



Faculty of Science
Botany Department

Seed Morphology of Some Taxa of Mimosoideae – Leguminosae

A Thesis Submitted For The Degree of Doctor of Philosophy of
Science in Botany
[Taxonomy of Flowering Plants]

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَنَكَ لَا عِلْمَ

لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ

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Declaration

This thesis has not been previously submitted for any degree at this or any other university.



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Mohamed Mahmoud Moawed

Dedication

To My Dear **Father & Mother**

My **Wife**

My **Brother**

and

My **Daughter**

For their pray, help, advice, support, endurance and

love



Mohamed Mahmoud Moawed

Abstract

The Mimosoideae – Leguminosae is considered as one of the most important subfamily which attracts many taxonomists to deal with it. In this work, 47 taxa of Mimosoideae were investigated using LM & SEM (dealing with seed macro- & micromorphological characters) and seed protein pattern. These taxa represent three tribes, seven genera, 46 species and three subspecies. The macro- and micromorphological criteria (219 attributes) and seed protein pattern attributes (38 bands) of the investigated taxa were numerically analyzed each alone. The sum of 257 attributes were numerically analyzed using NTsys-pc program (version 2.02) by **Rohlf (2000)**. The resulted dendrograms interpret the similarities and dissimilarities between the investigated taxa. The specific and infraspecific relationships were discussed and compared with the current system of classification (**Elias, 1981**).

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