



**β - glucosidase**

*Trichoderme viride*

**Exo -1, 4 – β - glucosidase**

	β-glucosidase	
<i>Trichoderme viride</i>		Exo-β-glucosidase
Cellulase		
β-glucosidase		
β-glucosidase		D – glucano- δ – lacton
Exo-1, 4-β-glucosidase	/	0.5 %
		. / 12
( 8 4.8 4 )	Exo-1, 4-β – glucosidase	
48		

**INHIBITION OF ENZYME ACTIVITY OF B – GLUCOSIDASE TO PRODUCTION OF EXO -1, 4 – β – GLUCOSIDASE EXTRACTION FROM *Trichoderme Viride***

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**Abstract**

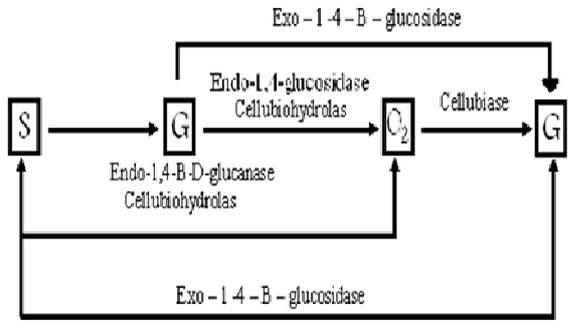
The aim of this work was to inhibition of the enzyme β-glucosidase for the production of the enzyme Exo-1, 4-β-glucosidase that have the power for analysis of cellulose to glucose. The using of the inhibition substance D- glucano - δ - Lacton success to inhibition of β-glucosidase at the concentration 0.45 mg/mL. at 1 minute. The optimum circumstances temperature, pH, and time of fermentation were (45 min., 4.8, 8 day).

: [ ]

4 -Cellulase{4-glucanohydrolase -1, 4} 1, 3; 1, {-β-D-glucano, EC 3, 2, 1, 4}, Endo – 1, 4-β – D-glucanase.-1, 4-β-cellubiosidase cellulose {cellubiohydrolase1, 4-β-D-glucano, EC 3, 2, 1, 91}, exocellubiohydrolase OR cellubiohydrolase-1, 4-β-glucosidase glucano {glucohy-

.Cellulase

$\beta$ -glucosidase  
Cellulase



Exo-1,4-  
[ ] Klosov  $\beta$ -glucosidase

[ ] Klosov

Exo-1, 4- $\beta$ -glucosidase

.1

[S]

Endo-1, 4- $\beta$ -D-

glucanase

$\beta$ -glucosidase

Exo-1, 4- $\beta$ -glucosidase

*Trichoderme viride*  
Cellulase

/

[ ] Mandels-Weber

: /

drolase 1, 4- $\beta$ -D-glucano, EC 3, 2, 1, 74},  
OR Exo- $\beta$ -glucosidase Exo-1-4- $\beta$ -glucosidas  
 $\beta$ -glucosidase {glucohydrolase- $\beta$ -D- glucoside  
.EC 3, 2, 1, 21} cellulase

[ ] Klosov

Exo -1, 4- $\beta$ -

glucosidase

Exo-1, 4- $\beta$ -glucosidase

(CMC)

:1

			CMC		
-	+	+	+	-	Endo -1,4 - $\beta$ -D- glucanase
-	+	+	-	+	cellulobiohydrolase
-	+	+	+	+	Exo - 1,4 - $\beta$ - glucosidase
+	+	-	-	-	Cellubiase

1

Exo-1, 4- $\beta$ -glucosidase

( )

(CMC)

Endo-1, 4- $\beta$ -D-glucanase

Exo-1, 4-

$\beta$ -glucosidase

Cellulase

Endo-1, 4- $\beta$ -D-glucanase



$\beta$ -glucosidase .[ ] Klosov

10

Exo-1, 4- $\beta$ -glucosidase

21 Exo-1, 4- $\beta$ -glucosidase

21

/

Exo-1, 4- $\beta$ -glucosidase

8 4.8 45 EXO-1, 4- $\beta$ -glucosidase

/ 29 23

.( )

*Trichoderme viride*

Exo-1, 4- $\beta$ -glucosidase

Exo-1, 2

4- $\beta$ -glucosidase

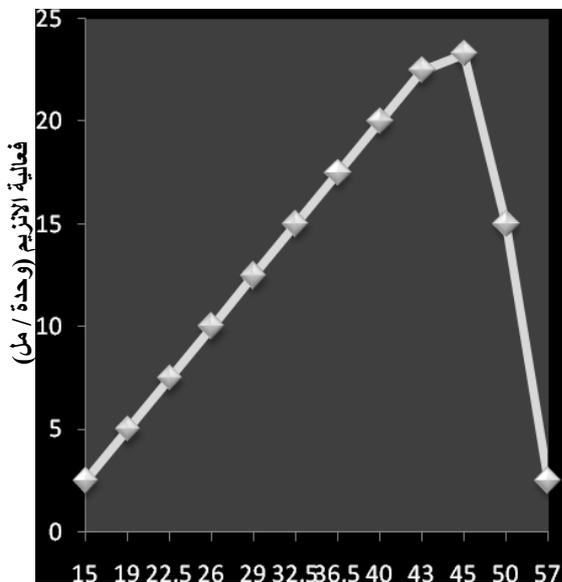
[ ] Klosov

48

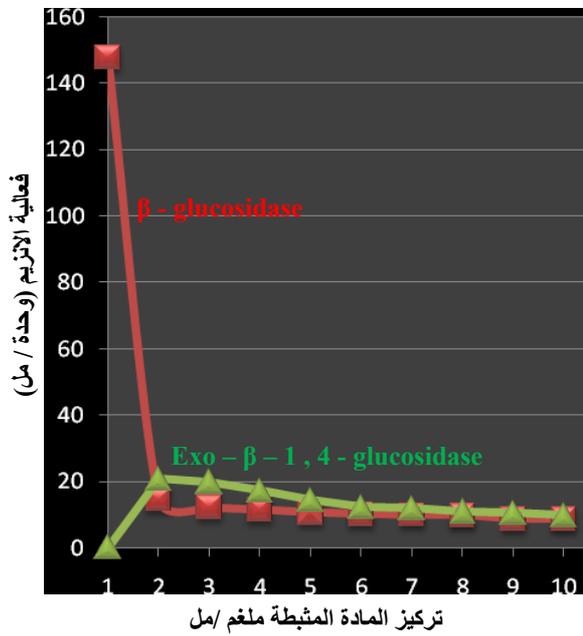
D-glucano- $\delta$ -lacton

:2

pH Exo- $\beta$ -1, 4-glucosidase



Exo-1,4- $\beta$ -glucosidase :  
 pH klosov  
*Trichoderme koninigii* )



D-glucano- $\delta$ -lacton :  
 Exo- $\beta$ -1, 4-glucosidase  
 pH

Exo-1,4-

4.5 pH  $\beta$ -glucosidase

Exo-1, 4- $\beta$ -glucosidase

/ 35

[ ] Pyc

[ ]

*Aspergillus niger*

*Aspergillus niger*

/ Exo-1, 4- $\beta$ -glucosidase

1.4

/ 26

*A. niger*

Pyc

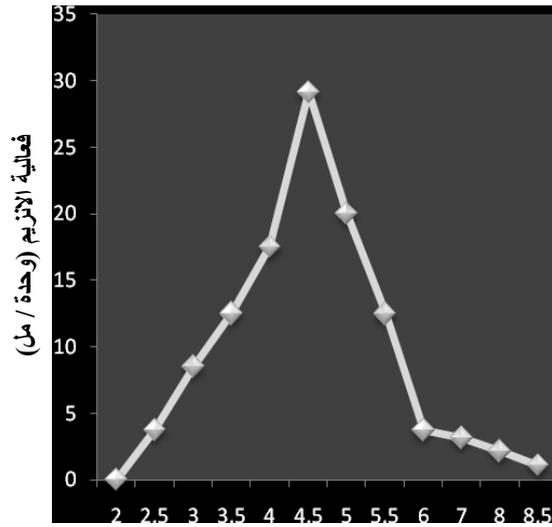
[ ] Javed [ ] Smith and Anderson  
CMCase

*Humicola insolens*

[ ] Immanuel

Exo-1, 4- $\beta$ -glucosidase

*Aspergillus niger*



Exo-

1,4- $\beta$ -glucosidase

[ ] Ray

Exo-1, 4- $\beta$ -

*Bacillus subtilis*

glucosidase

Kaur ( )

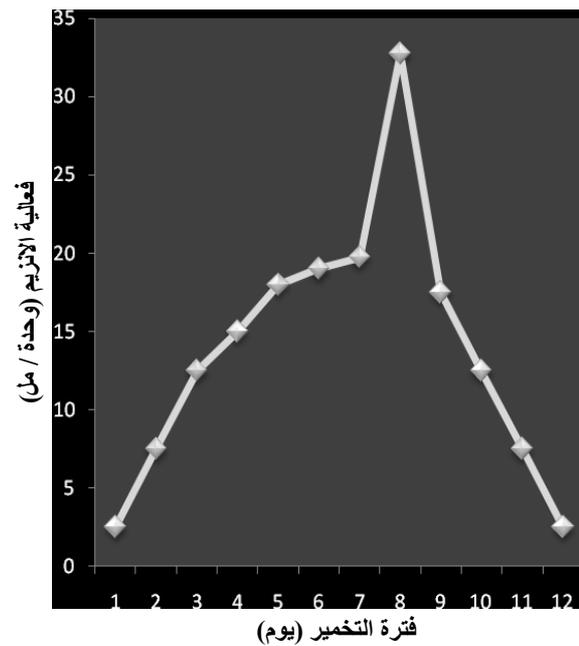
Exo-1, 4- $\beta$ -

*Melanocarpus sp.*

[ ] glucosidase

Kim

[ ]



[ ] Moussa and Tharwat .Cellulase  
*Sclerotium* Celullase

[ ] Monica *rolfsii* Celullase  
 / 12.20 Cellulase

*Trichoderme*  
 .(SSF) *viride*

[ ] Wang

Exo-1, 4-β-glucosidase  
 Cellulase

[ ] Berry  
 pH [ ] Arulpandib  
*Aspergillus niger* Tannase  
 Chellapadi and

[ ] Jani  
*Streptromyces sp.* Celullase  
 Celullase Ray

*Bacillus subtills*  
 [ ] Kaur  
 Celullase

[ ] Das *Melanocarpus sp.*  
 CMCCase

4.8 *Trichoderme reesei*

[ ] Roussos  
*Trichoderme* Celullase  
*harizanium*

4.5

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[ ] Pothiraj  
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- Exo-1, 4-B-glucosidase  
*Aspergillus niger*  
२१-२६:(१)१
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