

() ()

Bacillus sp.strain MA

(/ / : / / :)

(%)

% (w/v) % (w/v) % (w/v)
% (w/v) % (w/v)

:/ / > > > > >
pH rpm

(w/v) % /
/ pH

MA

(Fogarty, 1983)

(Mohapatra *et al.*, 1998)

(Ventosa *et al.*, 1998)

(Onishi& Hidaka, 1978) *Acinetobacter*

M. varians subsp. *halophilus* (Onishi& Sonoda, 1979) *Micrococcus halobious*

(Khire, 1994; Onishi, 1972)

(Kobayashi *et al.*, 1998)

(Deutch, 2001) *Bacillus dipsosauri* (Patel *et al.*, 1993) *Halobacterium halobium*

Bacillus sp. Strain MA

pH

:(g/l) % (w/v) ()
pH () (S)
() () ()
/ KOH

...

:

(Claus and Berkeley, 1986)

(Smibert & Krieg, 1994)

(Pary *et al.*, 1988)

:

/ S
 rpm pH . % (w/v) % (w/v)
) /
 OD .
 (UV-160A
 μ= / /

:

(w/v)
 % (w/v)
 S cc cc
 rpm
 ()
 rpm

.(Pantschev *et al.*, 1981)

% / (w/v) ml

%

/ pH / M

ml

/ M

/

/ M

HCl/

/ (w/v)

/ M

pH

pH

/ M

MA

%

%

%

pH

MA

DNA

G

MA

.(/ U ml⁻¹)

...

()

.(/ U ml⁻¹) %

(%) (% % %)

MA

			NaCl (%)		_____	_____	
<i>Bacillus</i> sp. Strain MA*	C/ST		/		+ -	+ + +	-
<i>Filobacillus milosensis</i>	T				- -	- - -	+
<i>Bacillus halophilus</i>	C	None			+ +	- - -	+
<i>Halobacillus trueperi</i>	C/ST		/		+ -	- + -	+
<i>Halobacillus litoralis</i>	C/ST		/		+ +	- + -	+
<i>Salibacillus salexigens</i>	C/ST	None			+ -	+ + -	+
<i>Bacillus marismortui</i>	T/ST				+ -	+ + -	+

Data from Arahal *et al.*, (1999), Garabito *et al.*, (1997), Schlesner *et al.*, (2001), Spring *et al.*, (1996), Ventosa *et al.*, (1989) and the isolate(*). Abbreviations: C, central; ST, subterminal; T, terminal.

.() **MA**

(U ml ⁻¹)		
/	+	
/	+	
/	+	
/	+	
/	+	
/	+	

% /

/ pH.

.() **MA**

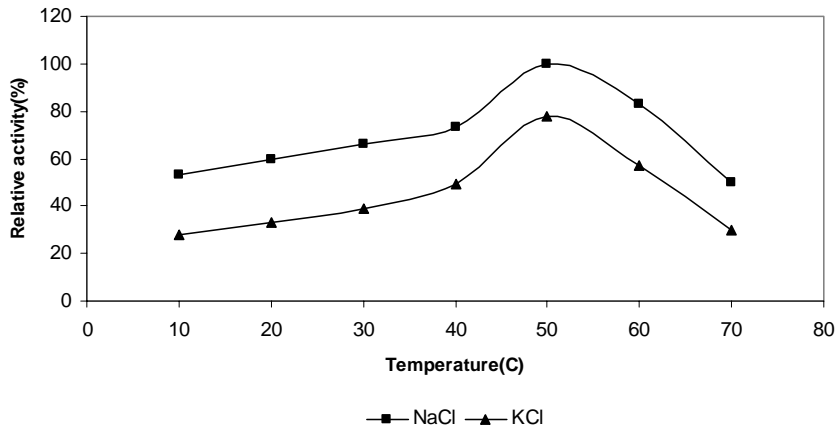
(U ml ⁻¹)		
-	-	
/		
/	+	%
/	+	%
-	+	%
	+	%()
/		
/	+	%
/	+	%
	+	%
/		
	+	%
/	+	%
-	+	%
	-	%()
/		
-	+	%
-	-	%
	-	%
-		
-	+	%
-	-	%
-	-	%
	-	%()

$\frac{1}{(w/v)}$:
 % (w/v) % / (w/v) % (w/v) / (w/v)

.(/ U ml⁻¹) % (w/v)

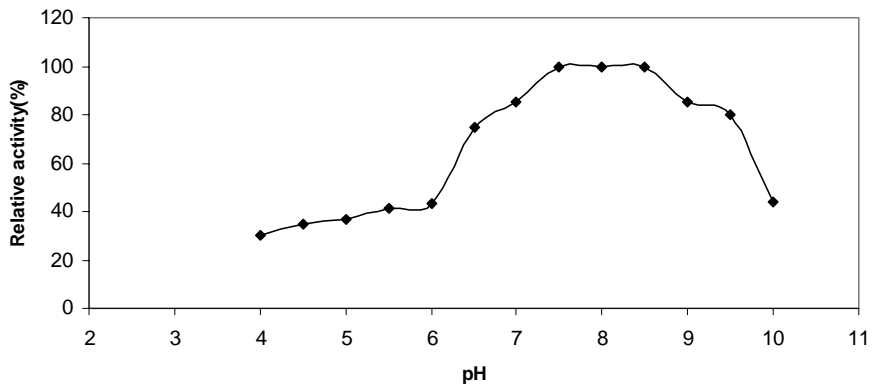
...

pH : pH
/ / pH
% (w/v) S : % (w/v) S
% (w/v) (/ h⁻¹)
S (/ U ml⁻¹)
S (/ U ml⁻¹)



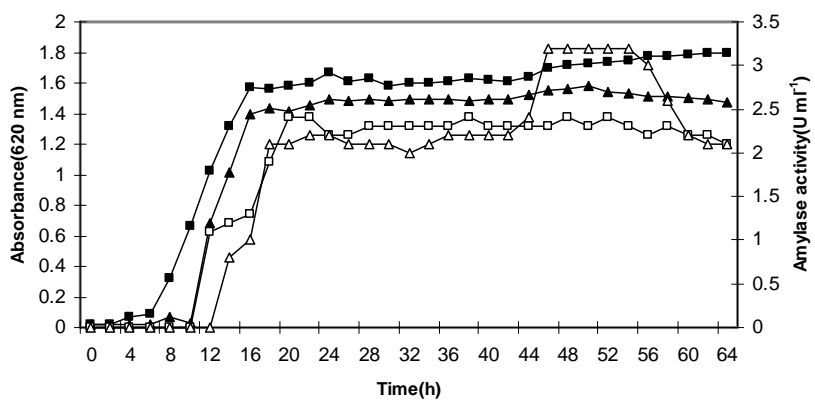
(pH /)

% (w/v)



◆ Amylase activity

pH / MA pH / HCl /



■ Absorbance(NaCl) ▲ Absorbance(Na₂SO₄)
 □ Amylase activity(NaCl) △ Amylase activity(Na₂SO₄)

% (w/v) S MA % (w/v)

Chromohalobacter

Filobacillus Halobacillus Bacillus

% /

...

(Spring *et al.*, 1996; Schlesner, *et al.*, 2001 ; Arahall *et al.*, 2001)

(Ventosa *et al.*, 1998)

MA

MA

() (/ U ml⁻¹)

% (w/v)

% (w/v)

% (w/v)

% (w/v)

%

(

%

)

% (w/v)

(Khire, 1994; Onishi & Sonada, 1979; Patel *et al.*, 1993)

% (w/v) % (w/v)
 (/ U ml⁻¹) % (w/v)
 % (/ pH)
 %
 / / pH.

MA

//

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