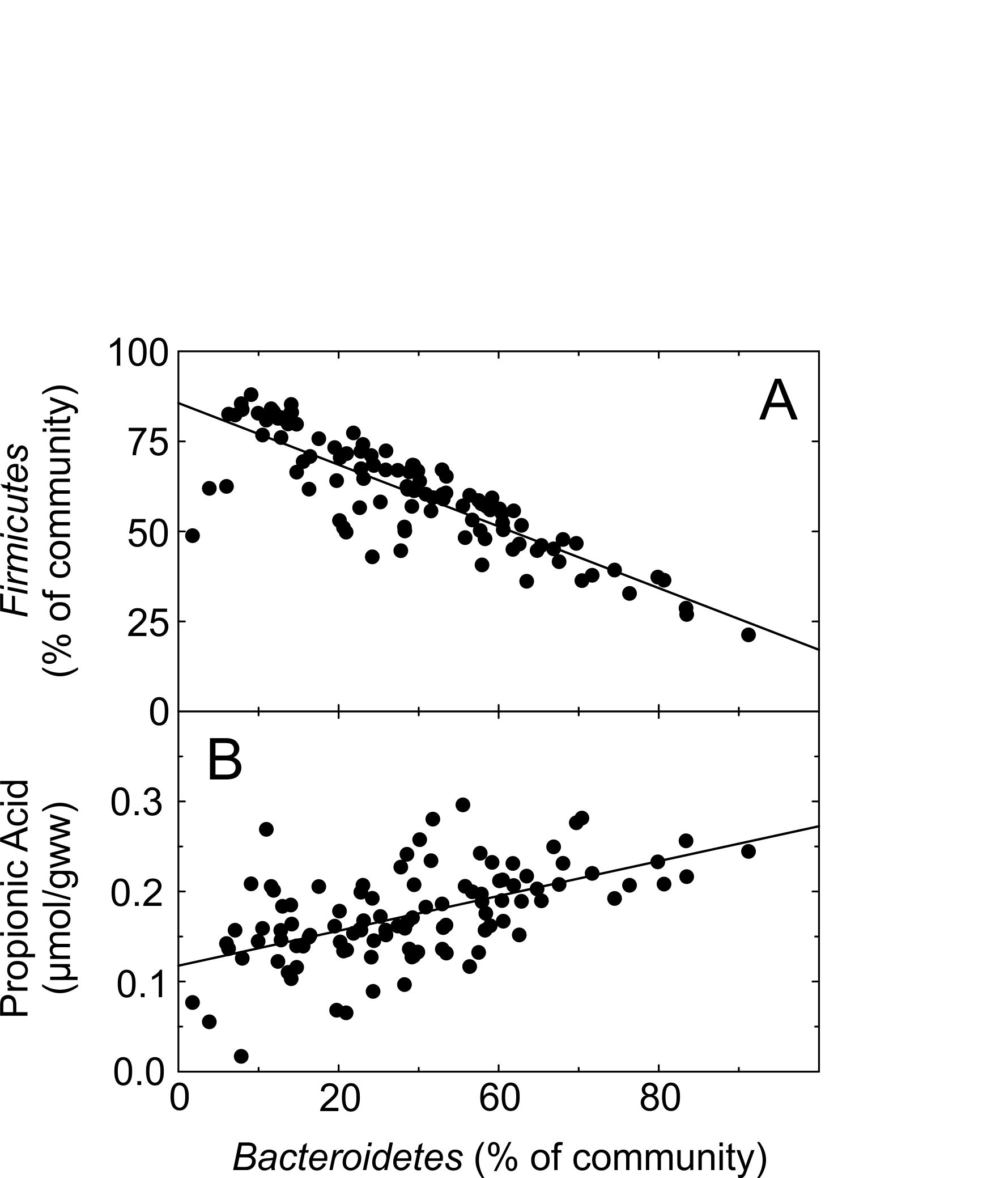
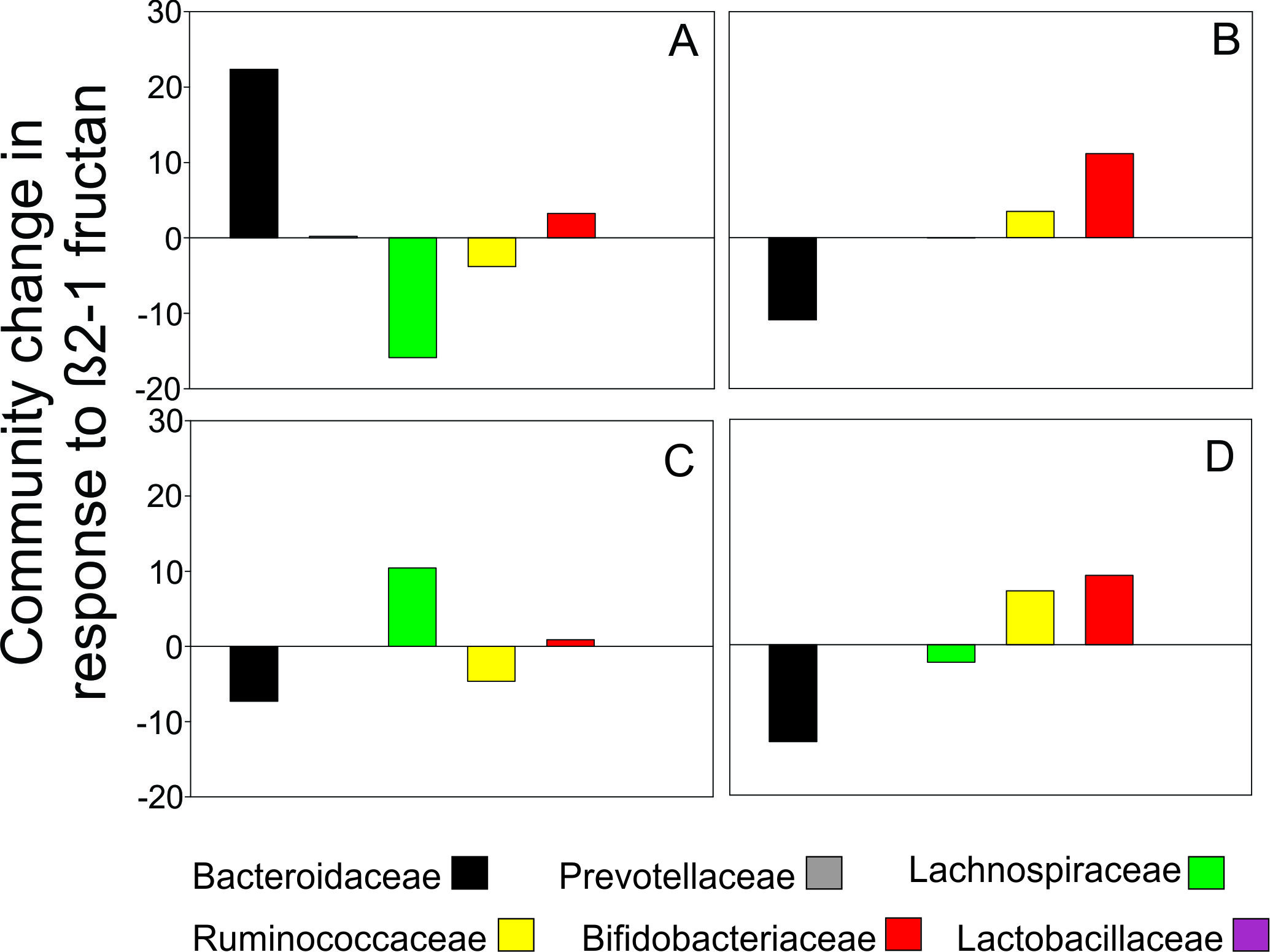
**Supplemental Figure 1:** Unrooted tree comparing faecal phylotype composition in d0 and d28 samples from subjects (n = 26) fed placebo and β2-1 fructan. The d28 β2-1 fructan faecal sample is identified with a black circle. The faecal community composition of each subject is unique; feeding β2-1 fructan has minor effects on the faecal phylotype composition within each individual subject.



**Supplemental Figure 2**: (A) Linear and negative relationship between the content of *Bacteroidetes* and *Firmicutes* (% of total community; r = -0.838, *P* = 0.028). (B) Linear and positive relationship between *Bacteroidetes* content and faecal propionic acid concentration (r = 0.658, *P* = 0.011). Pearson correlations were corrected for false rate of discovery using a step down Bonferroni correction.



**Supplemental Figure 3:** Change in the content of family lineages in response to β2-1 fructan supplementation in four randomly selected subjects subjected to metagenomic analysis. **Panel A:** Subject 001. **Panel B:** Subject 006. **Panel C:** Subject 024. **Panel D:** Subject 025.



**Supplemental Figure 4:** **Panel A:** Comparison of gene assignments in the major SEED categories in the faecal communities of Subjects 1, 6, 24, and 25 over the course of the study. **Panel B:** Community composition of Subjects 1, 6, 24, and 25 at the family taxonomic level. P-placebo, F- β2-1 fructan.

