

Name: ***Actinosynnema mirum***
 Authors: Hasegawa et al. 1978
 Status: Approved Lists
 Literature: Int. J. Syst. Bacteriol. 30:245 (AL)
 Risk group: 1 (German classification)
 Type strain: DSM 43827, IMET 9740, IMRU 3971

Author(s)	Hasegawa, T., Lechevalier, M. P., Lechevalier, H. A.
Title	New genus of the <i>Actinomacetales</i> : <i>Actinosynnema</i> gen. nov.
Journal	Int. J. Syst. Bacteriol.
Volume	28
Page(s)	304-310
Year	1978

Author(s)	Watanabe, K. et al.
Title	<i>Actinosynnema mirum</i> , a new producer of nocardicin antibiotics.
Journal	J. Antibiot. (Tokyo)
Volume	36
Page(s)	321-324
Year	1983

Fatty acid pattern:

11 : 0 Iso	1,0	16 : 0	11,0
12 : 0 Iso	7,0	17 : 0 Iso	4,0
13 : 0 Iso	3,5	17 : 0 Anteiso	8,5
13 : 0 Anteiso	6,5	17 : 1 cis 9	5,0
14 : 0 Iso	3,0	17 : 0	13,0
15 : 0 Iso	1,0	18 : 0 Iso	6,5
15 : 0 Anteiso	4,0	18 : 1 cis 9	4,5
16 : 0 Iso	9,0	18 : 0	10,5
16 : 1 cis 9	4,0		

Genus: *Actinosynnema*

FH 2537

Species: *mirum*

Numbers in other collections: ATCC 29888

Morphology:

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

Spore chains:

Spore surface:

Sporangia:

Fragmentation: -

Melanoid pigment: - - (+) -

NaCl resistance: 5 %

Lysozyme resistance:

pH: Value-

Optimum-

Temperature : Value-

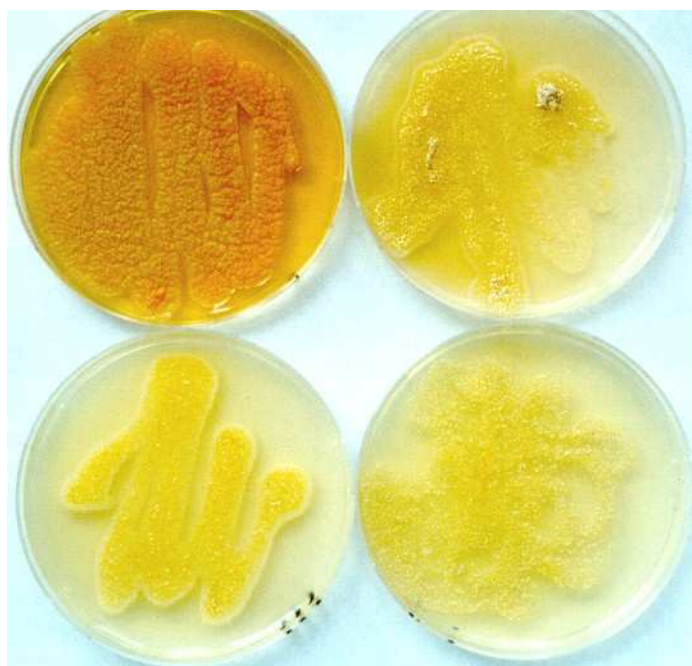
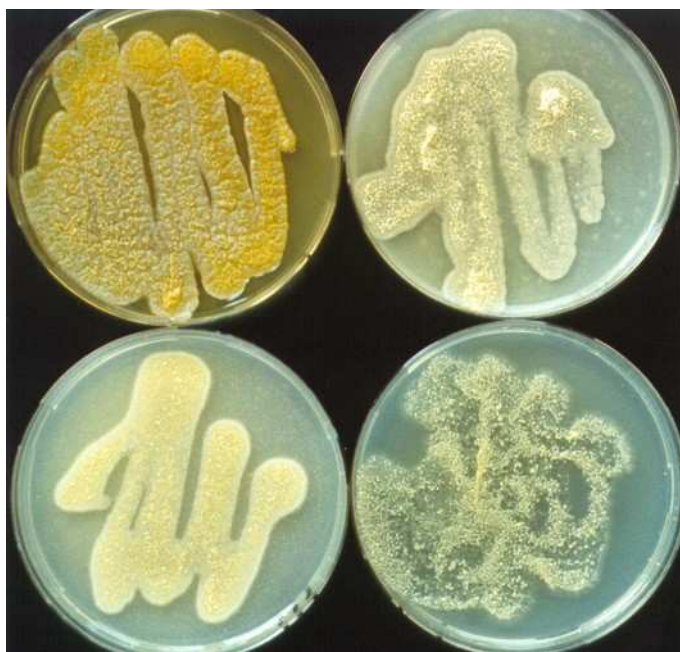
Optimum- 28°C

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-



Actinosynnema mirum

A and B – Agar plates medium 5265, 5315, 5317 and 5323



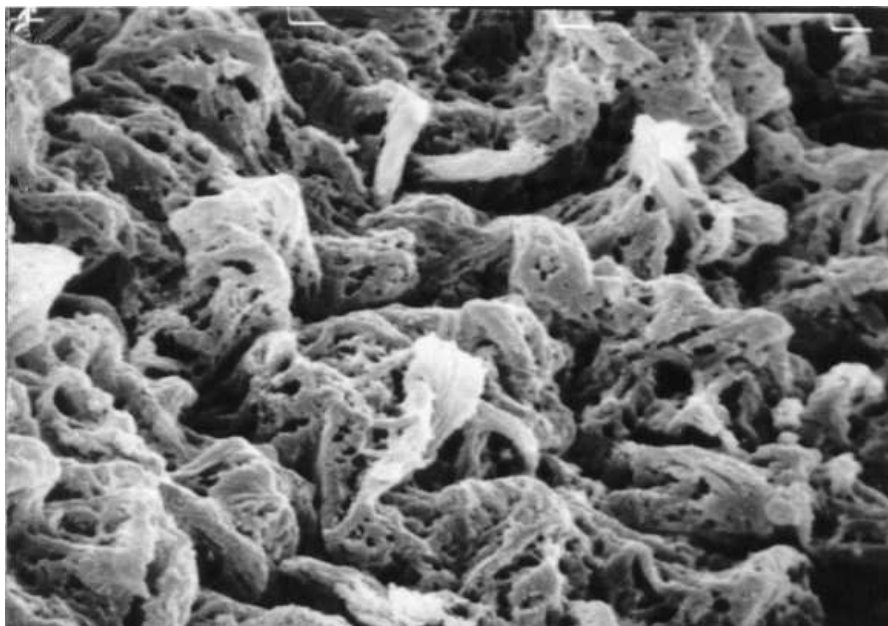
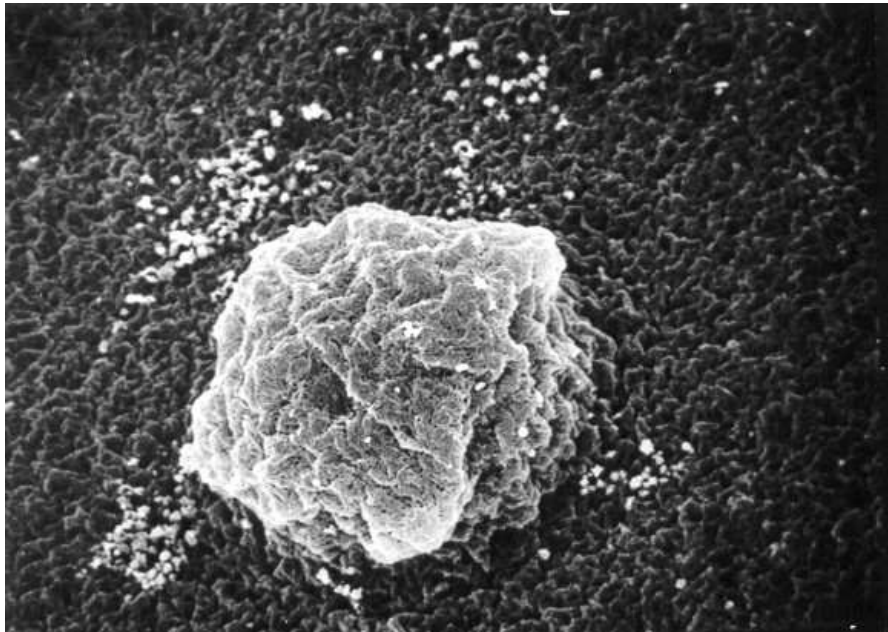
Actinosynnema mirum

C and D – Agar plates medium 5006, 5318, 5322, 5337 with and without tyrosine



Actinosynnema mirum

E - Microplates with use of carbohydrates (upper) and sodium chloride tolerance



Actinosynnema mirum

F – Dome like body in SEM (x 750)

G – Synnema beside dome like body in SEM (x 3.500)