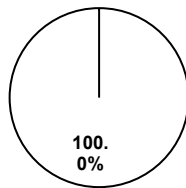


(a)

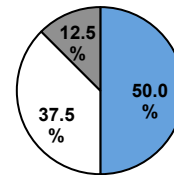
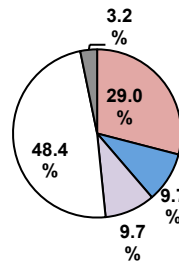
[FeFe] hydrogenase

[NiFe] hydrogenase

no
detection**(b)**

ACD/ACSS

AckA


■ *Bradyrhizobium*
■ *Azospirillum*
■ *Rhodospirillum*
■ Other genera

■ Unclassified *Alphaproteobacteria*

Figure S5. Taxonomic composition at the genus level of the alphaproteobacterial transcripts relevant to hydrogen generation ([FeFe] hydrogenase, [NiFe] hydrogenase) (a) and acetate generation (ACD/ACSS; acetyl-CoA decarbonylase/synthase, ackA; acetate kinase) (b) in D layer of the W6 period. Data are shown as means of three replicates.