

Name: ***Streptomyces cacaoi* subsp. *cacaoi***

Authors: (Waksman 1932) Waksman and Henrici 1948  
Lanoot 2002

Status: Approved Lists

Reference(s): Int. J. Syst. Bacteriol. 30:374 (AL)

Risk group: 1 (German classification)

Type strain: ATCC 3082, IMET 40260, DSM 40057

Synonym(s): *Streptomyces aminophilus* (heterotypic synonym)

Author(s) Lanoot, B., Vancanneyt, M., Cleenwerck, I., Wang, L., Li, W.,  
Liu, Z., Swings, J.

Title The search for synonyms among streptomycetes by using  
SDS-PAGE of whole-cell proteins. Emendation of the species  
*Streptomyces aurantiacus*, *Streptomyces cacaoi* subsp.  
*cacaoi*, *Streptomyces caeruleus* and *Streptomyces violatus*.

Journal Int. J. Syst. Evol. Microbiol.

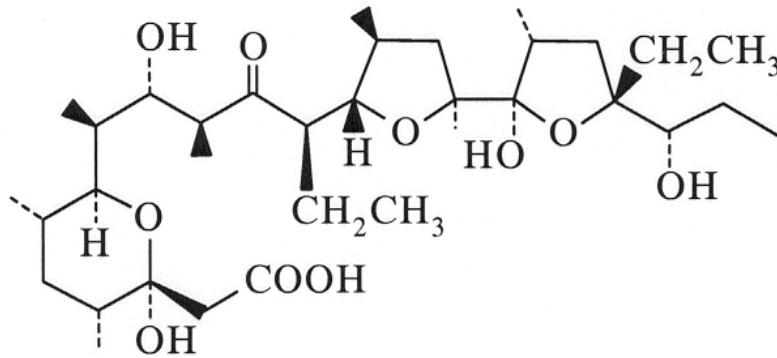
Volume 52

Page(s) 823-829

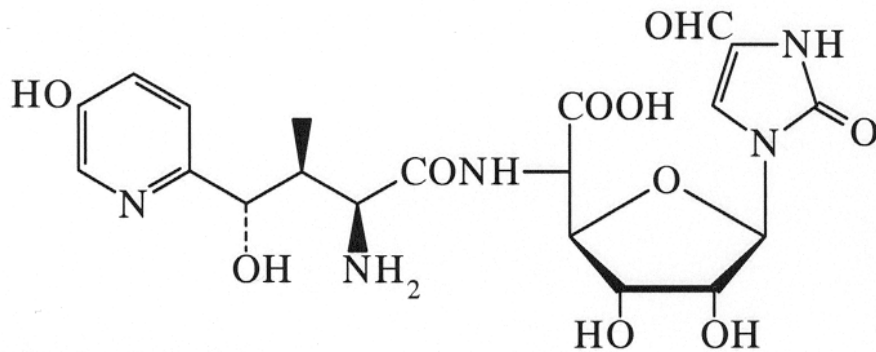
Year 2002

Metabolites from *Streptomyces cacaoi*:

Lysocellin, polyether antibiotic, cation-selective ionophore, active against gram-positive bacteria

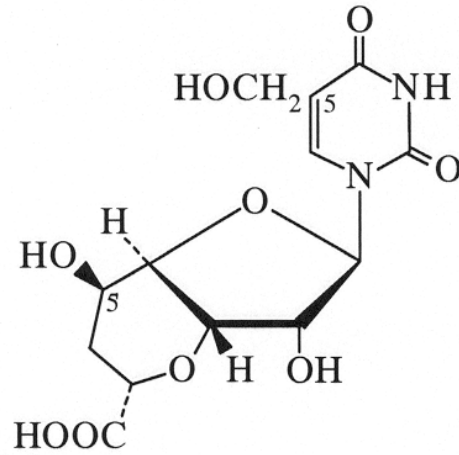


Nikkomycin X, nucleoside antibiotic, active against insects and fungi

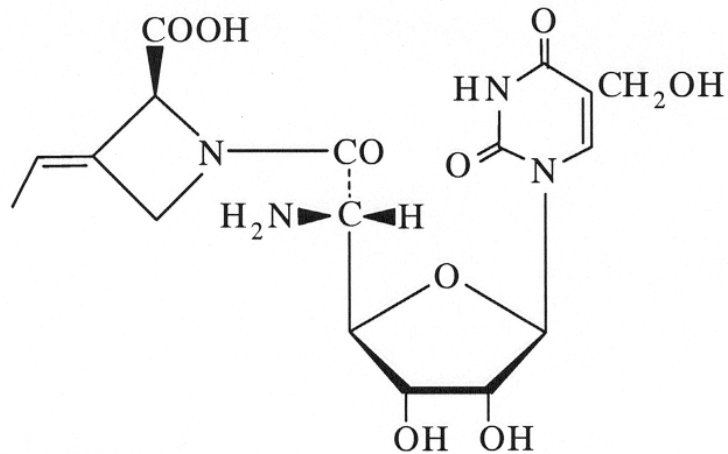


Metabolites from *Streptomyces cacaoi* subsp. *asoensis*

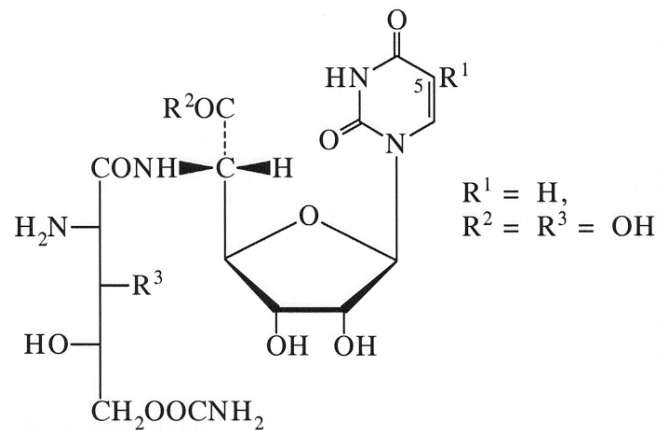
Octosyl acid B, nucleoside antibiotic



Polyoxin I, nucleoside antibiotic, antifungsl



Polyoxin L, nucleoside antibiotic, antifungal agent



**Genus:** *Streptomyces*

FH 6332

**Species:** *cacaoi*

**Subsp.:** *cacaoi*

**Numbers in other collections:** DSM 40057

Morphology:

	G	R
<u>ISP 2</u>	good	pastel yellow
	A	SP
	cream	none
	G	R
<u>ISP 3</u>	good	colorless
	A	SP
	cream	none
	G	R
<u>ISP 4</u>	good	colorless
	A	SP
	sparse	none
	G	R
<u>ISP 5</u>	good	colorless
	A	SP
	sparse	none
	G	R
<u>ISP 6</u>	good	lemon yellow
	A	SP
	none	none
	G	R
<u>ISP 7</u>	good	brown beige
	A	SP
	cream	none

Spore chains:

Spore surface:

Sporangia: -

Fragmentation: -

**Melanoid pigment:** - - - -

**NaCl resistance:** %

**Lysozyme resistance:**

**pH:** Value-

Optimum-

**Temperature :** Value-

Optimum- 28 °C

**Carbon utilization:**

Glu	Ara	Suc	Xyl	Ino	Man	Fru	Rha	Raf	Cel
+	+	+	-	+	+	-	-	-	+

**Enzymes:**

Gel	Cit	Ure	Arg	Onp	Trp	Lys	Odc	VP	Ind	H2S
-	+	+	+	+	-	+	+	+	-	-
2+	3+	4+	5-	6+	7+	8-	9-	10+	11+	
12+	13-	14+	15-	16+	17+	18+	19+	20-		

**Comments:**



***Streptomyces cacaoi* subsp. *cacaoi***

A and B – Agar plates medium 5006, 5265 and 5315

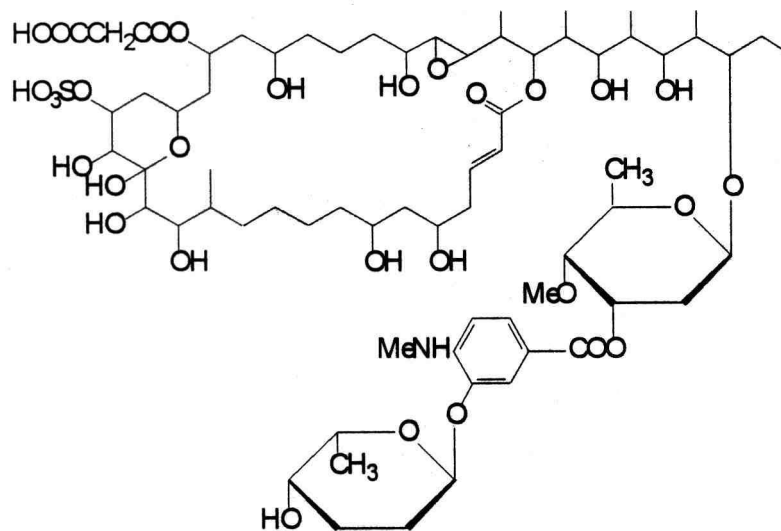


***Streptomyces cacaoi* subsp. *cacaoi***  
C – Microplate with ISP and melanin media

Name:	<b><i>Streptomyces aminophilus</i></b>
Authors:	Foster 1961
Status:	Approved Lists
Reference(s):	Int. J. Syst. Bacteriol. 30:371 (AL)
Risk group:	1 (German classification)
Type strain:	ATCC 14961, DSM 40186
Synonym(s):	<i>Streptomyces cacaoi</i> subsp. <i>cacaoi</i> <i>Streptomyces cacaoi</i>

### Secondary metabolites from *Streptomyces aminophilus*

Notonesomycin A, macrolide antibiotic with antifungal activity



**Genus:** *Streptomyces*

FH 2083

**Species:** *aminophilus*

**Numbers in other collections:** DSM 40186

Morphology:

	G	R
<u>ISP 2</u>	good	yellow
	A	SP
	white	none
	G	R
<u>ISP 3</u>	good	ivory
	A	SP
	ivory	none
	G	R
<u>ISP 4</u>	good	ivory
	A	SP
	ivory	none
	G	R
<u>ISP 5</u>	good	ivory
	A	SP
	ivory	none
	G	R
<u>ISP 6</u>	good	ivory
	A	SP
	none	none
	G	R
<u>ISP 7</u>	good	ivory
	A	SP
	white	none

Spore chains: SP

Spore surface: smooth

Sporangia:

Fragmentation:

Melanoid pigment: -

NaCl resistance: 5 %

Lysozyme resistance: 0,1 %

pH: Value-

Optimum-

Temperature : Value-

Optimum- 30°C

Carbon utilization:

Glu	Ara	Suc	Xyl	Ino	Man	Fru	Rha	Raf	Cel
+	-	-	-	-	-	+	-	-	-

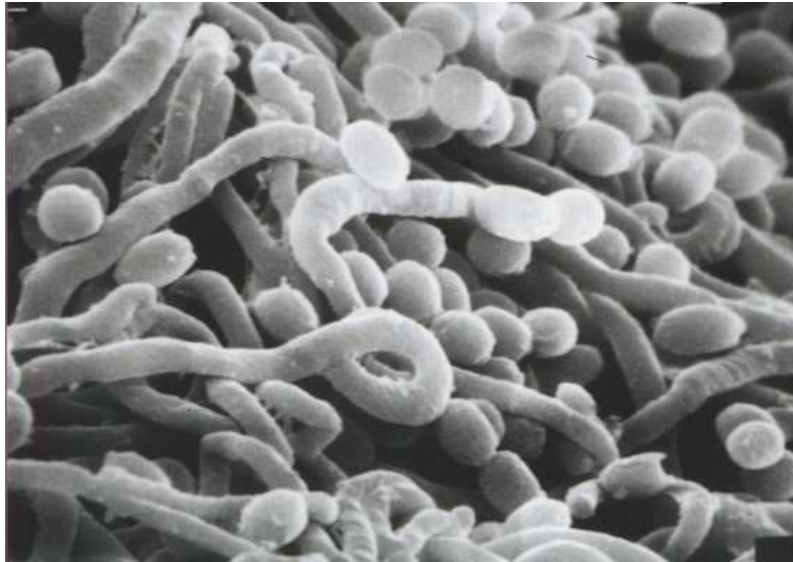
Enzymes:

Gel	Cit	Ure	Arg	Onp	Trp	Lys	Odc	VP	Ind	H2S
-	-	+		(+)				-	-	-

**Comments**







***Streptomyces aminophilus***

A and B – Agar plates medium 5006, 5265 and 5315

C – Microplate with ISP- and melanin media

D and E – Spore chain morphology and spore surface in SEM  
(D x 5.000 E x 10.000)