

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

Strain		DSM 42118
Genus		<b><i>Streptomyces</i></b>
Species		<b><i>alkaliphilus</i></b>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		CECT 8549, No. 7
Genbank accession numbers		16S rRNA gene: <a href="#">KF976730</a>
Reference		
Author		Akhwale, J. K., Göker, M., Rohde, M., Spröer, C., Schumann, P., Klenk, H. P., Boga, H. I.
Title		<i>Streptomyces alkaliphilus</i> sp. nov., isolated from sediments of Lake Elmenteita in the Kenyan Rift Valley
Journal		<i>Antonie Van Leeuwenhoek</i>
Volume		<b>107</b> (5)
Page		1249-59
Year		2015
Morphology		
Agar	ISP 2 - growth/G	sparse
Agar	ISP 2 - colony color/R	colourless
Agar	ISP 2 - aerial mycelium/A	none
Agar	ISP 2 - soluble pigment/S	none
Agar	ISP 3 - G	sparse
Agar	ISP 3 - R	ivory (1014)
Agar	ISP 3 - A	none
Agar	ISP 3 - S	none
Agar	ISP 4 - G	good
Agar	ISP 4 - R	grey beige (1019)
Agar	ISP 4 - A	cream (9001), sparse
Agar	ISP 4 - S	brown beige (81011)
Agar	ISP 5 - G	sparse- good
Agar	ISP 5 - R	traffic yellow (1023)
Agar	ISP 5 - A	none
Agar	ISP 5 - S	none
Agar	ISP 6 - G	sparse
Agar	ISP 6 - R	colourless
Agar	ISP 6 - A	none
Agar	ISP 6 - S	none
Agar	ISP 7 - G	sparse
Agar	ISP 7 - R	colourless
Agar	ISP 7 - A	none
Agar	ISP 7 - S	none
Agar	suter with tyrosine - G	good

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Agar	suter with tyrosine - R	-
Agar	suter with tyrosine - A	ivory (1014), cream (9001)
Agar	suter with tyrosine - S	black brown (8022)
Agar	suter without tyrosine - G	good
Agar	suter without tyrosine - R	-
Agar	suter without tyrosine - A	ivory (1014), cream (9001)
Agar	suter without tyrosine - S	black brown (8022)
	Sporechains/Sporangia	
Physiology		
Melanin		-- ++
pH	range	
pH	optimum	
temperature	range	
temperature	optimum	
sodium chloride tolerance		7,5%
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	4
Api zym	Esterase (C4)	3
Api zym	Esterase Lipase (C8)	2
Api zym	Lipase (C14)	1
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	2
Api zym	Cystine arylamidase	1
Api zym	Trypsin	0
Api zym	Chymotrypsin	0
Api zym	Phosphatase acid	1
Api zym	Naphtol-AS-BI-phosphohydrolase	1
Api zym	alpha galactosidase	1
Api zym	beta galactosidase	1
Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	3
Api zym	beta glucosidase	0
Api zym	N-acetyl-beta-glucoseamidase	0
Api zym	alpha mannosidase	0

Api zym	alpha fucosidase	0
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



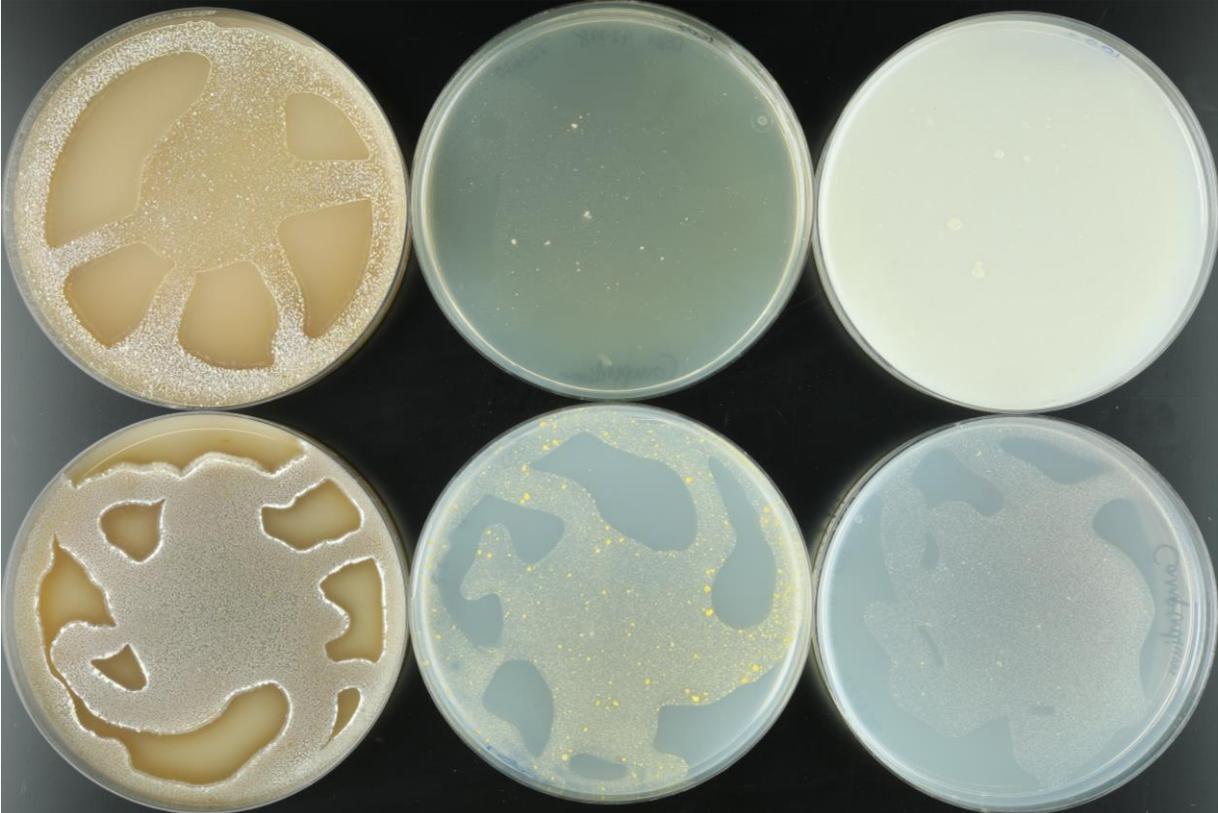
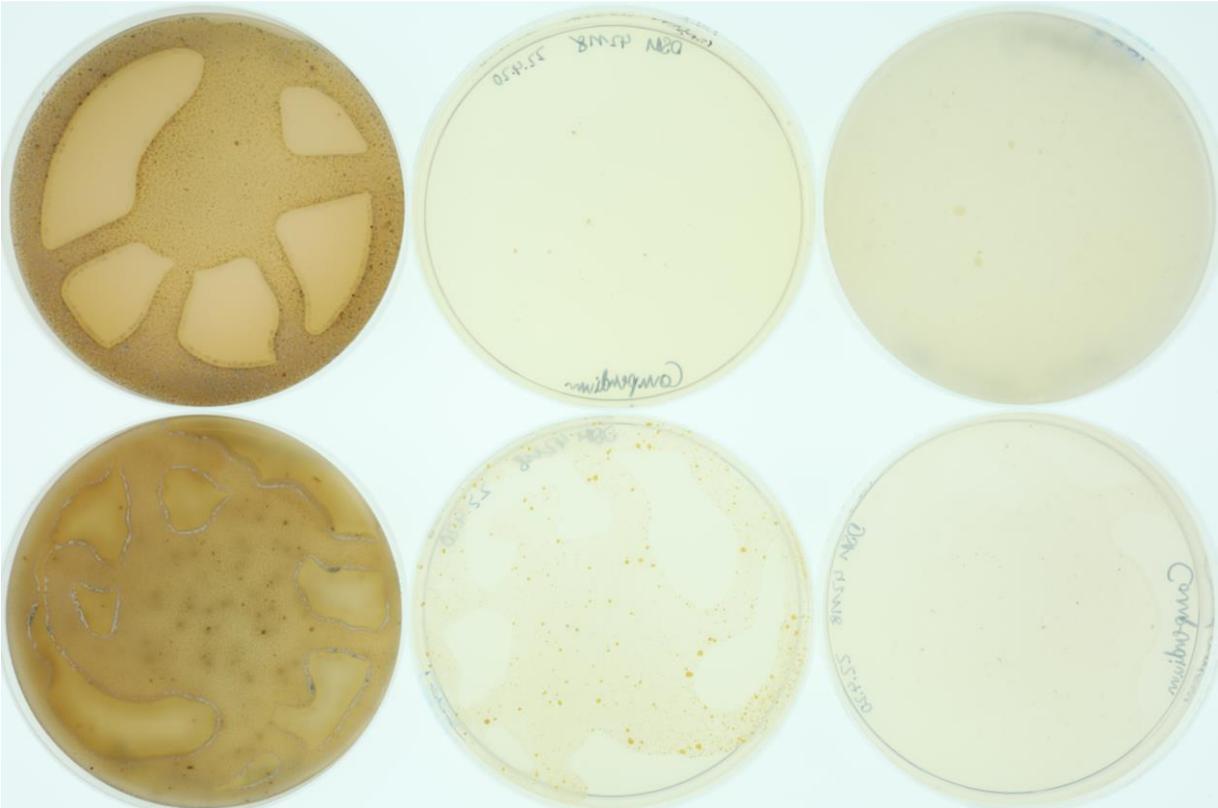
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM 42118.

### Apizym

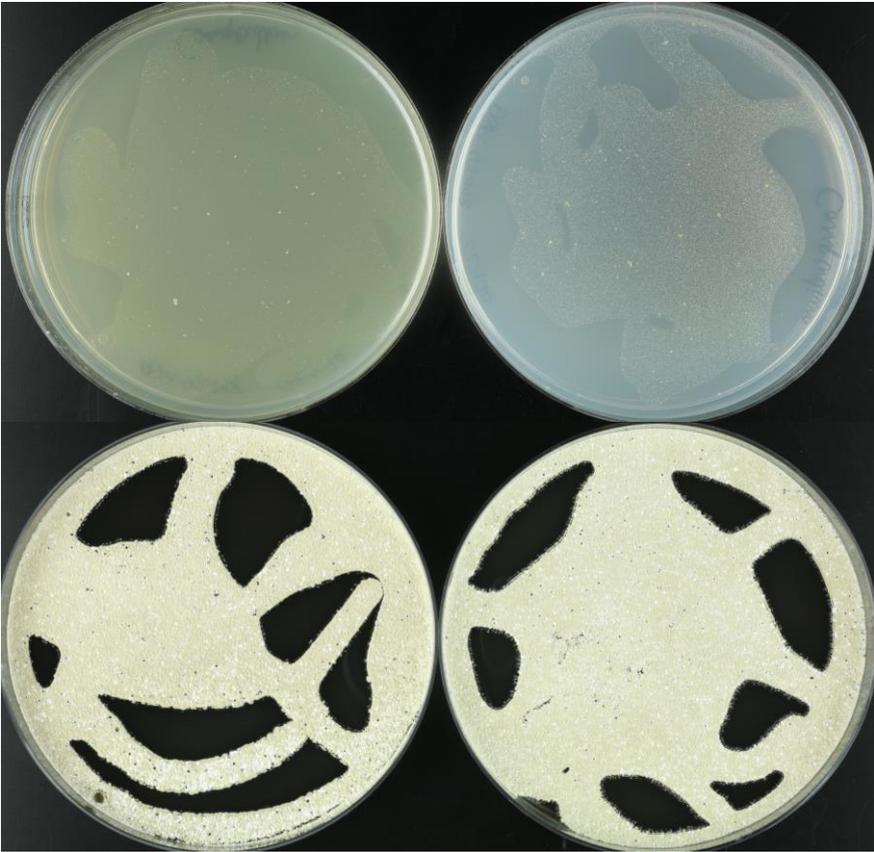


Abbildung 2: Apizym-Teststreifen mit Keim DSM 42118.

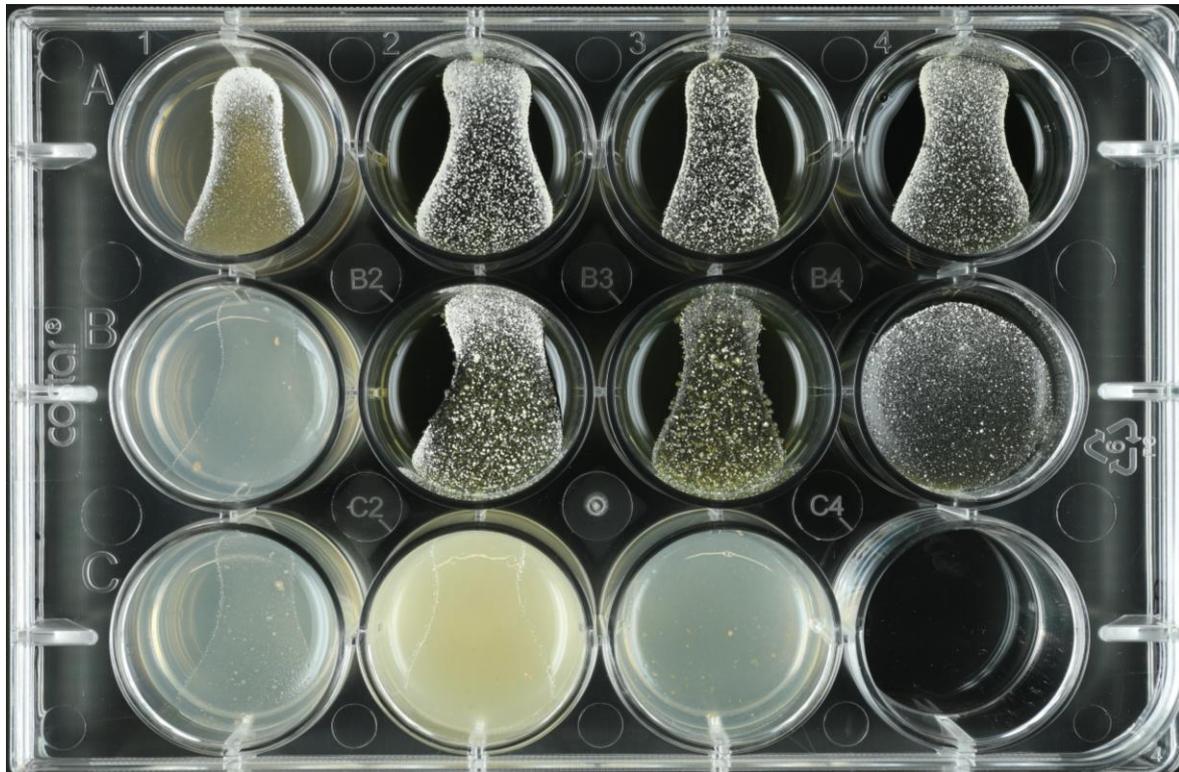
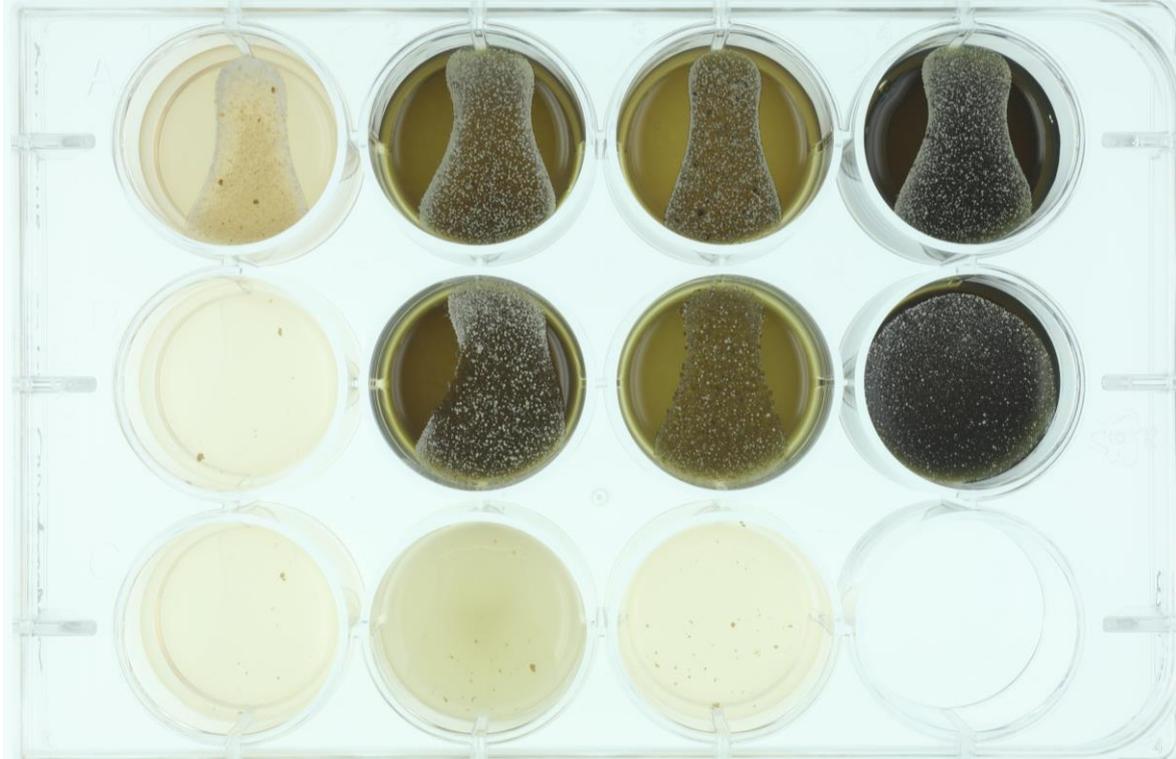
**Plates (65, ISP2, ISP3, ISP4, ISP5, ISP7)**



(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%)**

