

Name: ***Micromonospora carbonacea***
Authors: Luedemann and Brodsky 1965
Status: Approved Lists
Literature: Int. J. Syst. Bacteriol. 30:321 (AL)
Risk group: 1 (German classification)
Type strain: ATCC 27114, DSM 43168, NRRL 2972

Name: *Micromonospora carbonacea* subsp. *aurantiaca*
Authors: Luedemann and Brodsky 1965
Status: Approved Lists, Previously Subspecies
Literature: Int. J. Syst. Bacteriol. 30:321 (AL)
Risk group: 1 (German classification)
Type strain: ATCC 27115, DSM 43815
Synonym: *Micromonospora carbonacea*

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Authors: Luedemann and Brodsky 1965
Status: Approved Lists, Previously Subspecies
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Type strain: ATCC 27114, DSM 43168, NRRL 2972
Synonym: *Micromonospora carbonacea*

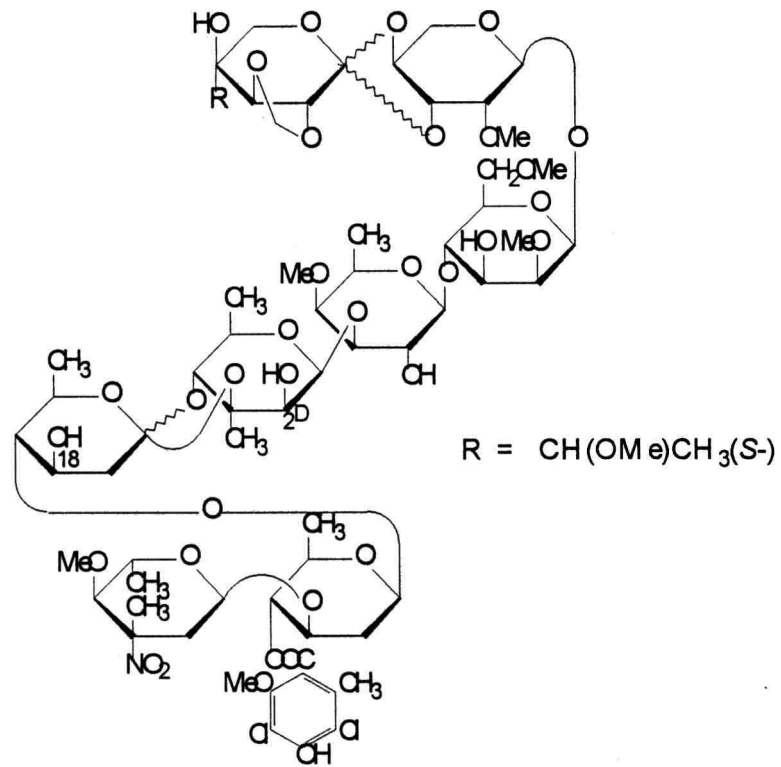
Author(s) Luedemann, G. M., Brodsky, B. C.
Title *Micromonospora carbonacea* sp. nov., an everninomicin-producing organism.
Journal Antimicrob. Agents Chemother.
Volume 1964
Page(s) 47-52
Year 1965

Fatty acid pattern:

14 : 0 Iso	4,0	17 : 0	7,0
15 : 0 Iso	15,0	18 : 1 cis 9	3,0
15 : 0 Anteiso	7,0	18 : 0	4,0
15 : 0	2,0		
16 : 0 Iso	24,0		
16 : 0	4,0		
16 : 0 10methyl	3,0		
17 : 0 Iso	4,0		
17 : 0 Anteiso	5,0		
17 : 1 cis 9	5,0		

Secondary metabolites from *Micromonospora carbonacea*

Everninomicin, oligosaccharide antibiotic, active against gram-positive bacteria



Genus: *Micromonospora*

FH 2353

Species: *carbonacea*

Numbers in other collections: ATCC 27114

Morphology:

	G	R
<u>ISP 2</u>	good	pure orange
	A	SP
	none	none
	G	R
<u>ISP 3</u>	good	orange - black
	A	SP
	none	none
	G	R
<u>ISP 4</u>	good	orange
	A	SP
	none	none
	G	R
<u>ISP 5</u>	good	beige
	A	SP
	white	none
	G	R
<u>ISP 6</u>	sparse	orange
	A	SP
	none	none
	G	R
<u>ISP 7</u>	good	brown red
	A	SP
	none	red

Spore chains:

Spore surface:

Sporangia:

Fragmentation:

Melanoid pigment: - - - -

NaCl resistance: 5 %

Lysozyme resistance: 0

pH: Value- from - Optimum-

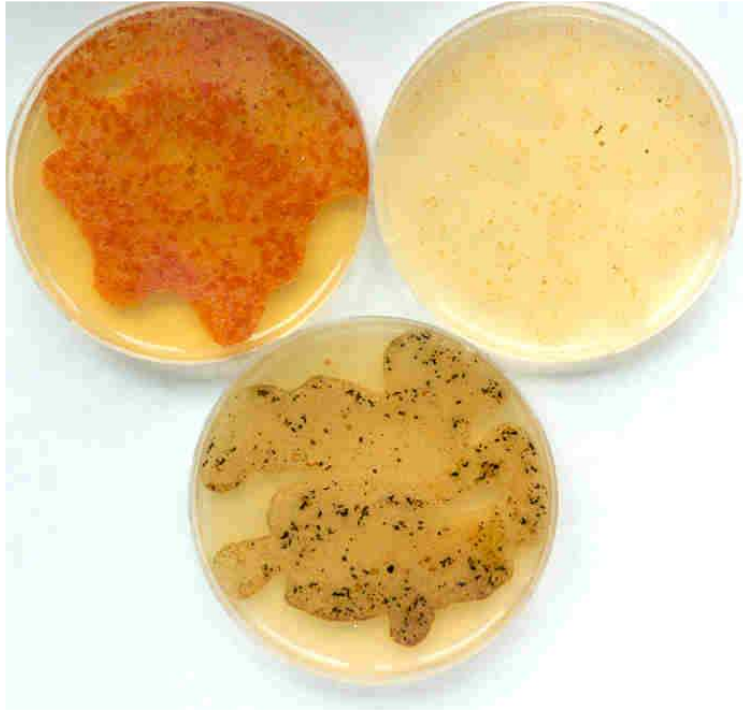
Temperature : Value- Optimum- 28 °C

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-			



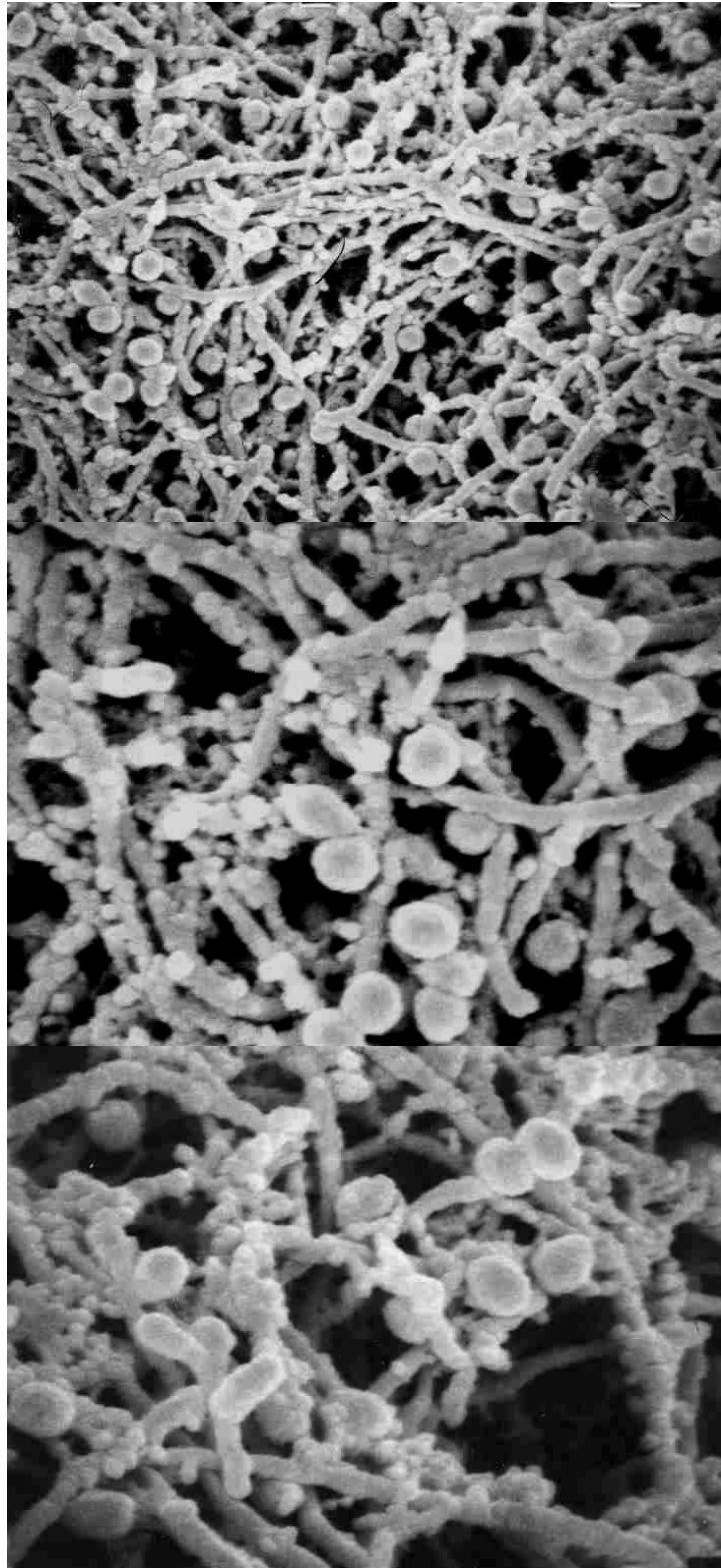
Micromonospora carbonacea

A and B – Agar plates medium 5265, 5315 and 5317



Micromonospora carbonacea

C and D – Agar plates medium 5318, 5322, 5337 with and without tyrosine



Micromonospora carbonacea

Sporulating colony in SEM

E x 5.000 F and G x 10.000

Genus: *Micromonospora*

FH 2931

Species: *carbonacea*

Numbers in other collections: DSM 43168

Morphology:

	G	R
<u>ISP 2</u>	good	red orange
	A	SP
	none	none
	G	R
<u>ISP 3</u>	good	pastel orange
	A	SP
	none	none
	G	R
<u>ISP 4</u>	good	black
	A	SP
	none	none
	G	R
<u>ISP 5</u>	good	pastel orange
	A	SP
	none	none
	G	R
<u>ISP 6</u>	good	pastel orange
	A	SP
	none	maize yellow
	G	R
<u>ISP 7</u>	good	pastel orange
	A	SP
	none	red

Spore chains:

Spore surface:

Sporangia:

Fragmentation:

Melanoid pigment: - - - -

NaCl resistance: 2,5 %

Lysozyme resistance: 0

pH: Value- from - Optimum-

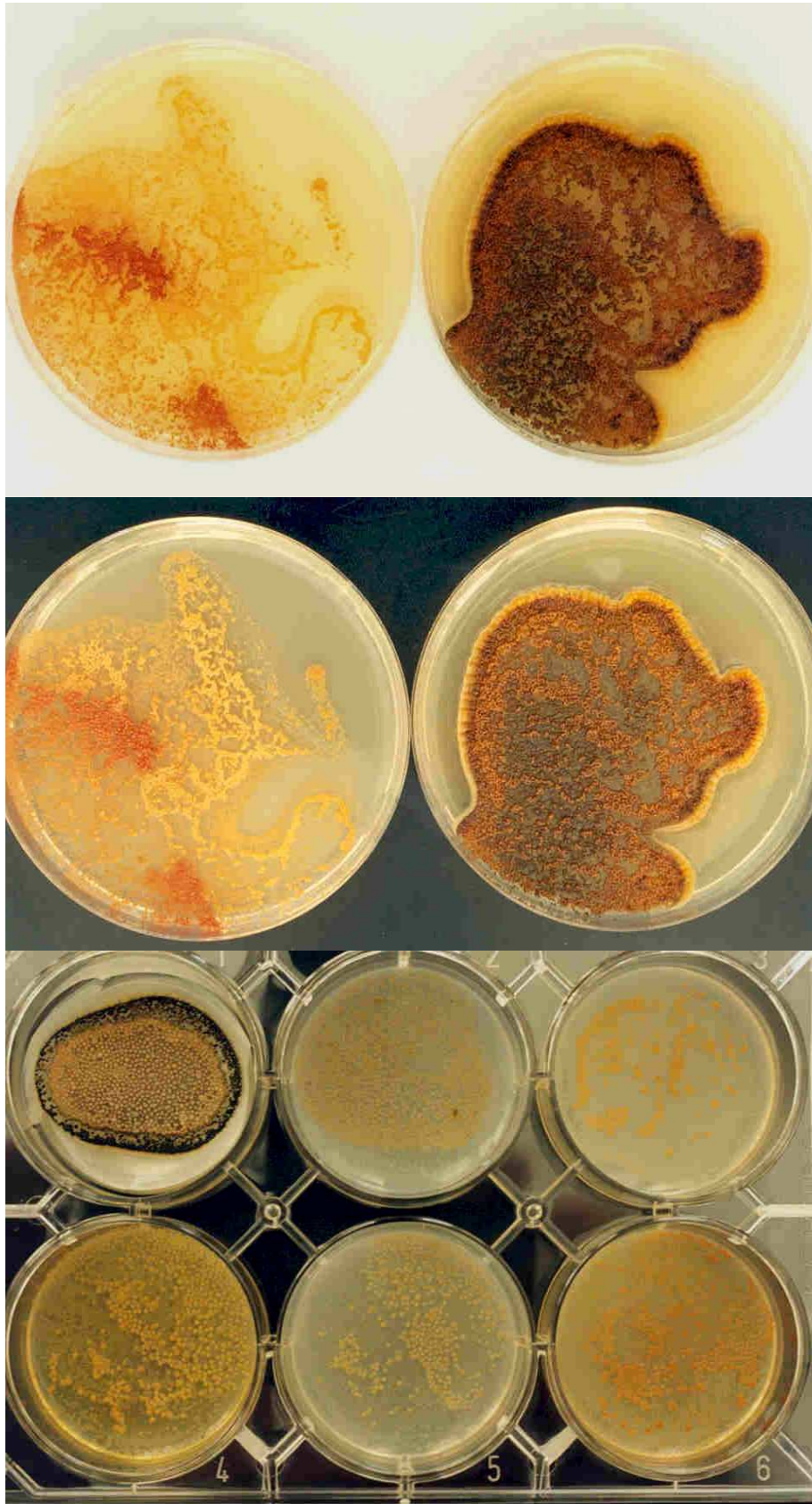
Temperature : Value- Optimum- 28 °C

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-



Micromonospora carbonacea

A and B – Agar plates medium 5315 and 5265

C- Microplate with ISP- and melanin media