

Class

Actinobacteria

Subclass

Actinobacteridae

Order

Actinomycetales

Suborder

Frankineae

Family

Frankiaceae

Genus

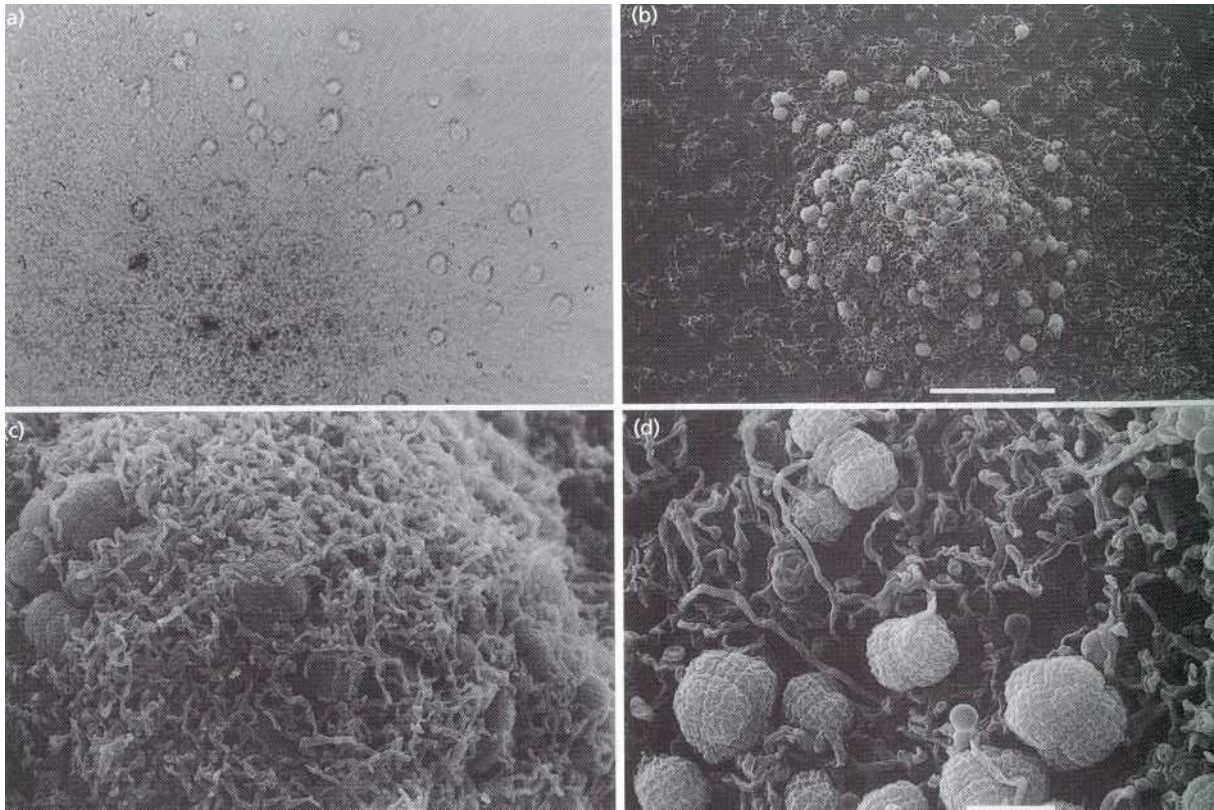
Cryptosporangium

Genus Identity Card

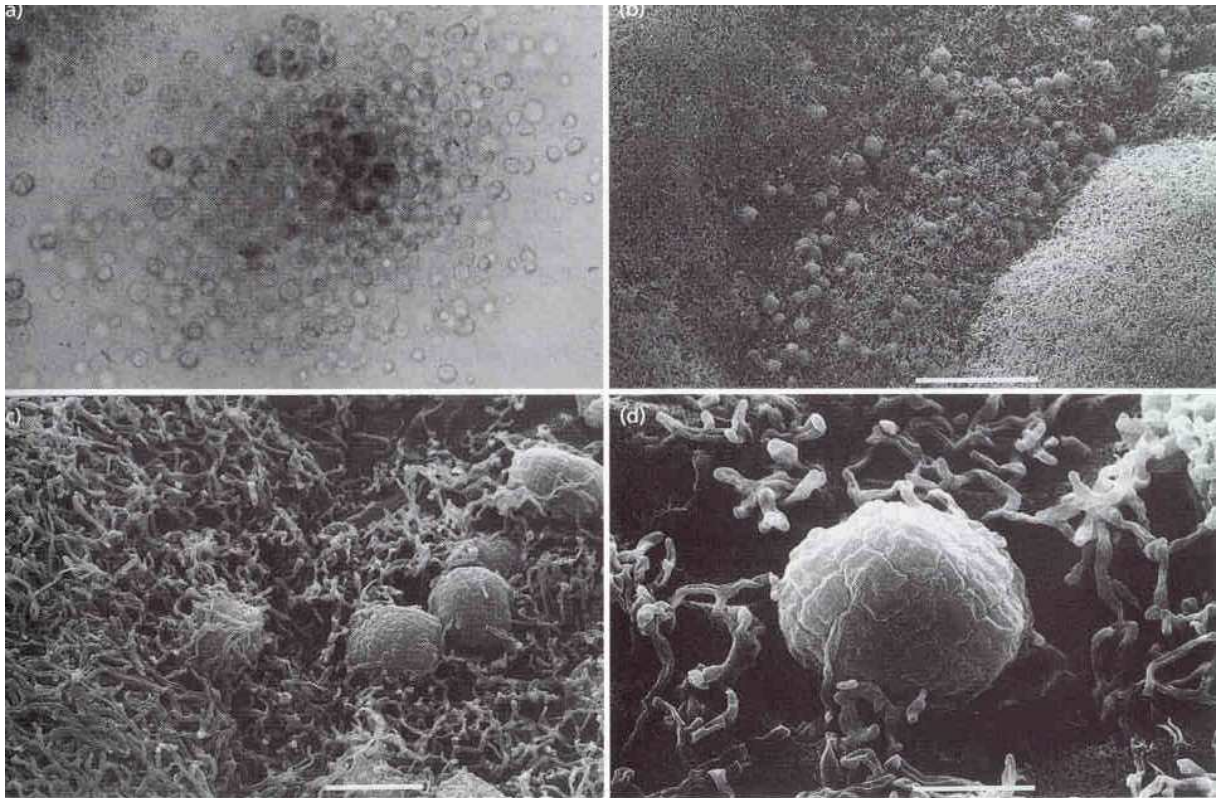
Genus	<i>Cryptosporangium</i>
Wall chemotype	meso-DAP, glycine, alanine, glutamic acid, glucoseamine
Whole cell sugar pattern	glucose, acofriose
Fatty acid pattern	C 17:1, C 18:1, iso C 16:0
Major menaquinone (MK)	-9(H ₄), 9(H ₆), 9(H ₈),
Phospholipidtype	phosphatidylethanolamine, Phosphatidylinositol
Mol% G+C of DNA	70
Morphology	branching mycelium, sporangia and aerial mycelia aggregate
Type strain	<i>Cryptosporangium arvum</i>

Lit.:

Tamura T., M. Hayakawa and K. Hatano. 1998
A new genus of the order *Actinomycetales*, ***Cryptosporangium*** gen. nov., with descriptions of *Cryptosporangium arvum* sp. nov. and *Cryptosporangium japonicum* sp. nov.
Int. J. Syst. Bacteriol. 48: 995-1005



Light micrograph (a) and scanning electron micrographs (b-d) of *Cryptosporangium arvum* grown on humidic acid/vitamin agar for 14 d at 28°C. Bars, 50 μm (b), 10 μm (c) and 5 μm (d). From Tamura et al. Int. J. System. Bacteriol. 1998.



Light micrograph (a) and scanning electron micrographs (b-d) of *Cryptosporangium japonicum* grown on humidic acid/vitamin agar for 14 d at 28°C. Bars, 50 µm (b), 10 µm (c) and 5 µm (d). From Tamura et al. Int. J. System. Bacteriol. 1998.

Name: CRYPTOSPORANGIUM
Authors: Tamura et al. 1998
Status: New Genus
Type species: *C. arvum*
Literature: Int. J. Syst. Bacteriol. 48:1003

Name: ***Cryptosporangium arvum* (Type species)**
Authors: Tamura et al. 1998
Status: New Species
Literature: Int. J. Syst. Bacteriol. 48:1003
Risk group: 1 (German classification)
Type strain: IFO 15965, YU 629-21, DSM 44712

Name: *Cryptosporangium aurantiacum*
Authors: Tamura and Hatano 2001
Status: New Species
Literature: Int. J. Syst. Bacteriol. 51:2124
Risk group: 1 (German classification)
Comment: basonym: "*Actinoplanes aurantiacus*"
Type strain: 71-C38, DSM 46144, IFO 13967, JCM 3241

Name: *Cryptosporangium japonicum*
Authors: Tamura et al. 1998
Status: New Species
Literature: Int. J. Syst. Bacteriol. 48:1003
Risk group: 1 (German classification)
Type strain: IFO 15966, YU 636-3, DSM 44713

Name: *Cryptosporangium minutisporangium*
Authors: (Ruan et al. 1986) Tamura and Hatano 2001
Status: New Combination
Literature: Int. J. Syst. Bacteriol. 51:2123
Risk group: 1 (German classification)
Type strain: A-60, ATCC 49415, IFO 15962, IMRU LL-A-60, JCM 9458, DSM 44714
Synonyms: *Actinoplanes minutisporangius* (basonym)

Genus: *Cryptosporangium* **FH 6416**

Species: *arvum*

Numbers in other collections: DSM 44712

Morphology:

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

Melanoid pigment: - + + -

NaCl resistance: %

Lysozyme resistance:

pH: Value- Optimum-

Temperature : Value- Optimum- °C

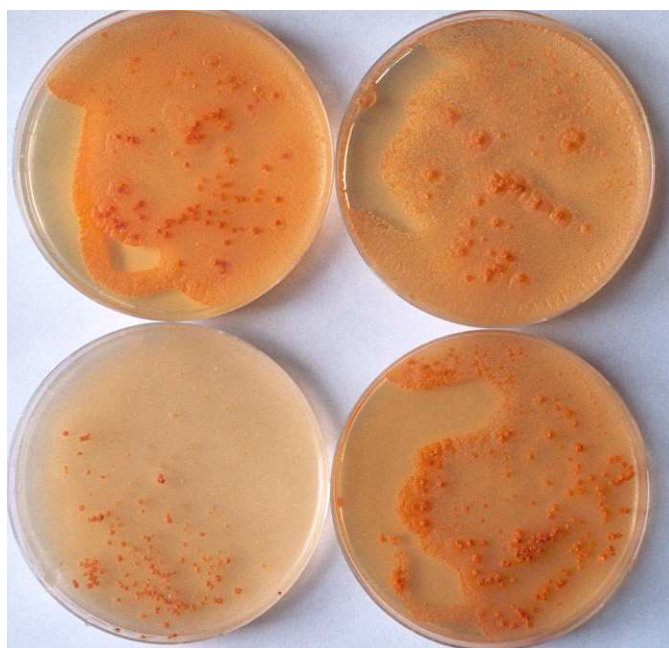
Carbon utilization:

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

Enzymes:

Api Zym									
2+	3+	4+	5-	6+	7-	8-	9+	10-	11+
12-	13+	14+	15-	16+	17+	18-	19-	20-	

Comments:



Cryptosporangium arvum

A and B – Agar plates medium 5006, 5265, 5315 and 5429