

Supplemental Material

Effect of start-up strategies and electrode materials on carbon dioxide reduction on bio-cathodes

Soroush Saheb-Alam,^{a#} Abhijeet Singh,^b Malte Hermansson,^c Frank Persson,^a Anna Schnürer,^b Britt-Marie Wilén,^a Oskar Modin^a

Chalmers University of Technology, Department of Architecture and Civil Engineering, Division of Water Environment Technology, Gothenburg, Sweden^a; Swedish University of Agricultural Sciences, Department of Molecular Sciences, BioGas group, Unit of Microbiology, Uppsala, Sweden^b; University of Gothenburg, Chemistry and Molecular Biology, Gothenburg, Sweden^c

#Address correspondence to Soroush Saheb-Alam, soroush.sahebalam@chalmers.se.

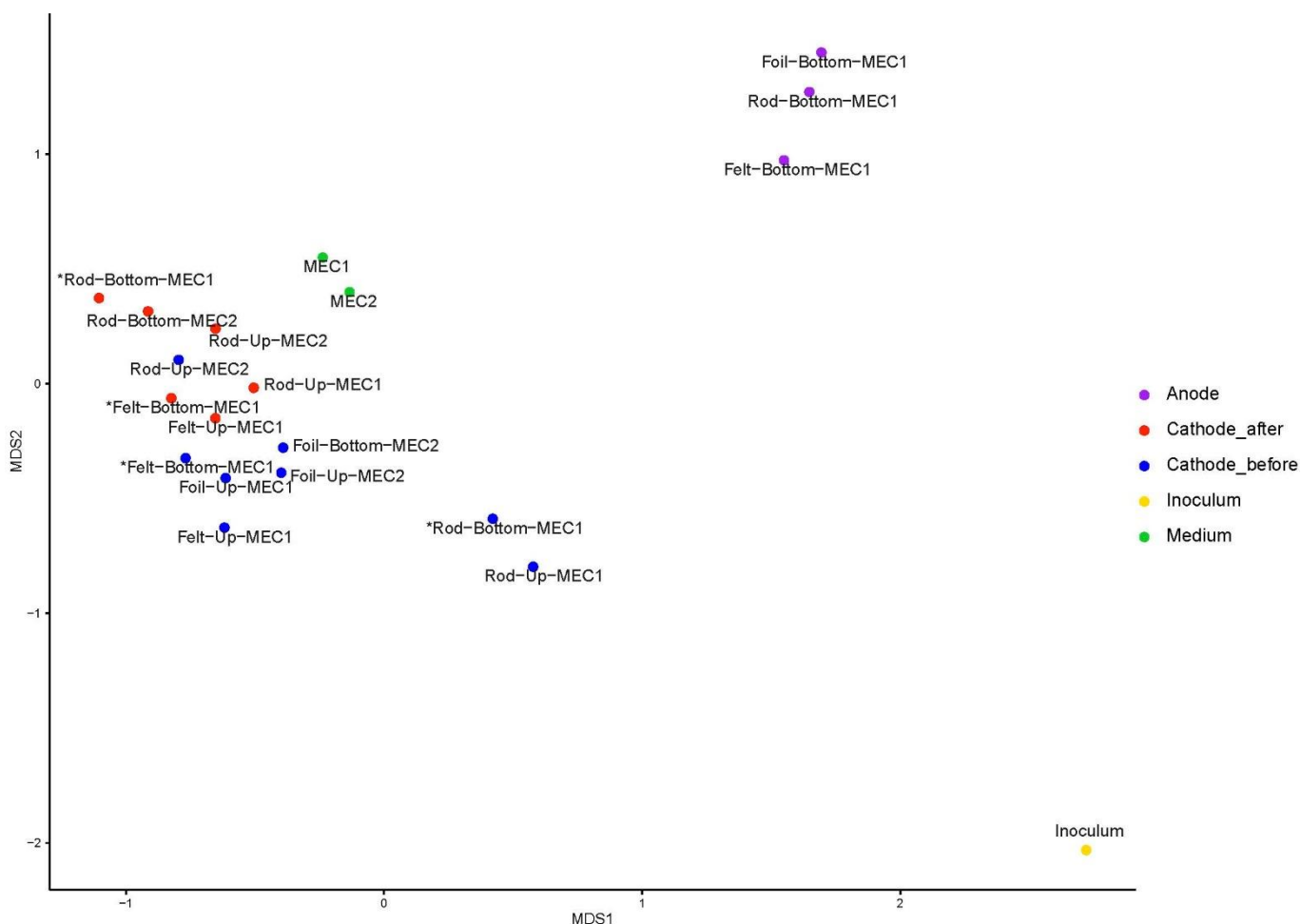


Figure S1. NMDS plot for microbial communities on different electrode materials before and after adding BES, medium and inoculum. *Electrodes that were placed in MEC1 after removing bio-anodes.



Figure S2. Table based on TRFLP data. The relative abundances of the different TRFs are shown. “Before” and “after” refer to before and after 2-bromoethanesulfonate addition. Asterisk (*) means that the electrode was placed in MEC1 after removing some bio-anodes for sampling.

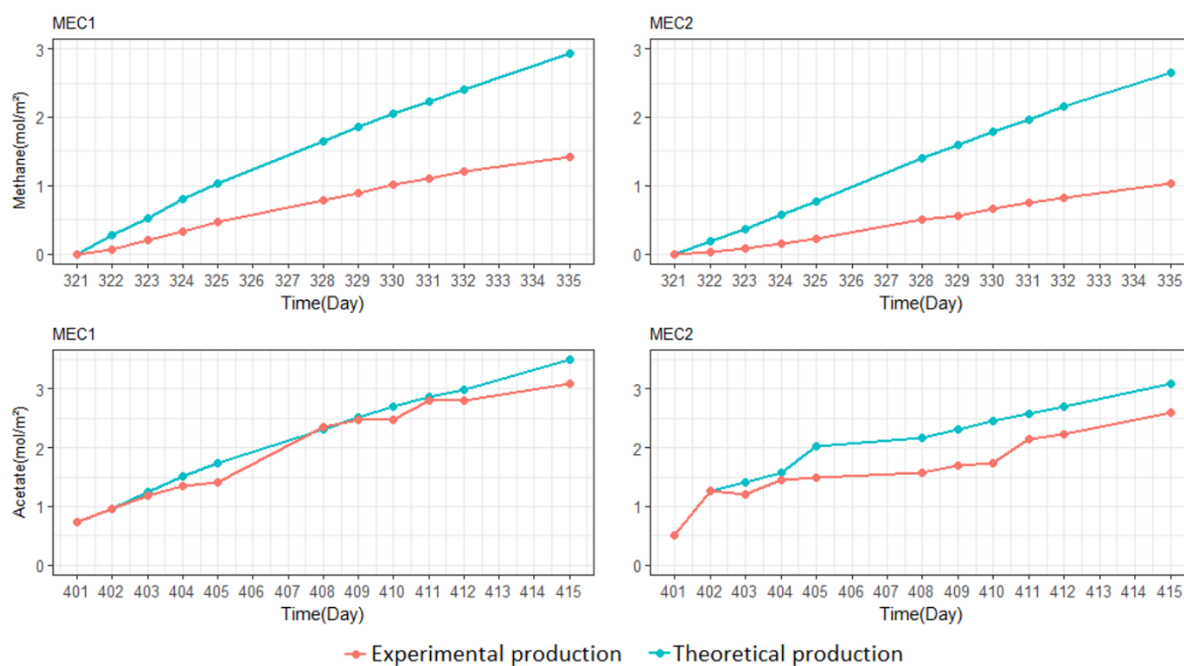


Figure S3. Methane and acetate production over two-week periods in MEC1 and MEC2. The theoretical production refers to the methane/acetate that should be produced from the current which flowed through the MEC. Experimental production refers to the methane/acetate that was measured in the experiment.