

Name: ***Microbispora mesophila***

Authors: (Nonomura and Ohara 1971) Zhang et al. 1998

Status: New Combination

Literature: Int. J. Syst. Bacteriol. 48:418

Risk group: 1 (German classification)

Type strain: ATCC 27303, DSM 43048

Synonyms: *Thermomonospora mesophila* (basonym)

Author(s) Nonomura, H., Ohara, Y.

Title Distribution of actinomycetes in soil. X. New genus and species of monosporic actinomycetes.

Journal J. Ferment. Technol.

Volume 49

Page(s) 895-903

Year 1971

Author(s) Zhang, Z., Wang, Y., Ruan, J.

Title Reclassification of *Thermomonospora* and *Microtetraspora*.

Journal Int. J. Syst. Bacteriol.

Volume 48

Page(s) 411-422

Year 1998

Fatty acid pattern:

15 : 0 Iso	3,0	16 : 0 Iso 2 OH	4,0
15 : 0	1,0	17 : 0	2,0
16 : 0 Iso	44,0	17 : 0 10methyl	7,0
16 : 1 cis 9	2,0	18 : 0 Iso	7,0
16 : 0	5,0	18 : 1 cis9	6,0
16 : 0 10methyl	2,0	18 : 0	3,0
17 : 0 Iso	4,0		
17 : 1 cis9	7,0		

Genus: *Microbispora*

FH 2362

Species: *mesophila*

Numbers in other collections: DSM 43048

Morphology:

	G	R
<u>ISP 2</u>	good	green brown
	A	SP
	cream	none
	G	R
<u>ISP 3</u>	good	sand yellow
	A	SP
	cream	none
	G	R
<u>ISP 4</u>	good	green brown
	A	SP
	cream	none
	G	R
<u>ISP 5</u>	good	colorless
	A	SP
	cream	none
	G	R
<u>ISP 6</u>	good	sand yellow
	A	SP
	none	none
	G	R
<u>ISP 7</u>	good	colorless
	A	SP
	cream	none

Spore chains:

Spore surface:

Sporangia: -

Fragmentation: -

Melanoid pigment: - - - -

NaCl resistance: 2,5%

Lysozyme resistance:

pH: Value-

Optimum-

Temperature : Value-

Optimum- 38°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 -			



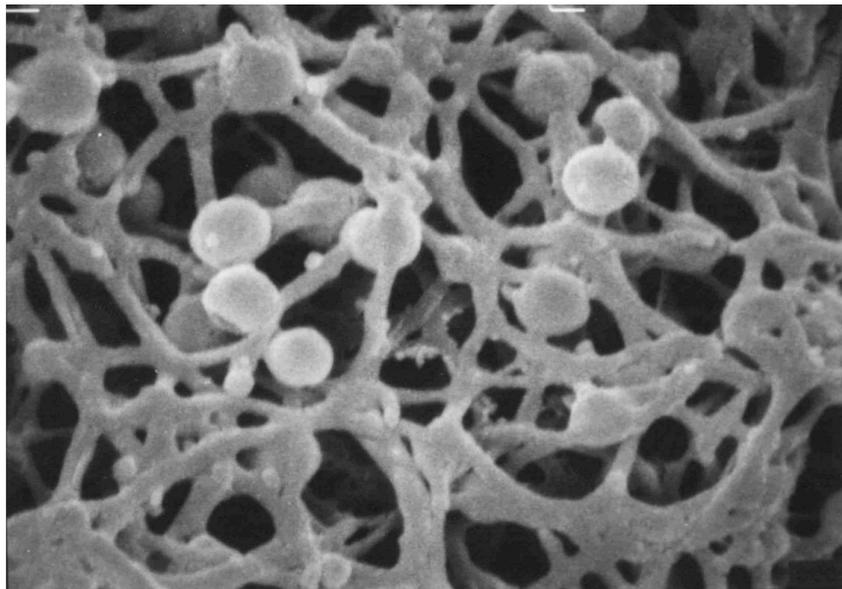
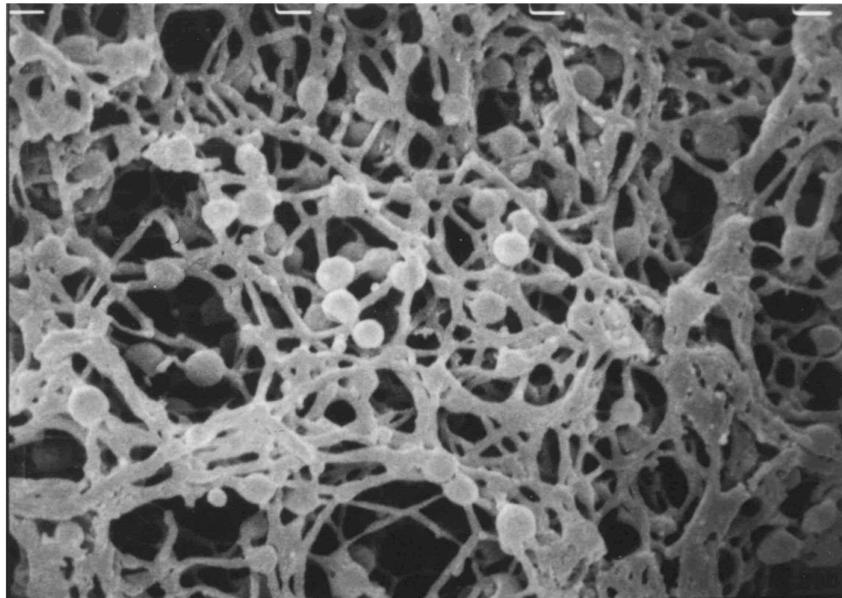
Microbispora mesophila

A and B – Agar plates medium 5006, 5265, 5315 and 5317



Microbispora mesophila

C and D – Agar plates medium 5318, 5323, 5337 with and without tyrosine



Microbispora mesophila

Scanning electron microscopy of spores in aerial mycelium

E x 3.500 F x 7.500

