

Name: *Actinosynnema pretiosum* subsp. *pretiosum*

Authors: Hasegawa et al. 1983

Status: New Species

Literature: Int. J. Syst. Bacteriol. 33:318

Risk group: 1 (German classification)

Type strain: ATCC 31281, C-15003(N-1), DSM 44132,  
FERM-P 3992, IFO 13726

Author(s) Hasegawa, T., Tanida, S., Hatsano, K., Higashide, E.,  
Yoneda, M.

Title Motile actinomycetes: *Actinosynnema pretiosum* subsp.  
*pretiosum* sp. nov., subsp.nov. and *Actinosynnema*  
*pretiosum* subsp. *auranticum* subsp. nov.

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Year 1983

Fatty acid pattern:

11 : 0 Iso	1,0	16 : 0	14,0
11 : 0 Anteiso	1,0	17 : 0 Iso	4,0
12 : 0 Iso	6,0	17 : 0 Anteiso	8,5
12 : 0	1,0	17 : 1 cis 9	3,5
13 : 0 Iso	1,5	17 : 0	14,0
13 : 0 Anteiso	10,5	18 : 0 Iso	7,5
14 : 0 Iso	2,0	18 : 1 cis 9	2,0
14 : 0	1,0	18 : 0	10,5
15 : 0 Anteiso	5,0	19 : 0 Anteiso	2,5
16 : 0 Iso	4,0		
16 : 1 cis 9	1,0		

**Genus:** *Actinosynnema* FH 2538  
**Species:** *pretiosum* **Subsp. pretiosum**  
**Numbers in other collections:** ATCC 31281

Morphology:

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

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-

**Comments:**



***Actinosynnema pretiosum* subsp. *pretiosum***

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

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



***Actinosynnema pretiosum* subsp. *pretiosum***

C – Microplates with use of carbohydrates (upper) and sodium chloride tolerance