



Ain Shams University  
Faculty of Science

# **Separation and Identification of the Components of Acacia Sieberiana Stem Bark Plant Extract and Study its Safety as a Treatment Drug of Diarrhea**

**A thesis submitted for the fulfillment of Master  
Degree of Science in Analytical Chemistry**

**(M.SC)**

**BY**

**Hany Fathy Ahmed Elmezian**

B. Sc. of Chemistry (2006)  
Faculty of Science  
Ain shams University

2016



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**B. Sc. Chemistry (2006)**

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# ABBREVIATION

LIST OF SYMBOLS DESCRIPTION	
<b>AESBAS</b>	Acetone extract of stem bark of Acacia Sieberiana
<b>ANOVA</b>	Analysis of variance
<b>BSTFA</b>	N, O-Bis (trimethylsilyl) trifluoroacetamide
<b>CBC</b>	A complete blood count
<b>CLA</b>	conjugated linoleic acids
<b>g</b>	gram
<b>GC</b>	Gas Chromatography
<b>GC- MS</b>	Gas Chromatography-Mass Spectrometry
<b>Gran</b>	Granule (cell biology)
<b>Hb</b>	Hemoglobin
<b>kg</b>	kilogram
<b>LD50</b>	Lethal Dose, 50%" or median lethal dose
<b>Lymph</b>	Lymphocyte
<b>MCH</b>	Mean Cell Hemoglobin
<b>MCHC</b>	Mean Corpuscular Hemoglobin Concentration
<b>MCV</b>	Mean Cell Volume
<b>mg</b>	milligram
<b>ml</b>	millilitre
<b>Mon</b>	Monocyte
<b>MPV</b>	Mean Platelet Volume
<b>MS</b>	mass spectrometry

<b>NIST</b>	National Institute Standard and Technology library data
<b>OECD</b>	organization of economic corporation and development's
<b>PCV</b>	Packed Cell Volume (Hematocrit)
<b>PDW</b>	Platelet Distribution Width
<b>PLT</b>	Platelets
<b><i>P</i>-values</b>	The probability of obtaining a result the hypothesis under consideration is true
<b>PVC</b>	Packed Cell Volume
<b>RBC</b>	Red Blood Cells
<b>RDW</b>	Red Blood Cell Distribution Width
<b>RT</b>	Retention Times
<b>SD</b>	The standard deviation
<b>SEM</b>	Standard error of mean
<b>TMS</b>	Tri-methyl silyl group
<b>WBC</b>	White Blood Cells
<b>WHO</b>	The World Health Organization