

Compendium of Actinobacteria from Dr. Joachim M. Wink
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Strain		DSM 42149
Genus		<i>Streptomyces</i>
Species		<i>lunaelactis</i>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		BCCM/LMG 28326, MM109
Genbank accession numbers		16S rRNA gene: KJ862793 and KM207217 <i>trpB</i> gene: KJ862832 <i>atpD</i> gene: KM207218 <i>gyrB</i> gene: KM207219 <i>recA</i> gene: KJ862806 <i>rpoB</i> gene: KJ862819
Reference		
Author		Maciejewska, M., Pessi, I. S., Arguelles-Arias, A., Noirfalise, P., Luis, G., Ongena, M., Barton, H., Carnol, M., Rigali, S.
Title		<i>Streptomyces lunaelactis</i> sp. nov., a novel ferroverdin A-producing <i>Streptomyces</i> species isolated from a moonmilk speleothem
Journal		<i>Antonie Van Leeuwenhoek</i>
Volume		107 (2)
Page		519-31
Year		2015
Morphology		
Agar	ISP 2 - growth/G	sparse
Agar	ISP 2 - colony color/R	sand yellow (1002)
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	good
Agar	ISP 3 - R	green beige (1000)
Agar	ISP 3 - A	pure white (9010), sparse
Agar	ISP 3 - S	none
Agar	ISP 4 - G	sparse
Agar	ISP 4 - R	reseda green (6011)
Agar	ISP 4 - A	traffic white (9016), sparse
Agar	ISP 4 - S	none
Agar	ISP 5 - G	good
Agar	ISP 5 - R	ivory (1014)
Agar	ISP 5 - A	none
Agar	ISP 5 - S	none
Agar	ISP 6 - G	sparse
Agar	ISP 6 - R	grey beige (1019)
Agar	ISP 6 - A	none

Agar	ISP 6 - S	olive brown (8008)
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	pale brown (8025)
Agar	ISP 7 - A	none
Agar	ISP 7 - S	grey beige (1019)
Agar	suter with tyrosine - G	sparse
Agar	suter with tyrosine - R	ivory (1014), grey beige (1019)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	black brown (8022)
Agar	suter without tyrosine - G	sparse
Agar	suter without tyrosine - R	oyster white (1013)
Agar	suter without tyrosine - A	none
Agar	suter without tyrosine - S	none
	Sporechains/Sporangia	
Physiology		
Melanin		(+) - + -
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		5%
lysozyme tolerance		
use of carbohydrates	glucose	+
use of carbohydrates	arabinose	-
use of carbohydrates	sucrose	-
use of carbohydrates	xylose	(+)
use of carbohydrates	inositol	(+)
use of carbohydrates	mannose	++
use of carbohydrates	fructose	++
use of carbohydrates	rhamnose	+
use of carbohydrates	raffinose	(+)
use of carbohydrates	cellulose	(+)
Api zym	Phosphatase alcaline	5
Api zym	Esterase (C4)	2
Api zym	Esterase Lipase (C8)	2
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	3
Api zym	Cystine arylamidase	2
Api zym	Trypsin	5
Api zym	Chymotrypsin	2
Api zym	Phosphatase acid	5
Api zym	Naphtol-AS-BI-phosphohydrolase	4
Api zym	alpha galactosidase	0

Api zym	beta galactosidase	1
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	5
Api zym	beta glucosidase	4
Api zym	N-acetyl-beta-glucosaminidase	5
Api zym	alpha mannosidase	3
Api zym	alpha fucosidase	0
Api coryne	nitrate reduction	+
Api coryne	Pyrazamidase	-
Api coryne	Pyrrolidonyl arylamidase	+
Api coryne	Alkaline phosphatase	+
Api coryne	beta glucuronidase	-
Api coryne	beta galactosidase	-
Api coryne	alpha glucosidase	+
Api coryne	N-acetyl -beta glucosaminidase	+
Api coryne	Esculin (beta glucosidase)	+
Api coryne	Urease	-
Api coryne	Gelatine(hydrolysis)	+
Api coryne	Glucose fermentation	-
Api coryne	Ribose fermentation	-
Api coryne	Xylose fermentation	-
Api coryne	Mannitol fermentation	-
Api coryne	Maltose fermentation	-
Api coryne	Lactose fermentation	-
Api coryne	Sucrose fermentation	-
Api coryne	Glycogen fermentation	-

Apicoryne



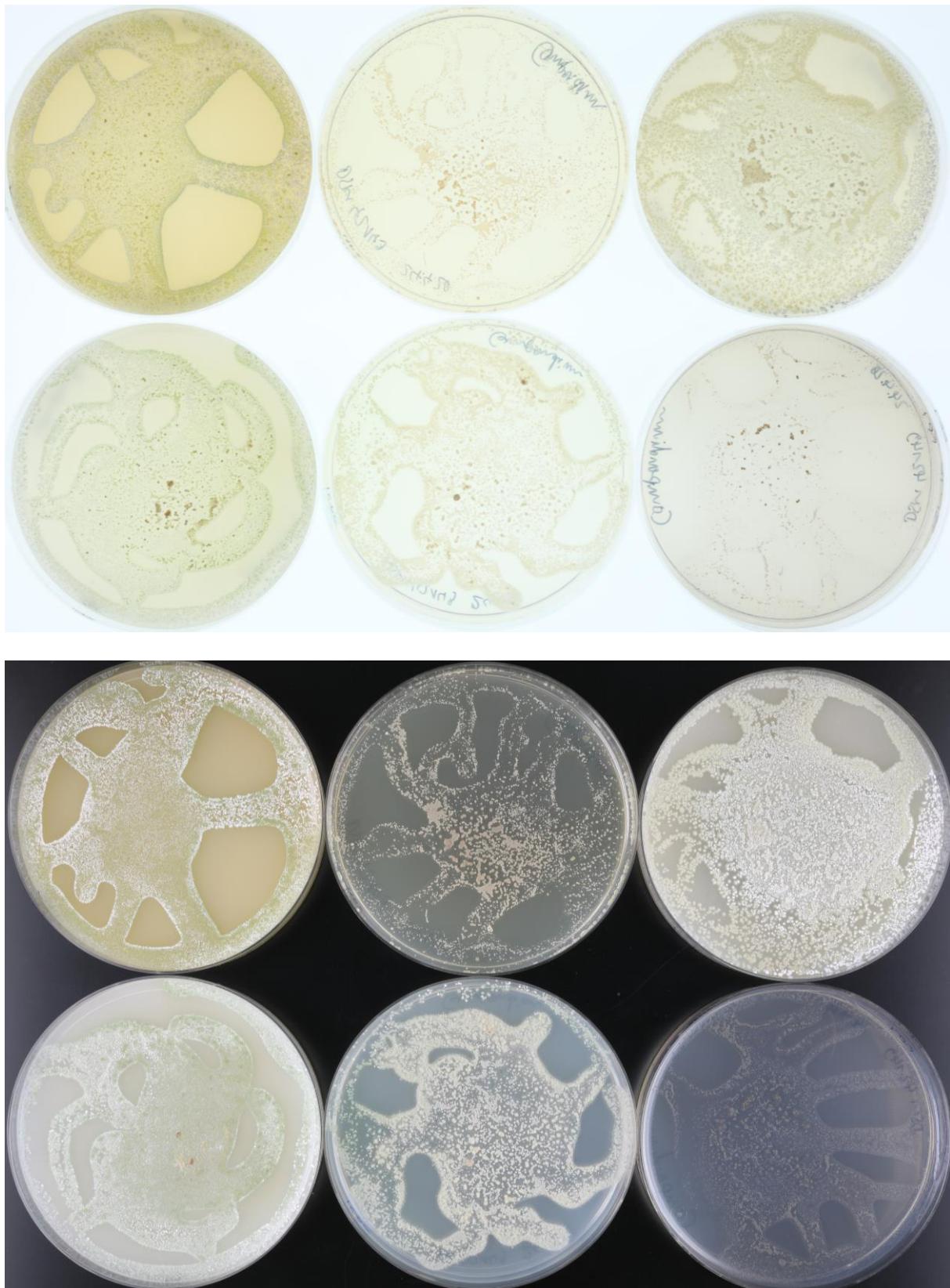
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 42149.

Apizym



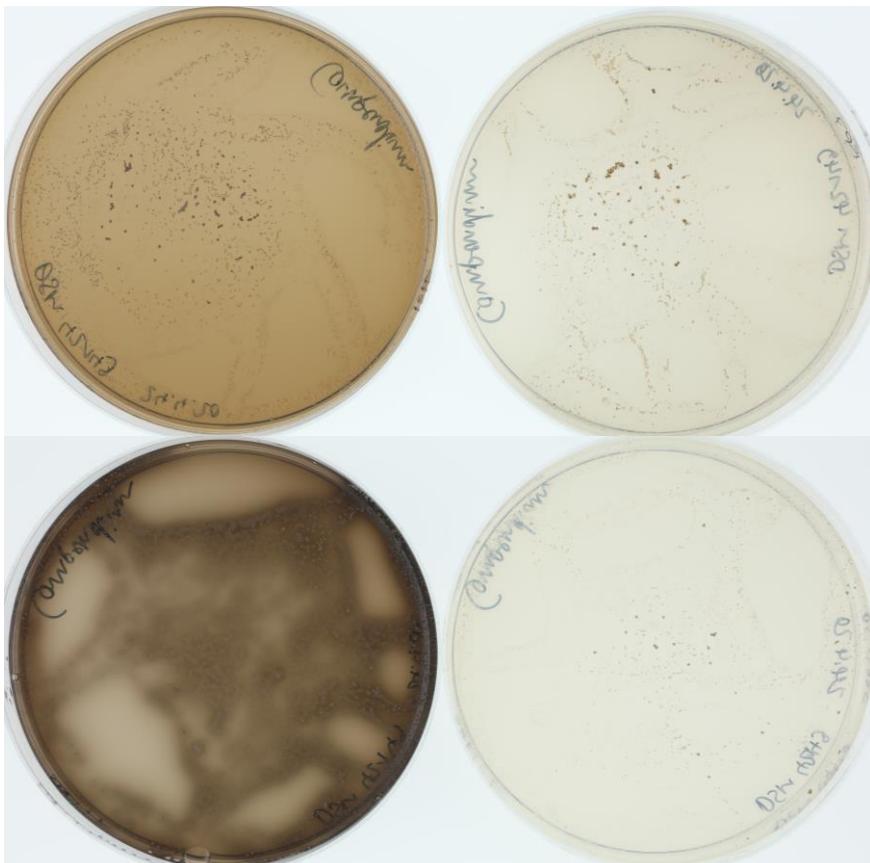
Abbildung 2: Apizym-Teststreifen mit Keim DSM 42149.

Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)

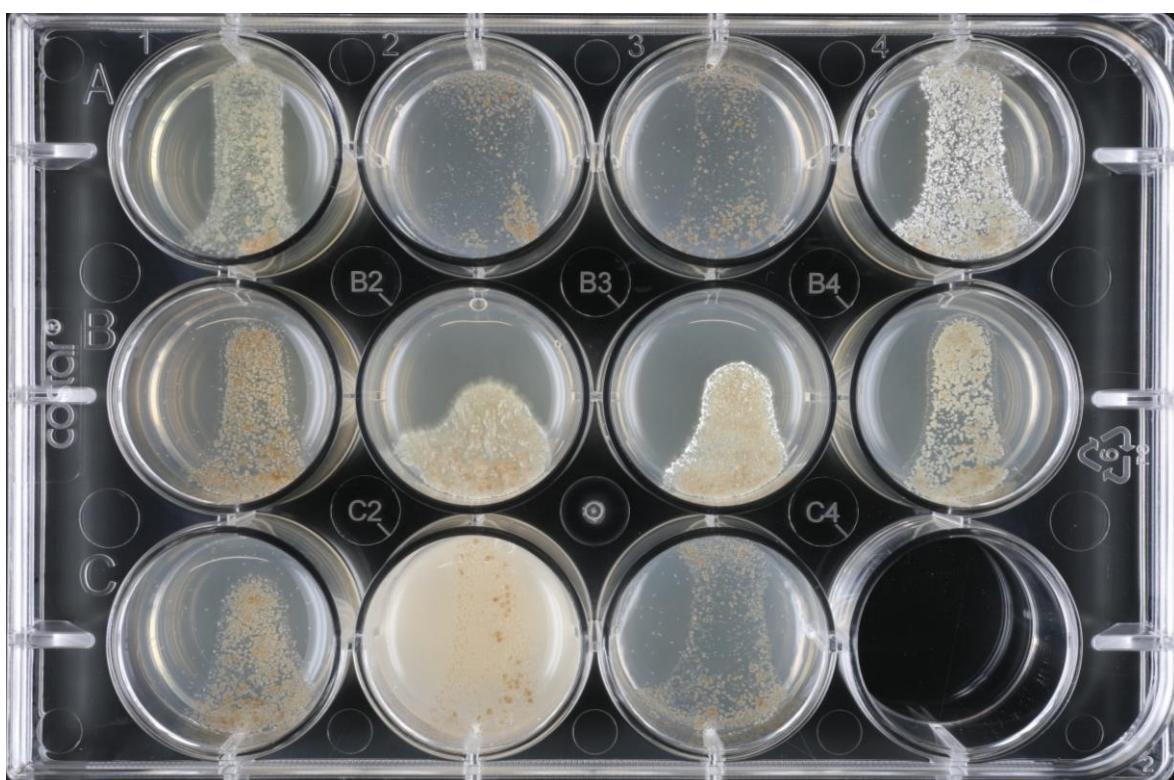


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(ISP6, ISP7, SSM+T, SSM-T)



Carbon utilization test (from top left to bottom right: glucose, arabinose, sucrose, xylose, inositol, mannose, fructose, rhamnose, raffinose, cellulose)



**Sodium chloride tolerance test (from top left to bottom right: 0%, 2,5%, 5%,
7,5%, 10%)**

