

Compendium of Actinobacteria from Dr. Joachim M. Wink  
University of Braunschweig

Strain		DSM 42093
Genus		<b><i>Streptomyces</i></b>
Species		<b><i>lannensis</i></b>
Status		
Risk group		L1
Type strain		JCM 16578, TISTR 1982, TA4-8
Genbank accession numbers		16S rRNA gene: <a href="#">AB562508</a>
Reference		
Author		Promnuan, Y., Kudo, T., Ohkuma, M., Chantawannakul, P.
Title		<i>Streptomyces chiangmaiensis</i> sp. nov. and <i>Streptomyces lannensis</i> sp. nov., isolated from the South-East Asian stingless bee ( <i>Tetragonilla collina</i> )
Journal		<i>Int J Syst Evol Microbiol</i>
Volume		<b>63</b> ( Pt 5 )
Page		1896-901
Year		2013
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	clay brown (8003)
Agar	ISP 2 - aerial mycelium/A	signal white (9003)
Agar	ISP 2 - soluble pigment/S	brown beige (1011)
Agar	ISP 3 - G	good
Agar	ISP 3 - R	tarpaulin grey (7010)
Agar	ISP 3 - A	light grey (7035), stone grey (7030)
Agar	ISP 3 - S	green brown (8000), olive brown (8008)
Agar	ISP 4 - G	good
Agar	ISP 4 - R	brown beige (1011)
Agar	ISP 4 - A	silk grey (7044), telegrey 2 (7046)
Agar	ISP 4 - S	sand yellow (1002), ocher brown (8001)
Agar	ISP 5 - G	sparse
Agar	ISP 5 - R	clay brown (8003)
Agar	ISP 5 - A	pure white (9010)
Agar	ISP 5 - S	ocher brown (8001)
Agar	ISP 6 - G	sparse
Agar	ISP 6 - R	sand yellow (1002)
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	pale brown (8025)
Agar	ISP 7 - A	stone grey (7030)

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Agar	ISP 7 - S	ochre yellow (1024)
Agar	suter with tyrosine - G	sparse
Agar	suter with tyrosine - R	light ivory (1015)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	none
Agar	suter without tyrosine - G	sparse
Agar	suter without tyrosine - R	light ivory (1015)
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		2,5%
lysozyme tolerance		
use of carbohydrates	glucose	+ (aerial mycelium, sparse)
use of carbohydrates	arabinose	+ (aerial mycelium, sparse)
use of carbohydrates	sucrose	(+)
use of carbohydrates	xylose	++ (aerial mycelium, sparse)
use of carbohydrates	inositol	+ (aerial mycelium, sparse)
use of carbohydrates	mannose	+ (aerial mycelium)
use of carbohydrates	fructose	++ (aerial mycelium)
use of carbohydrates	rhamnose	++ (aerial mycelium)
use of carbohydrates	raffinose	+ (aerial mycelium, sparse)
use of carbohydrates	cellulose	-
Api zym	Phosphatase alkaline	5
Api zym	Esterase (C4)	1
Api zym	Esterase Lipase (C8)	1
Api zym	Lipase (C14)	0
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	3
Api zym	Cystine arylamidase	1
Api zym	Trypsin	1
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	3
Api zym	Naphtol-AS-BI-phosphohydrolase	5
Api zym	alpha galactosidase	4
Api zym	beta galactosidase	4
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	2
Api zym	beta glucosidase	4

Api zym	N-acetyl-beta-glucoseamidase	5
Api zym	alpha mannosidase	5
Api zym	alpha fucosidase	1
Api coryne	nitrate reduction	-
Api coryne	Pyraziamidase	-
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 glucoseamidase	+
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 42093.

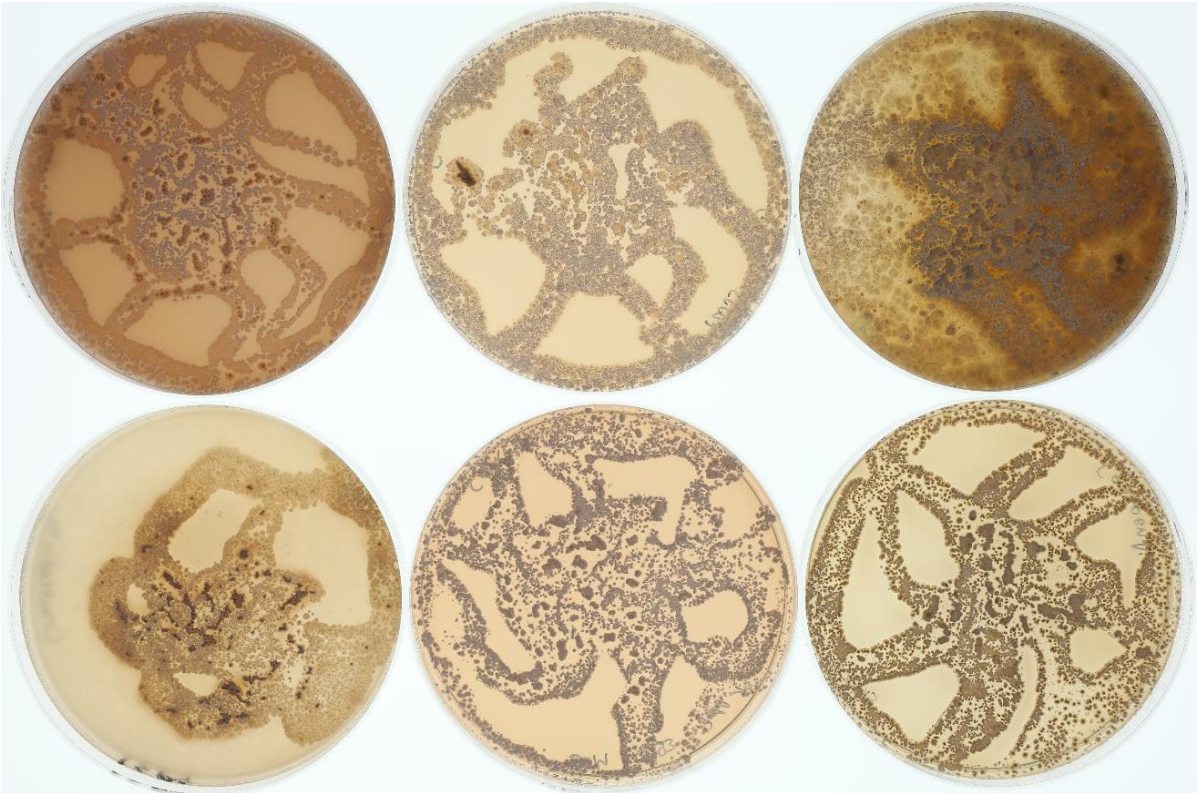
## Apizym



Abbildung 2: Apizym-Teststreifen mit Keim DSM 42093.



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



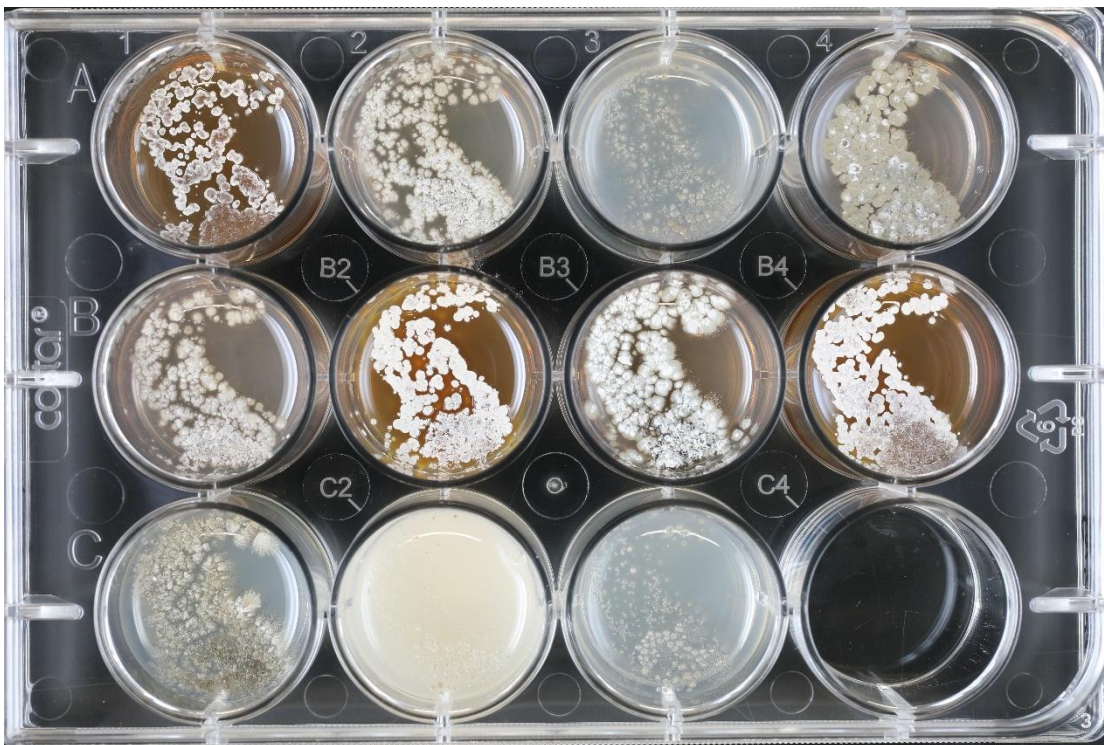


(ISP6, ISP7, SSM+T, SSM-T)





**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%)**

