

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

Strain		DSM 106290
Genus		<i>Natronoglycomyces</i>
Species		<i>albus</i>
Status		
Risk group		1 (provisional classification by DSMZ)
Type strain		ACPA22; DSM 106290; VKM Ac-2771
Genbank accession number		16S rRNA gene: KY775645
Reference		
Author		Sorokin DY, Khijniak TV, Zakharycheva AP, Elcheninov AG, Hahnke RL, Boueva OV, Ariskina EV, Bunk B, Kublanov IV, Evtushenko LI.
Title		<i>Natronoglycomyces albus</i> gen. nov., sp. nov, a haloalkaliphilic actinobacterium from a soda solonchak soil
Journal		Int J Syst Evol Microbiol
Volume		71
Page		
Year		2021
Morphology		
Agar	ISP 2 - growth/G	Sparse
Agar	ISP 2 - colony colour/R	1014 ivory
Agar	ISP 2 - aerial mycelium/A	None
Agar	ISP 2 - soluble pigment/S	None
Agar	ISP 3 - G	Sparse
Agar	ISP 3 - R	1015 light ivory
Agar	ISP 3 - A	None
Agar	ISP 3 - S	None
Agar	ISP 4 - G	Sparse
Agar	ISP 4 - R	7023 concrete grey
Agar	ISP 4 - A	None
Agar	ISP 4 - S	None
Agar	ISP 5 - G	Sparse
Agar	ISP 5 - R	1015 light ivory
Agar	ISP 5 - A	None
Agar	ISP 5 - S	None
Agar	ISP 6 - G	Sparse
Agar	ISP 6 - R	1002 sand yellow
Agar	ISP 6 - A	None
Agar	ISP 6 - S	None

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

Agar	ISP 7 - G	Sparse
Agar	ISP 7 - R	1015 light ivory
Agar	ISP 7 - A	None
Agar	ISP 7 - S	None
Agar	suter with tyrosine - G	Sparse
Agar	suter with tyrosine - R	1001 beige
Agar	suter with tyrosine - A	None
Agar	suter with tyrosine - S	None
Agar	suter without tyrosine - G	Sparse
Agar	suter without tyrosine - R	1001 beige
Agar	suter without tyrosine - A	None
Agar	suter without tyrosine - S	None
	Sporechains/Sporangia	
Physiology		
Melanin		0
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	0
Api zym	Esterase (C4)	3
Api zym	Esterase Lipase (C8)	4
Api zym	Lipase (C14)	2
Api zym	Leucin arylamidase	5
Api zym	Valine arylamidase	3
Api zym	Cystine arylamidase	0
Api zym	Trypsin	1
Api zym	Chymotrypsin	2
Api zym	Phosphatase acid	0
Api zym	Naphtol-AS-BI-phosphohydrolase	1
Api zym	alpha galactosidase	0
Api zym	beta galactosidase	0

Api zym	beta glucuronidase	0
Api zym	alpha glucosidase	4
Api zym	beta glucosidase	5
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



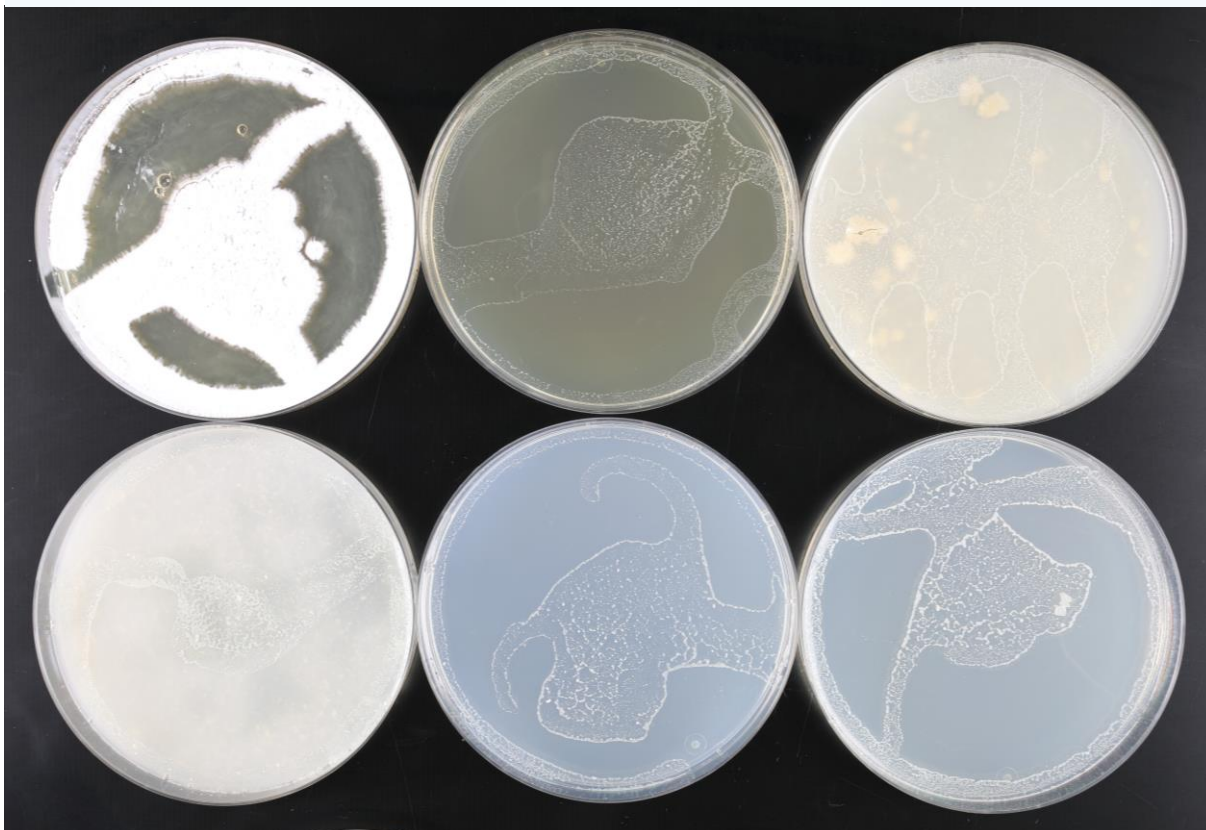
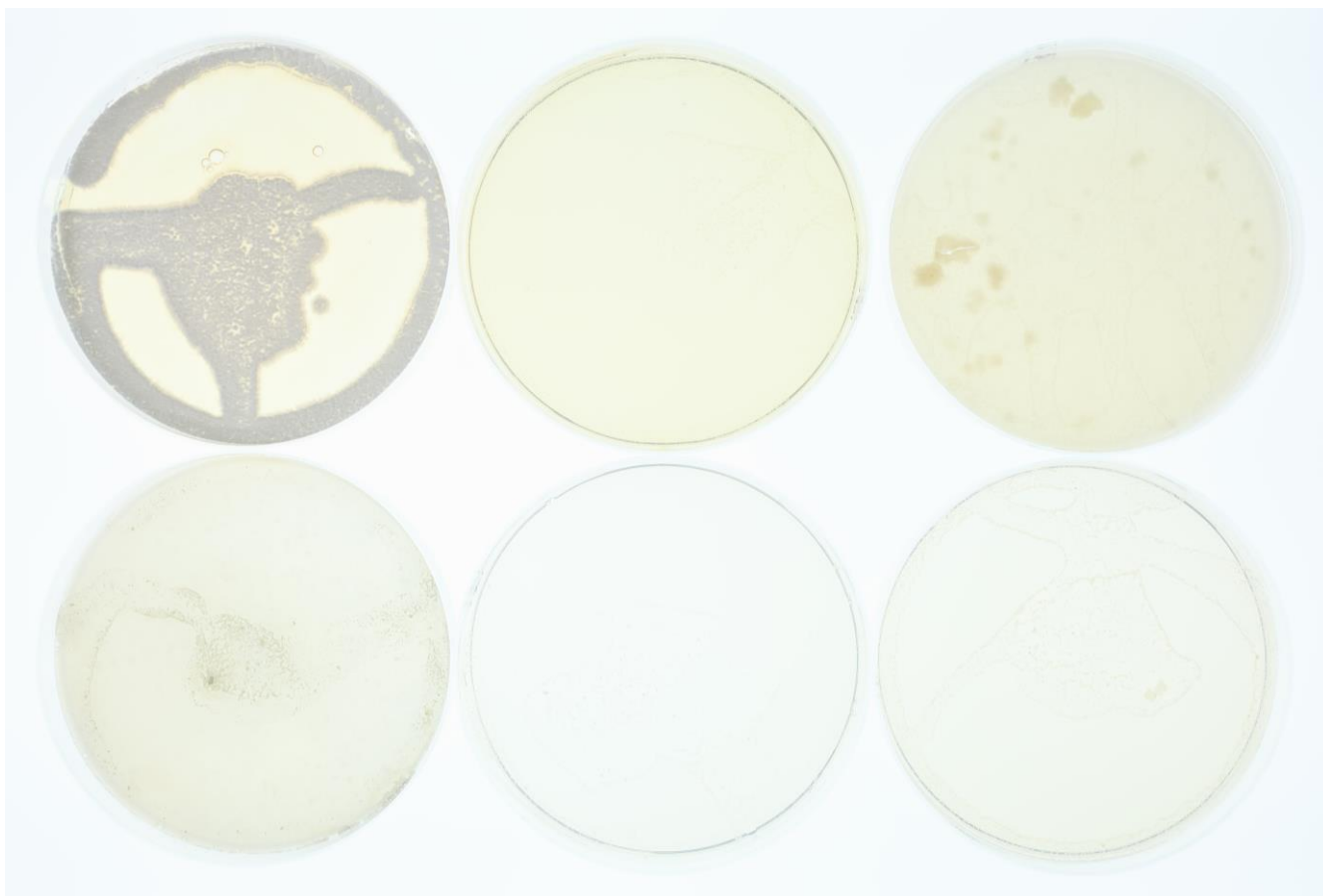
Abbildung 1: Apicoryne-Teststreifen mit Keim DSM.

APIzym



Abbildung 2: Apizym-Teststreifen mit Keim DSM.

Plates (ISP2 + Na₂CO₃-Buffer, ISP2, ISP3, ISP4, ISP5, ISP7)



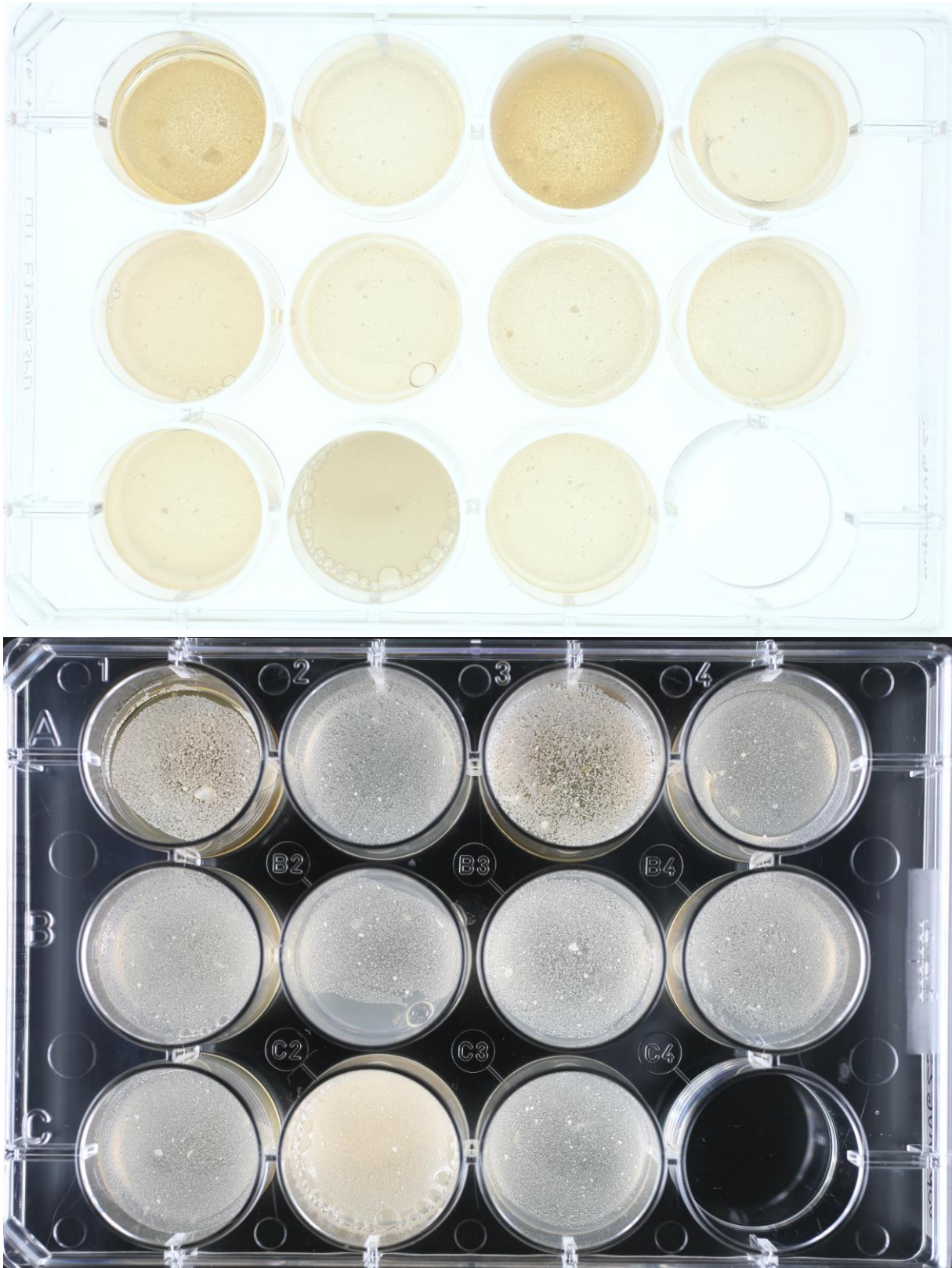
(ISP6, ISP7)



(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%)

