

Supplementary Material

Improving saccharification efficiency of lignocellulosic biomass using a bio-inspired two-stage microreactor system loaded with complex enzymes

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Table S1 Particle size distribution of wheat straw pretreated by ball milling.

Samples^a	D_{0.1} (µm)	D_{0.5} (µm)	D_{0.9} (µm)
Ball milling for 18 h	0.81±0.03	3.38±0.19	10.55±2.76
Ball milling for 24 h	0.83±0.03	3.12±0.10	8.48±0.53
Ball milling for 30 h	0.66±0.01	3.06±0.07	14.35±1.62

^a D_{0.1}, D_{0.5}, and D_{0.9} represent 10%, 50% or 90% percentiles of the total volume.

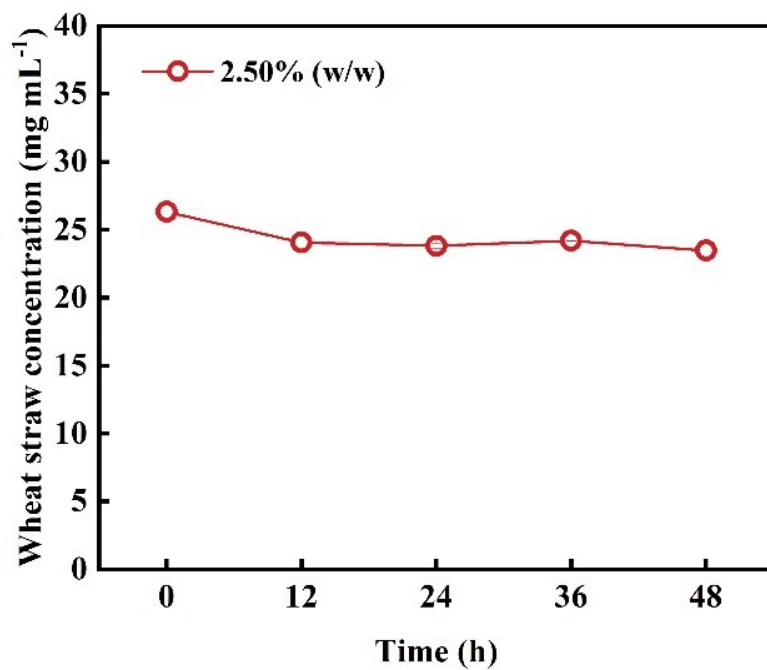


Fig. S1. The extended-time static sedimentation characteristics of wheat straw pretreated by ball milling for 24 h.

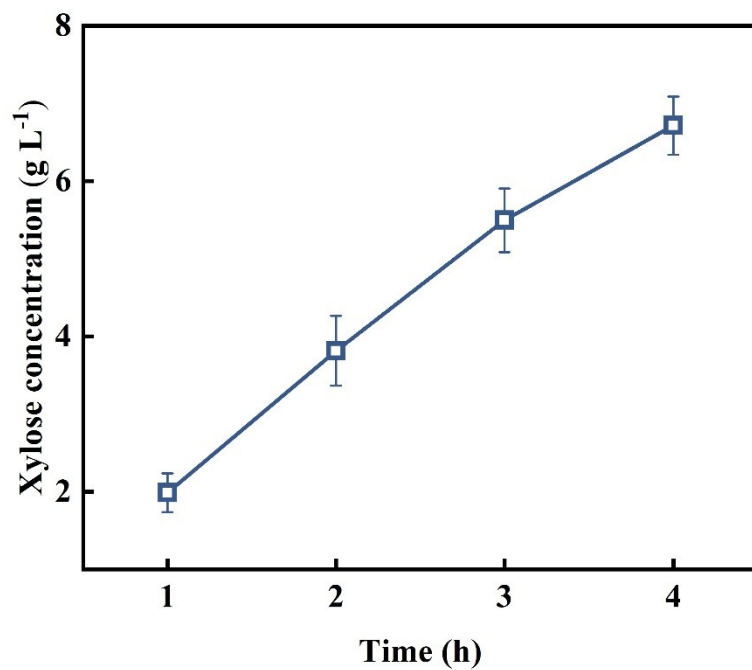


Fig. S2. Xylose production from 2.5% (w/v) xylan using cellulase Cellic CTec2.

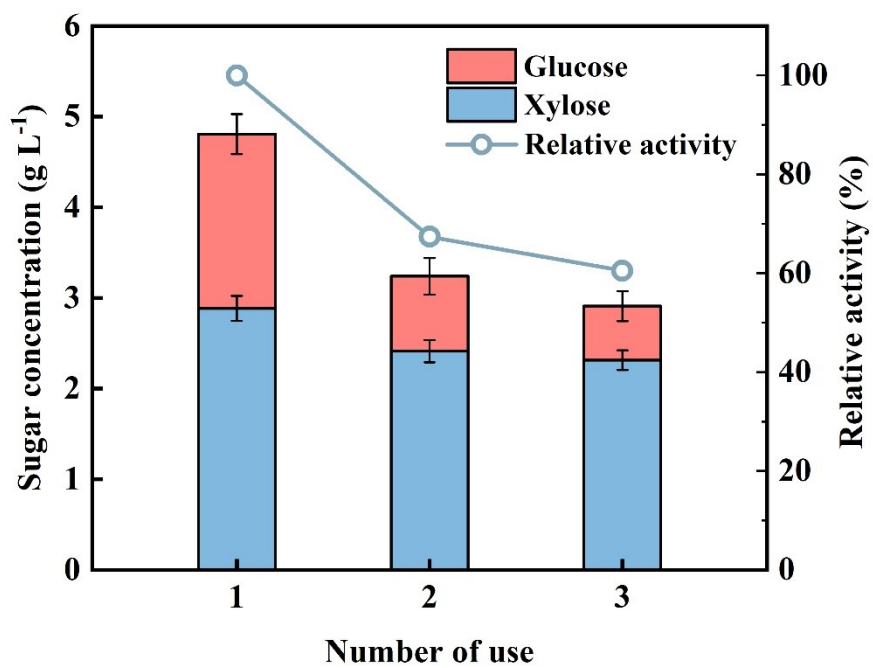


Fig. S3. Conversion characteristics of wheat straw in a two-stage microreactor during the reuse process.