

Article

Enhanced Biogas Production by Ligninolytic Strain *Enterobacter hormaechei* KA3 for Anaerobic Digestion of Corn Straw

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Supplementary Materials: 2 pages, 1 Table, 2 Figures

Table S1. Characteristics of substrates and inoculum.

Parameters	Corn Straw	Cow Manure
TS (%)	94.20 ± 0.13	15.8 ± 0.1
VS (%)	96.34 ± 0.11	84.75 ± 0.67
TC (%VS)	43.74	36.46
TN (%VS)	0.76	2

TS, total solid; VS, Total volatile solids; TC, total carbon; TN, total nitrogen. Values are means and standard deviations for three replicates.

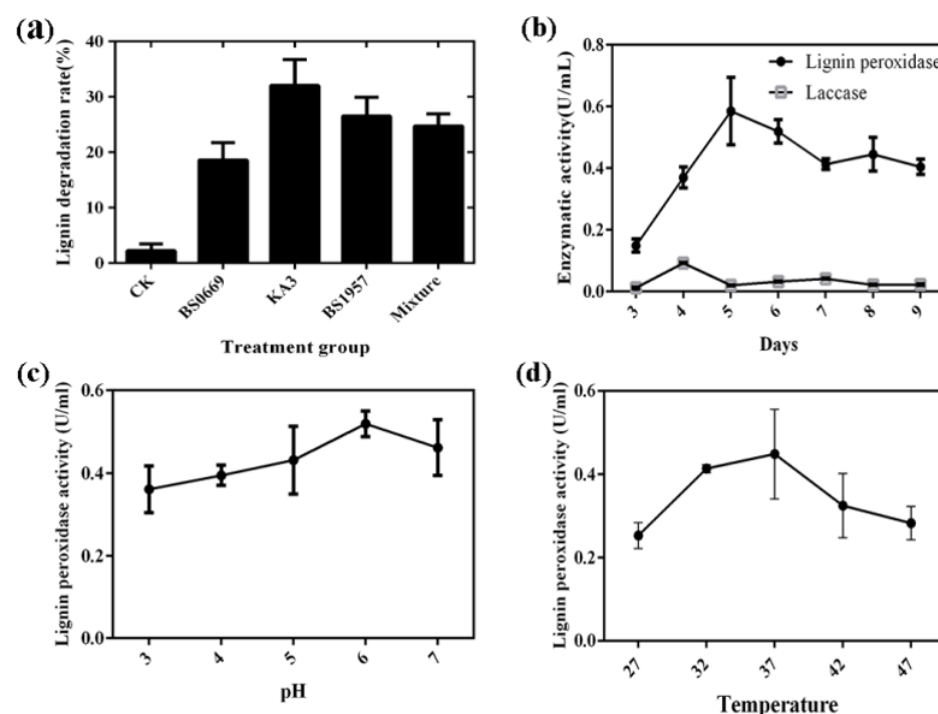


Figure S1. The lignin degradation ability of the strain was screened. (a) Degradation rates after 7 days of maize straw treatment by different strains, (b) LiP and laccase activities at different culture days, optimal (c) initial pH and (d) temperature for maximal LiP enzyme activity by *Enterobacter hormaechei* KA3. Results are presented as mean values and standard deviations for three replicates.

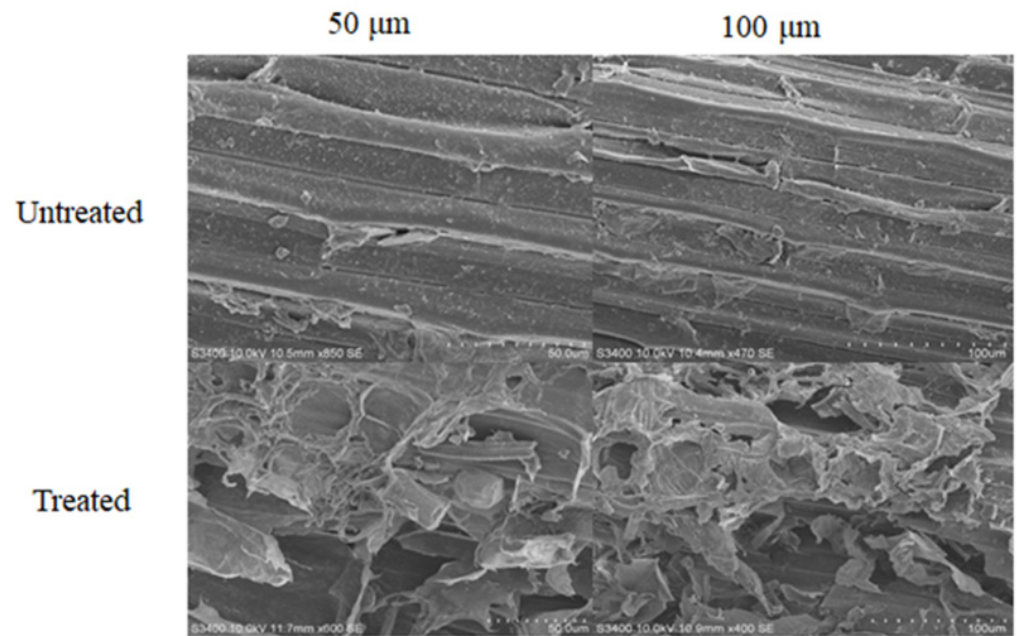


Figure S2. SEM characterization of surface changes after treatment of corn straw with *Enterobacter hormaechei* KA3. The surface of the treated group was obviously damaged compared with the untreated group.