

**Supplementary data for**

**Functional Study of Different Lignocellulases from  
*Trichoderma guizhouence NJAU4742* in the  
Synergistic Degradation of Natural Straw**

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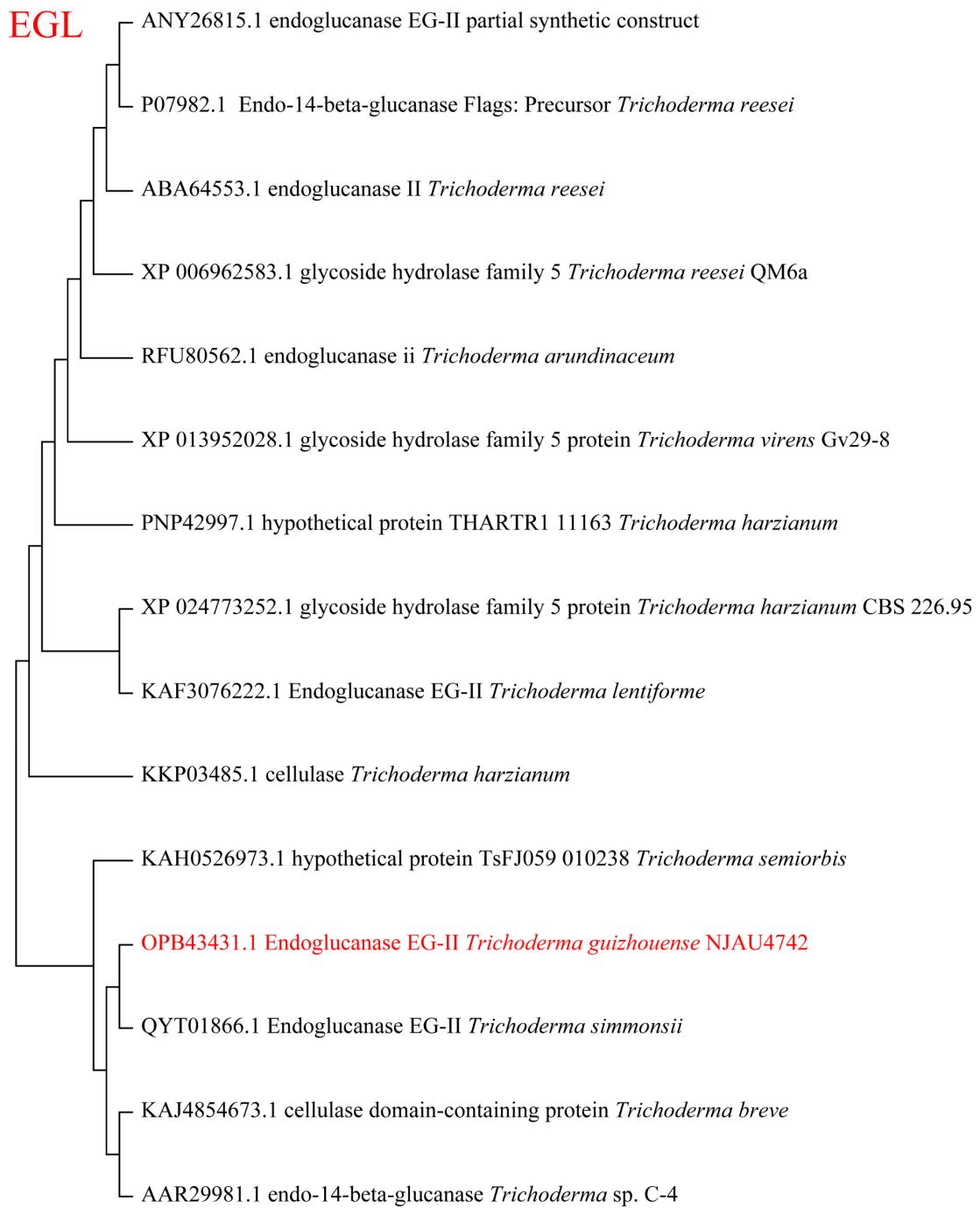
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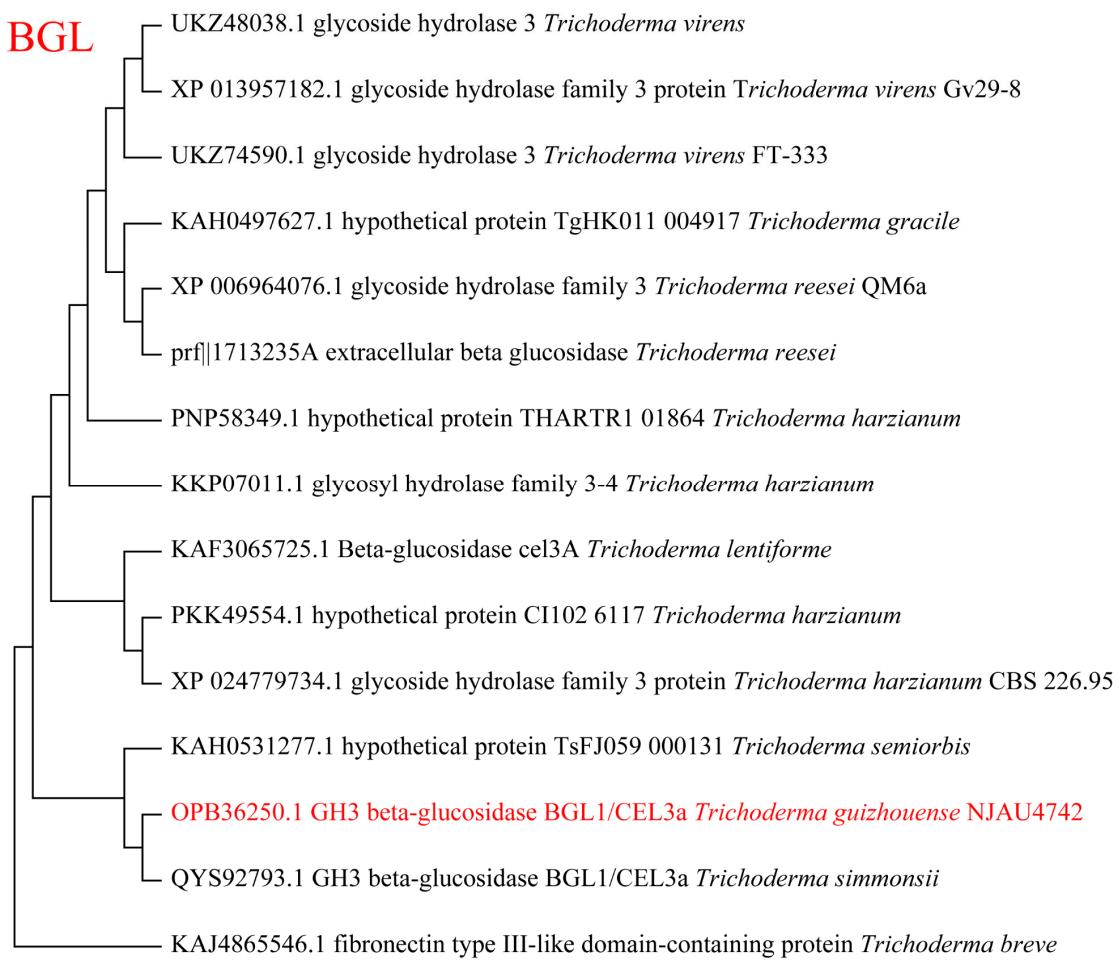
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Number of pages: 7

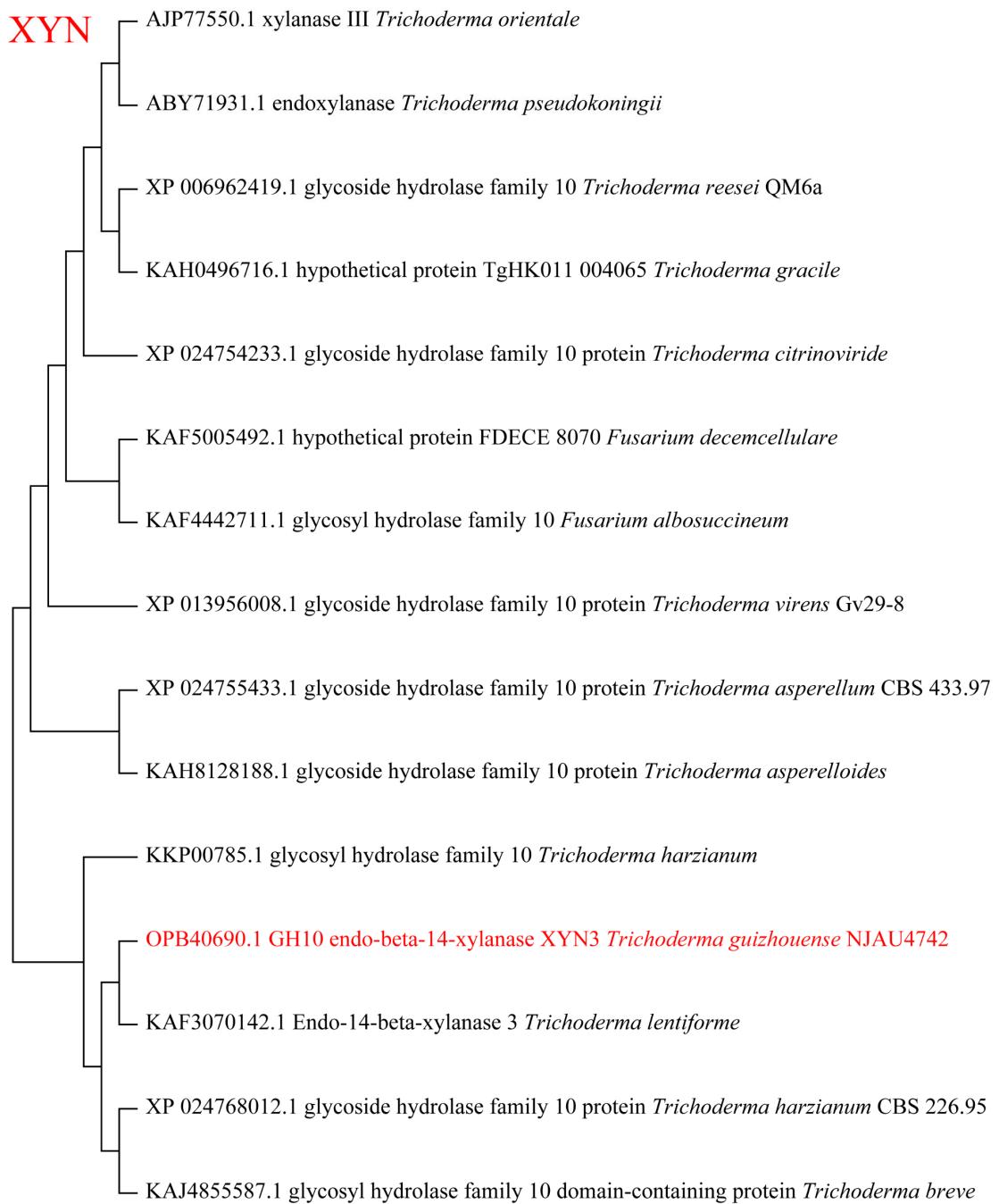
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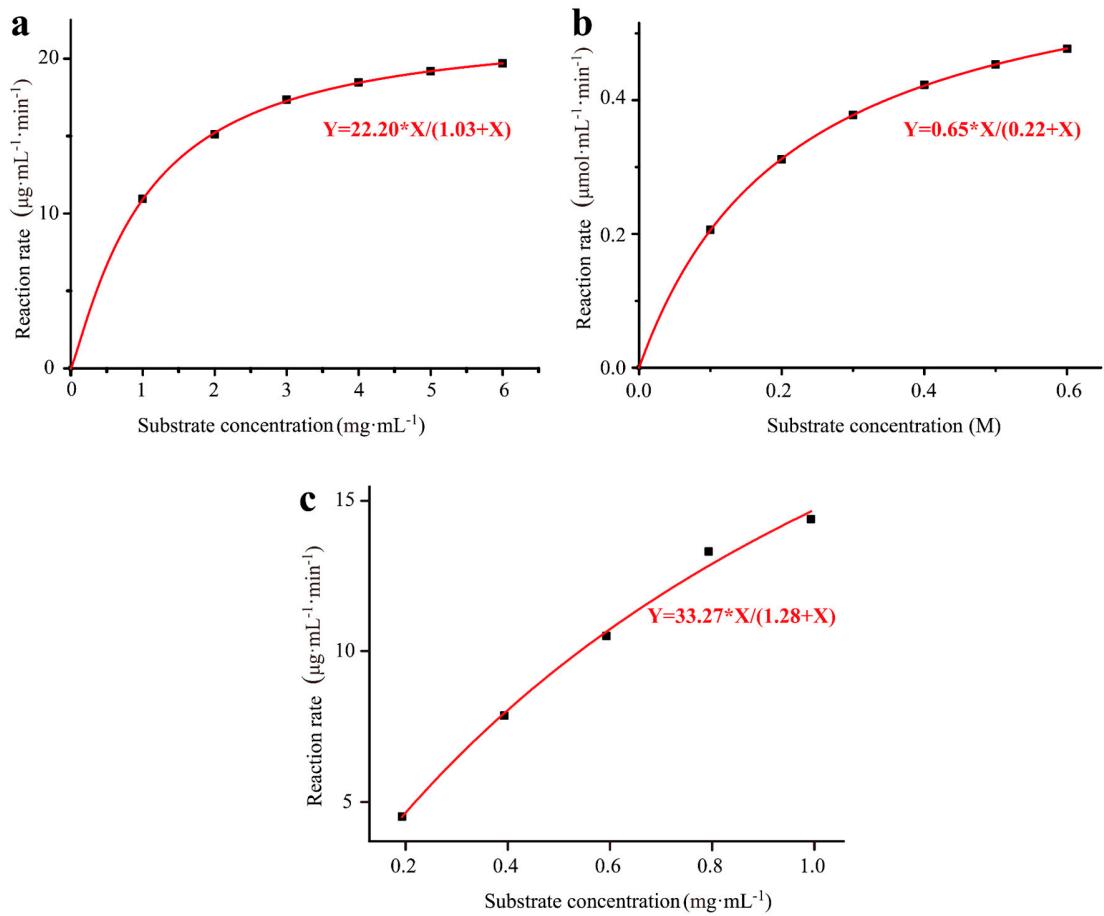
**Figure S1.** The phylogenetic trees of EGL by performing multiple sequence alignments using MEGAX software.



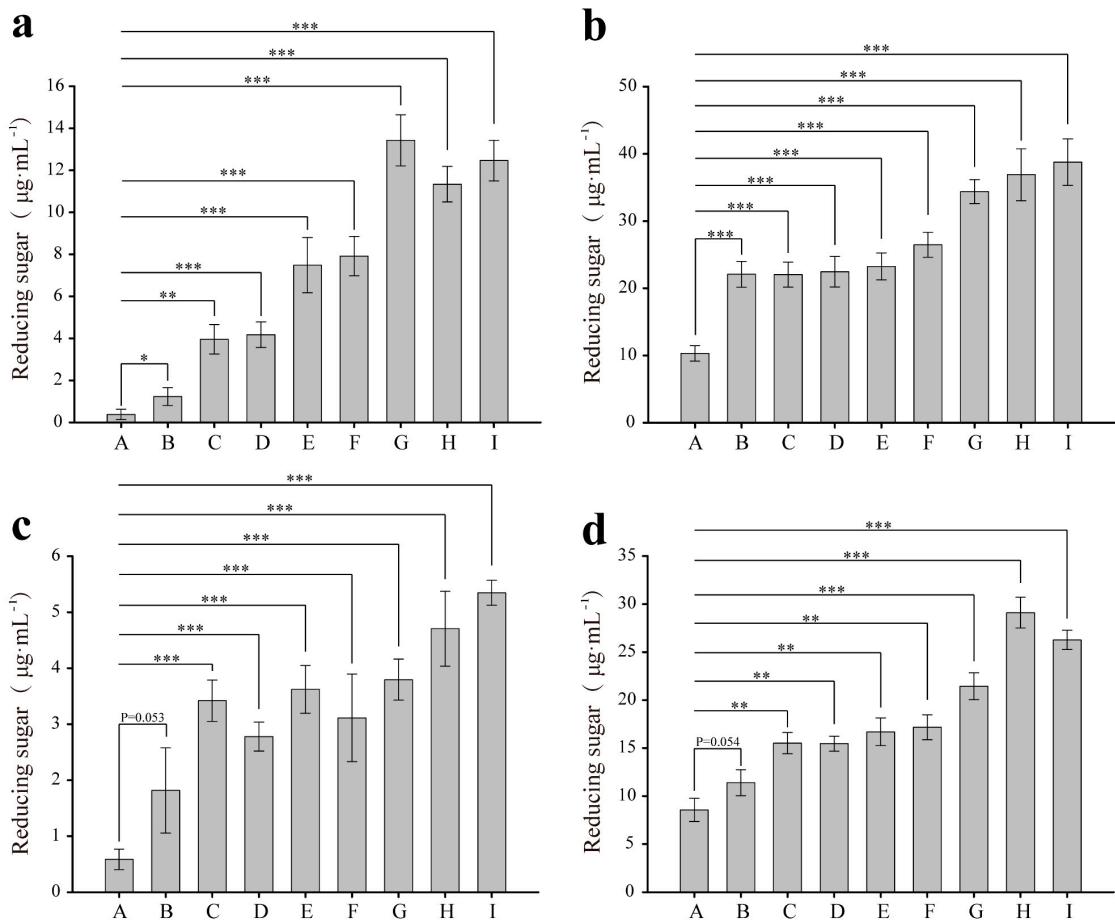
**Figure S2.** The phylogenetic trees of BGL by performing multiple sequence alignments using MEGAX software.



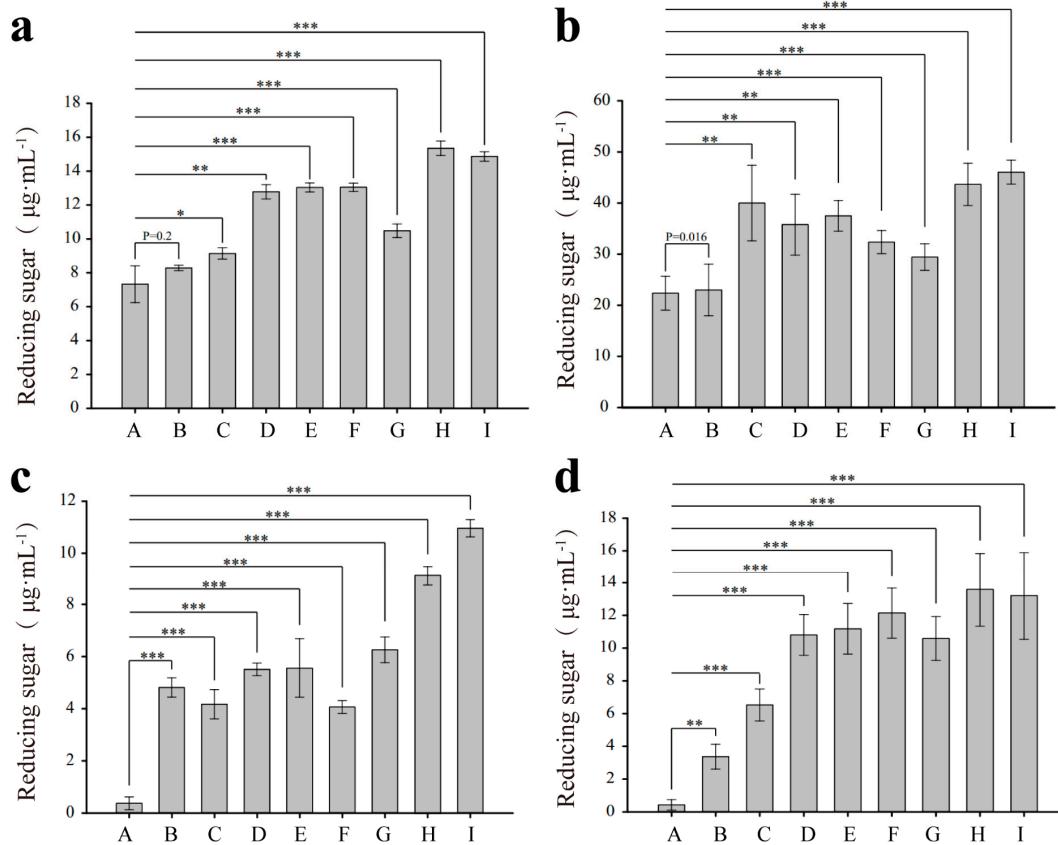
**Figure S3.** The phylogenetic trees of XYN by performing multiple sequence alignments using MEGAX software.



**Figure S4.** Kinetic analysis of EGL (a), BLG (b), and XYN (c), respectively.



**Figure S5.** Synergistic degradation of different natural substrates by EGL and BGL. a: wheat straw; b: soybean straw; c: rice straw; d: corn straw. Different letters on the x-axis represent different proportions of the three hydrolytic enzymes added. A: 0.05 M EGL; B: 0.05 M EGL + 0.01 M BGL; C: 0.05 M EGL + 0.02 M BGL; D: 0.05 M EGL + 0.03 M BGL; E: 0.05 M EGL + 0.04 M BGL; F: 0.05 M EGL + 0.05 M BGL; G: 0.05 M EGL + 0.06 M BGL; H: 0.05 M EGL + 0.07 M BGL; I: 0.05 M EGL + 0.08 M BGL. \*\*\* P < 0.001, \*\* P < 0.01, \* P < 0.05.



**Figure S6.** Synergistic degradation of different natural substrates by EGL and XYN. a: wheat straw; b: soybean straw; c: rice straw; d: corn straw. Different letters on the x-axis represent different proportions of the three hydrolytic enzymes added. A: 0.1 M XYN; B: 0.1 M XYN + 0.01 M EGL; C: 0.1 M XYN + 0.02 M EGL; D: 0.1 M XYN + 0.03 M EGL; E: 0.1 M XYN + 0.04 M EGL; F: 0.1 M XYN + 0.05 M EGL; G: 0.1 M XYN + 0.06 M EGL; H: 0.1 M XYN + 0.07 M EGL; I: 0.1 M XYN + 0.08 M EGL. \*\*\*  $P < 0.001$ , \*\*  $P < 0.01$ , \*  $P < 0.05$ .