

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

Strain		DSM 100524
Genus		<i>Streptomyces</i>
Species		<i>formicae</i>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		1H-GS9, CGMCC 4.7277
Genbank accession numbers		16S rRNA gene: KP784804
Reference		
Author		Bai, L., Liu, C., Guo, L., Piao, C., Li, Z., Li, J., Jia, F., Wang, X., Xiang, W.
Title		<i>Streptomyces formicae</i> sp. nov., a novel actinomycete isolated from the head of <i>Camponotus japonicus</i> Mayr
Journal		<i>Antonie Van Leeuwenhoek</i>
Volume		109 (2)
Page		253-61
Year		2016
Morphology		
Agar	ISP 2 - growth/G	good
Agar	ISP 2 - colony color/R	sand yellow (1002)
Agar	ISP 2 - aerial mycelium/A	telegrey 2 (7046), telegrey 4 (7047), good
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	good
Agar	ISP 3 - R	olive grey (7002)
Agar	ISP 3 - A	traffic grey A (7042), signal white (9003), good
Agar	ISP 3 - S	none
Agar	ISP 4 - G	good
Agar	ISP 4 - R	stone grey (7030)
Agar	ISP 4 - A	traffic grey A (7042), telegrey 4 (7047)
Agar	ISP 4 - S	sand yellow (1002)
Agar	ISP 5 - G	good
Agar	ISP 5 - R	ivory (1014)
Agar	ISP 5 - A	dusty grey (7037), light grey (7035)
Agar	ISP 5 - S	none
Agar	ISP 6 - G	sparse
Agar	ISP 6 - R	colourless
Agar	ISP 6 - A	none
Agar	ISP 6 - S	olive grey (7002)
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	light ivory (1015), quartz grey (7039)

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

Agar	ISP 7 - A	none
Agar	ISP 7 - S	olive grey (7002), sparse
Agar	suter with tyrosine - G	sparse
Agar	suter with tyrosine - R	concrete grey (7023)
Agar	suter with tyrosine - A	none
Agar	suter with tyrosine - S	traffic black (9017)
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	+
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 alkaline	5
Api zym	Esterase (C4)	3
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	1
Api zym	Trypsin	1
Api zym	Chymotrypsin	1
Api zym	Phosphatase acid	4
Api zym	Naphtol-AS-BI-phosphohydrolase	5
Api zym	alpha galactosidase	3
Api zym	beta galactosidase	5
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	4

Api zym	beta glucosidase	3
Api zym	N-acetyl-beta-glucoseamidase	5
Api zym	alpha mannosidase	4
Api zym	alpha fucosidase	3
Api coryne	nitrate reduction	-
Api coryne	Pyrazinamidase	-
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



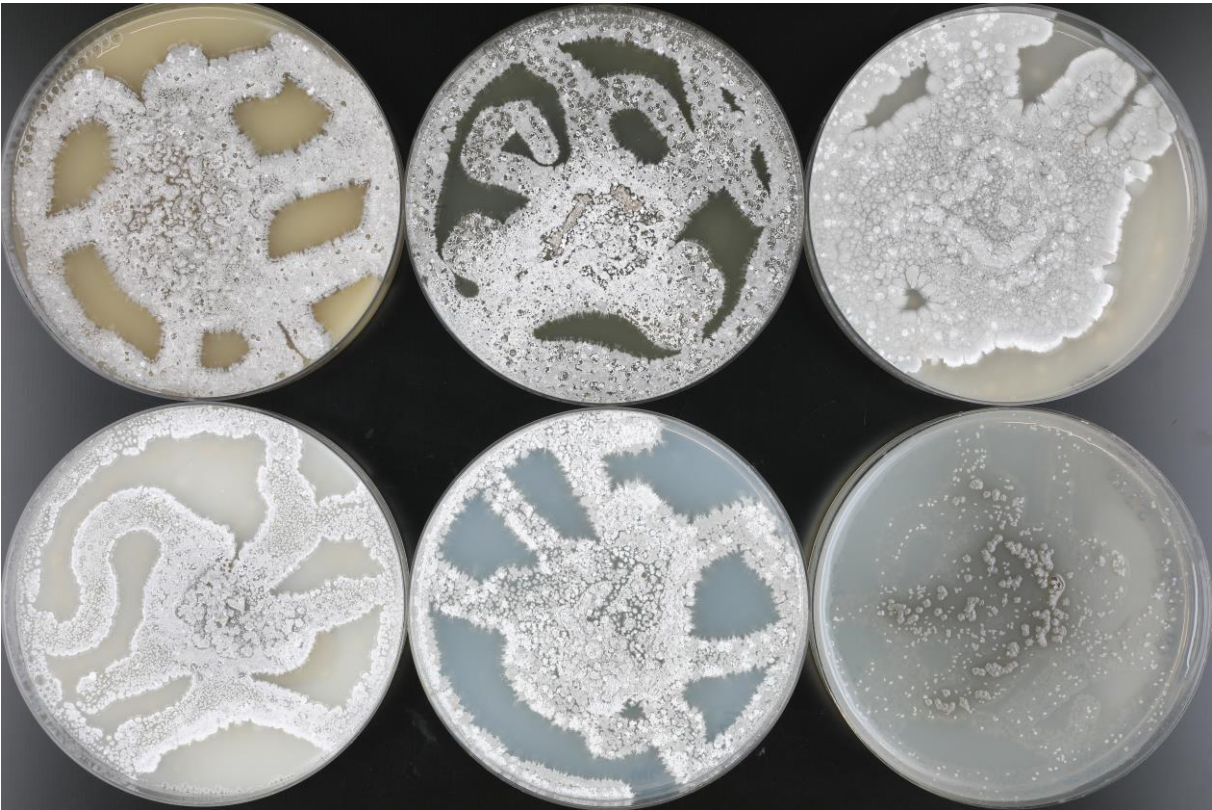
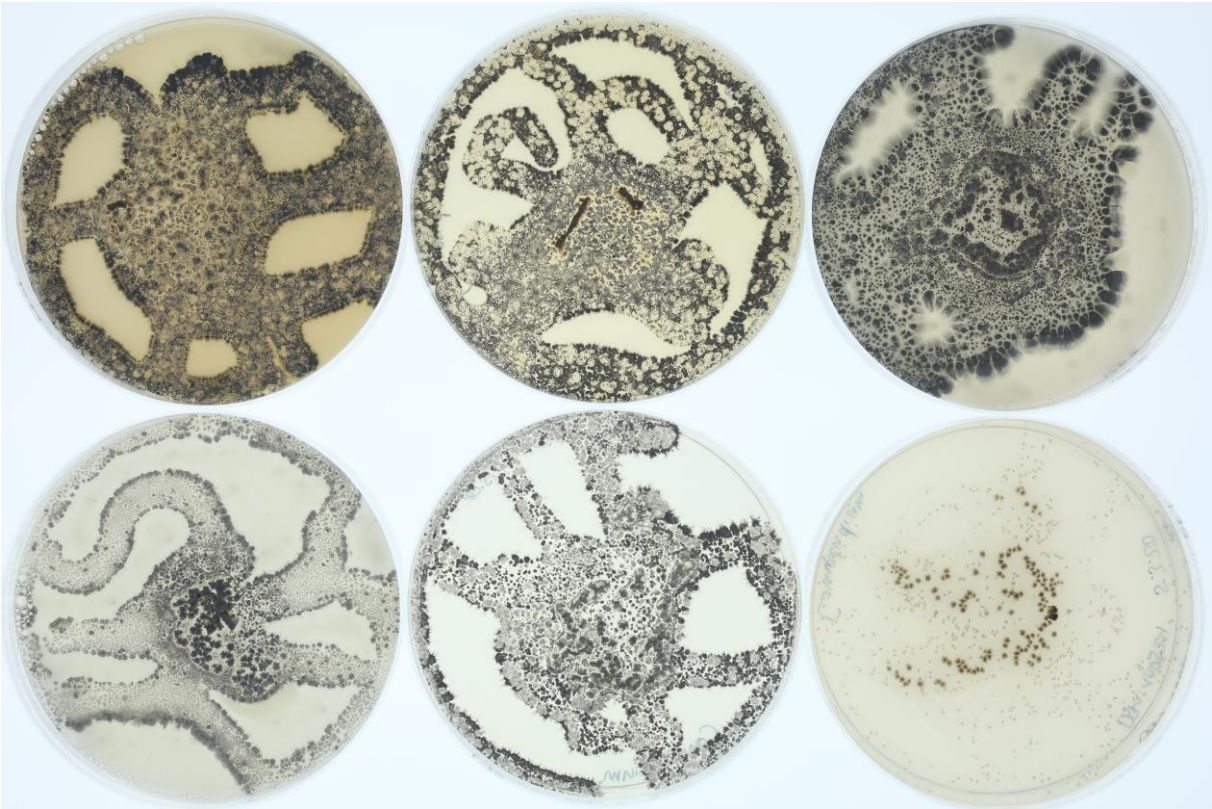
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 100524.

Apizym

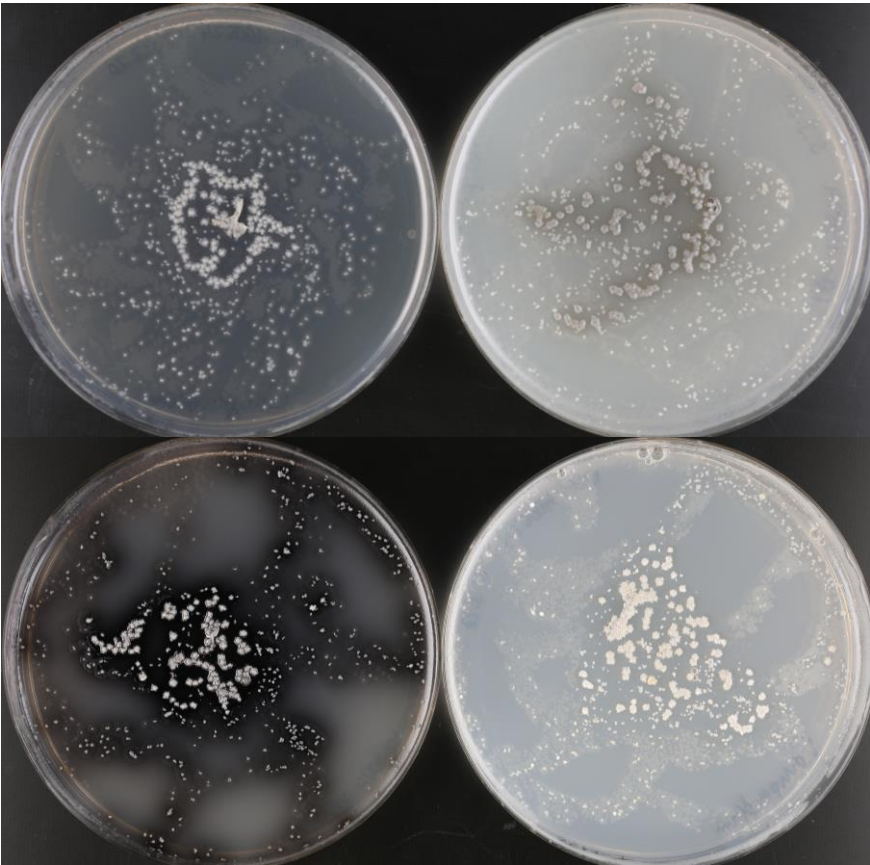
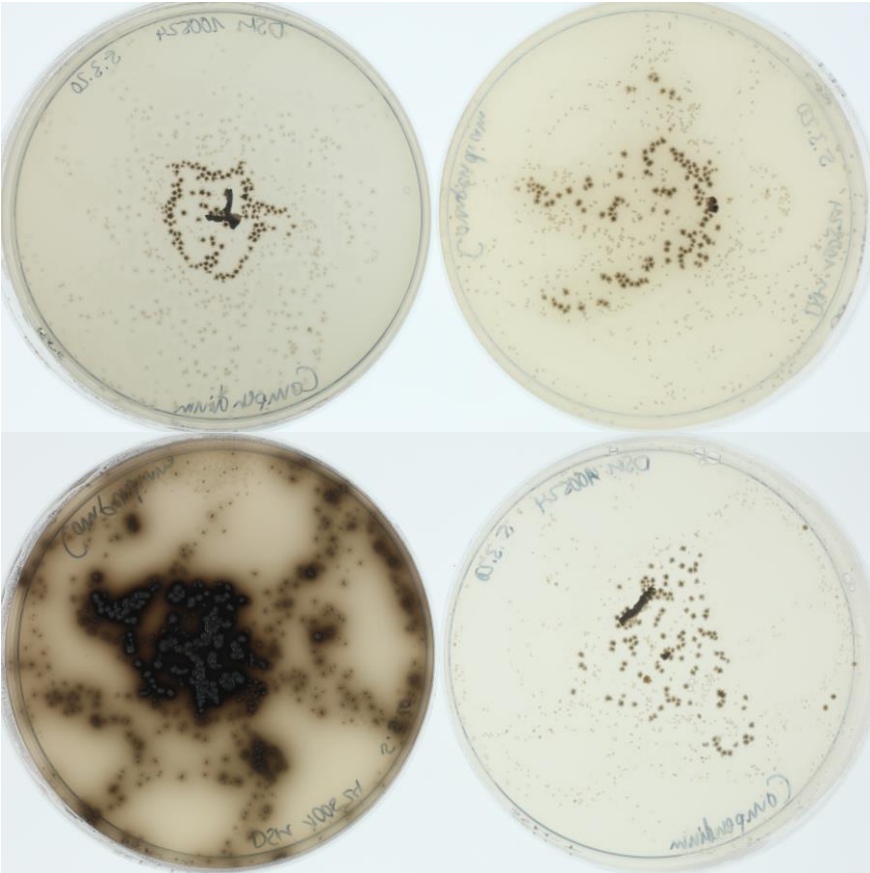


Abbildung 2: Apizym-Teststreifen mit Keim DSM 100524.

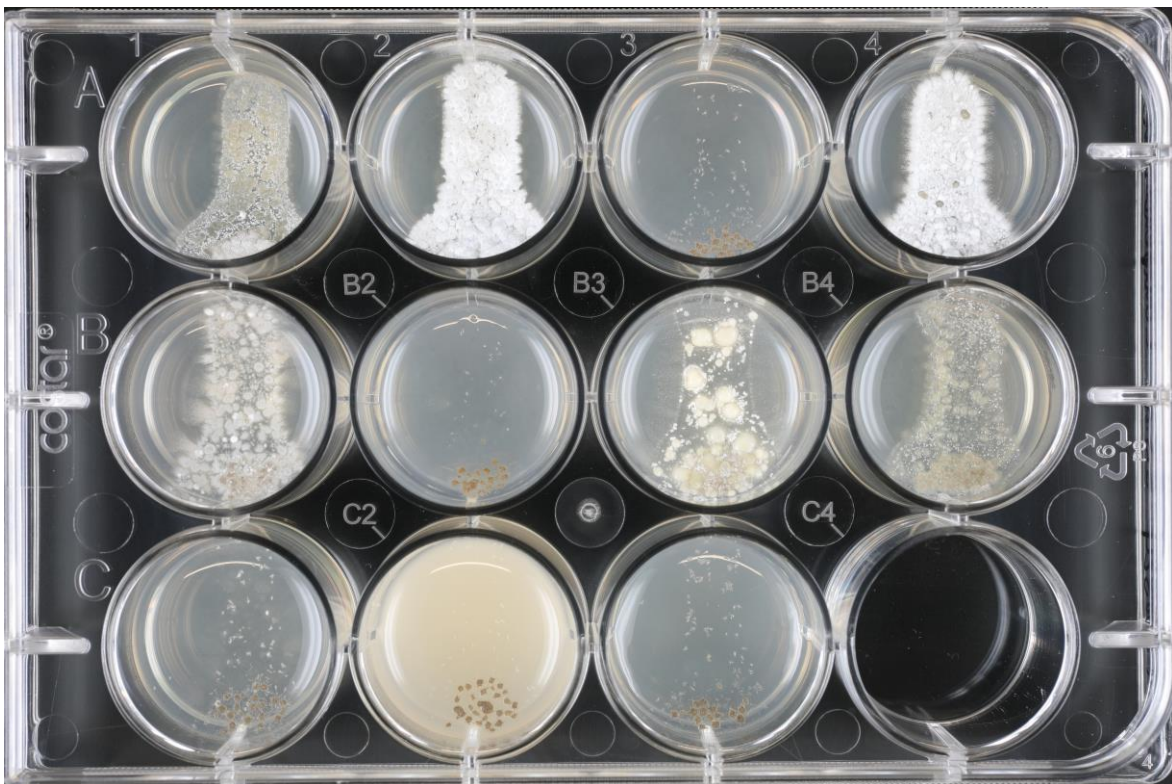
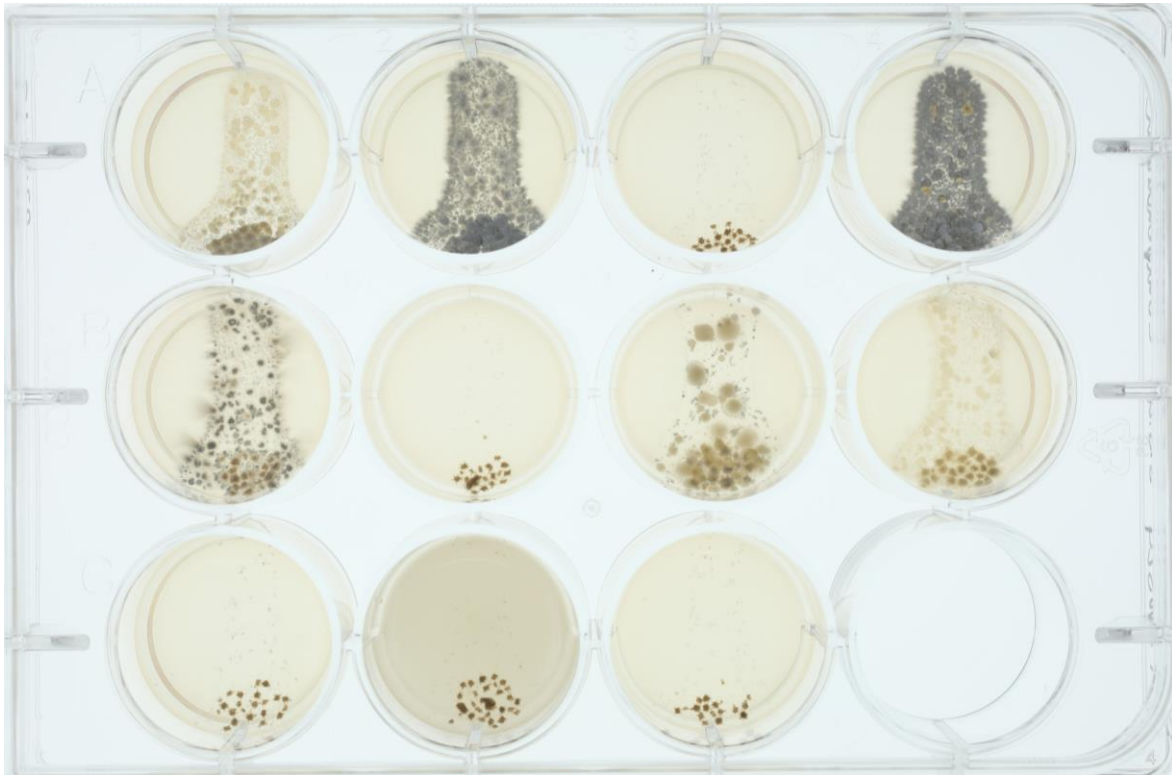
Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)



(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%)

