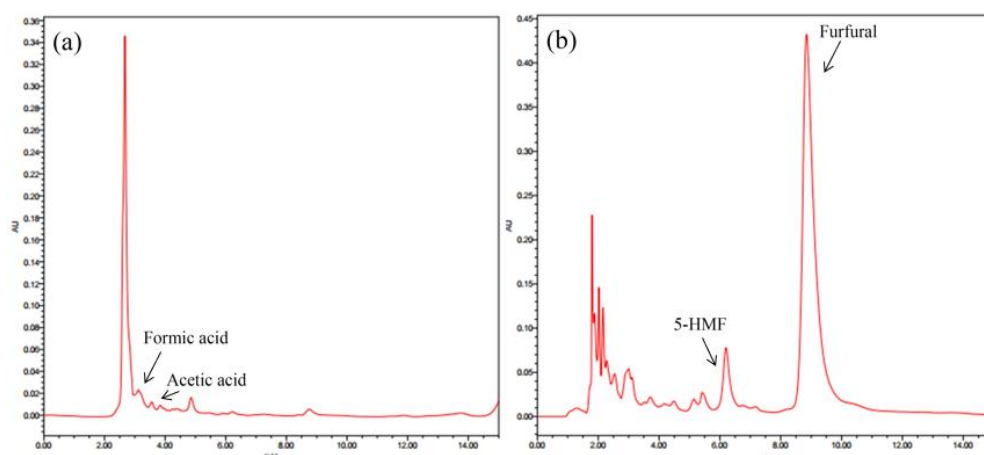
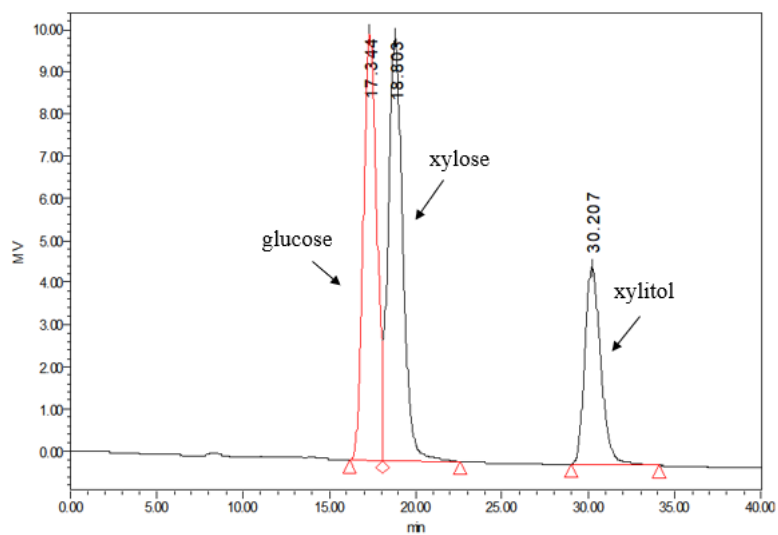


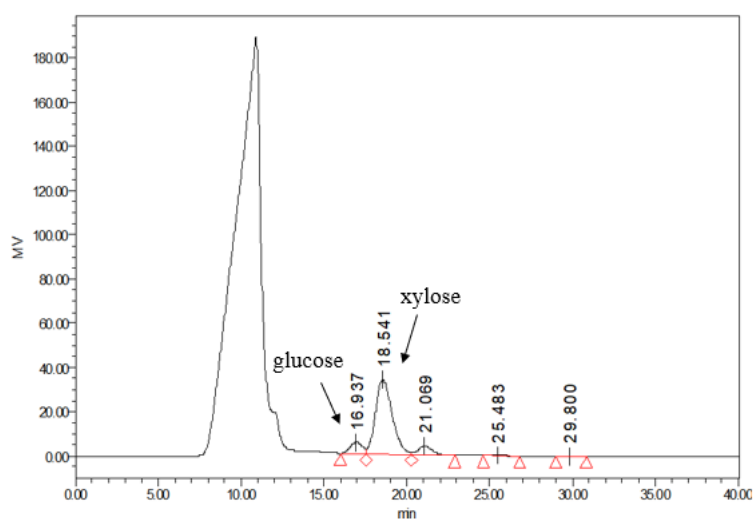
**Figure S1.** HPLC chromatogram of standard (a) Formic acid standard (2.9min), (b) Acetic acid standard (3.5min), (c) 5-HMF standard (6.2min), (d) Furfural standard (8.8min)。



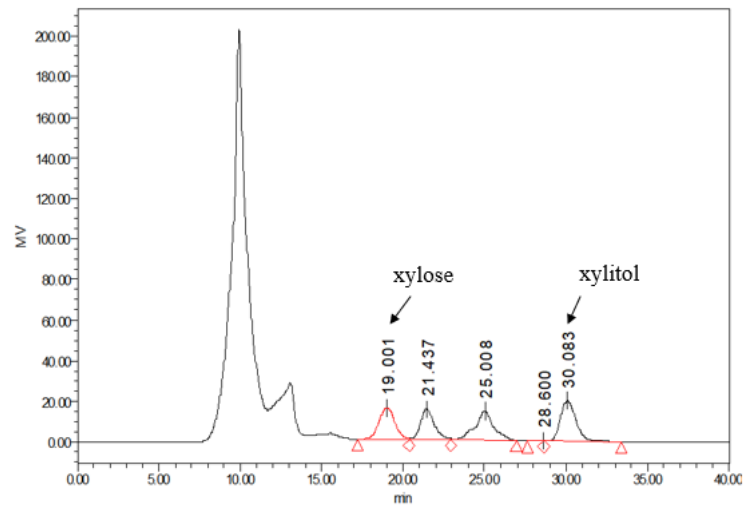
**Figure S2.** HPLC chromatogram of inhibitors produced during the DSA hydrolysis of quinoa straw (a) Formic acid (2.9min) and acetic acid (3.5min); (b) 5-HMF (6.2min) and Furfural (8.8min).



**Figure S3.** HPLC chromatogram of glucose (17.3min), xylose (18.8min) and xylitol (30.2min) standards.



**Figure S4.** HPLC chromatogram of glucose (16.9min) and xylose (18.5min) produced during the DSA hydrolysis of quinoa straw.



**Figure S5.** HPLC chromatogram of xylose (19min) and xylitol (30.1min) produced during the fermentation.