Ain Shams University
Faculty of Pharmacy
Microbiology & Immunology dept.

"Production and Characterization of Some Microbial Surfactants"

A Thesis

Submitted in Partial Fulfillment of the Requirements for the

Master degree
In
Pharmaceutical Sciences
(Microbiology & Immunology)

By

Ahmad Mohammad Abdel-Mawgoud Saleh

Bachelor of Pharmaceutical Sciences,
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و آخر دعوانا أن الحمد لله رب العالمين...

Ahmad M. Abdel-Mawgoud

List of Abbreviations

Abbreviation	*Definition*
BS	Biosurfactant
CFS	Cell free supernatant
CFU	Colony forming unit
CMC	Critical micelle concentration
CSL	Corn steep liquor
C-source	Carbon source
DCT	Drop collapse test
E_{24}	Emulsification index after 24 h
EDTA	Ethylene diamine terta-acetic acid
GMgM	Glucose-magnesium medium
GTE buffer	Glucose-tris-EDTA buffer
HC	Hydrocarbon
HPLC	High performance liquid chromatography
HPTLC	High performance thin layer chromatography
HSS	High salt solution
LB broth	Luria Bertani broth
MMSM	Molasses-Mineral salts medium
MSM	Mineral slats medium
N-source	Nitrogen source
OD	Optical density
ODS	Octadecyl silane
OST	Oil spreading test
PVA	Poly vinyl alcohol

Abbreviation	*Definition*
R_f	Retardation factor
RL	Rhamnolipid
RL homologue	Mono-rhamno mono-lipidic rhamnolipid homologue
RLL homologue	Mono-rhamno di-lipidic rhamnolipid homologue
RP-HPLC	Reversed phase-HPLC
RRL homologue	Di-rhamno mono-lipidic rhamnolipid homologue
RRLL homologue	Di-rhamno di-lipidic rhamnolipid homologue
SDS	Sodium dodecyl sulfate
SF	Surfactin
SMSM	Soy bean oil-MSM
ST	Surface tension
SW agar	Siegmund Wagner agar
TAE buffer	Tris-acetate-EDTA buffer
TE buffer	Tris-EDTA buffer
TES	Trace elements solution
TLC	Thin layer chromatography
TPA	Total peak area
t_r	Retention time
V-P	Voges-Proskauer
Wt	Weight

Contents

Title *Page*

Title *Page*

Title *Page*

Title *Page*

Title *Page*

Title *Page*