

CURRICULUM VITAE

Dr. John Refaat Fahim Mikhael

Lecturer of Pharmacognosy, Pharmacognosy Department,
Faculty of Pharmacy, Minia University



I- Information:

- **Personal Information:**

- Name: John Refaat Fahim Mikhael
- Date of Birth: 29 March, 1982
- Nationality: Egyptian
- Marital Status: Married
- Military Status: Exempt
- Home Address: 5 Alaa El-Din, Bak Street, Minia, Egypt
- Work Address: Pharmacognosy Department, Faculty of Pharmacy, Minia University, Minia 61519, Egypt.
- Position: Lecturer
- General Specialization: Pharmacognosy and Medicinal Plants
- Specific Specialization: Chemistry of Natural Products

- **Contact Information:**

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II- Qualifications:

- 1- B.Sc. of Pharmaceutical Sciences, excellent with the degree of honour, Faculty of Pharmacy, Minia University, Egypt, May 2003.
- 2- M.Sc. of Pharmacognosy, Faculty of Pharmacy, Minia University, Egypt, April 2009, entitled "Phytochemical and biological studies of *Crinum augustum* Rox. and *Crinum asiaticum* L. family Amaryllidaceae cultivated in Egypt".
- 3- Ph.D. of Pharmacognosy, Faculty of Pharmacy, Minia University, Egypt, June 2014, entitled "Phytochemical and biological studies of *Chorisia chodatii* Hassl. and *Chorisia speciosa* A. St.-Hil. family Bombacaceae cultivated in Egypt".

III- Positions:

1- Demonstrator (October 2003-April 2009):

Pharmacognosy Department, Faculty of Pharmacy, Minia University.

2- Assistant Lecturer (May 2009-June 2014):

Pharmacognosy Department, Faculty of Pharmacy, Minia University.

3- Lecturer (July 2014 up till now):

Pharmacognosy Department, Faculty of Pharmacy, Minia University.

4- Researcher (2012):

Graduate School of Life and Environmental Sciences, Tsukuba University, Tsukuba, Japan (A two-month research grant supported by Japan Society of Promotion of Science (JSPS) under the Asia Africa Science Platform Program entitled: "Establishment of Integrative Research Base by Humanities and Sciences on Valorization of Useful Plants for Regional Development in North Africa" under the mutual co-operation with "Alliance for Research on North Africa (ARENA)", Japan).

IV- Experience:

A) Teaching Experience:

a) Participating in teaching the practical courses and laboratory tutorials of the following (2003-2014):

1- General Pharmacognosy and Medicinal plants for first year students, Faculty of Pharmacy, Minia University, since 2003.

2- Pharmacognosy and Medicinal plants for second year students, Faculty of Pharmacy, Minia University, since 2003.

3- Phytochemistry for third year students, Faculty of Pharmacy, Minia University, since 2003.

4- Applied Pharmacognosy (Chromatography and Spectral analysis of natural products) for fourth year students, Faculty of Pharmacy, Minia University, since 2004.

5- Phytotherapy for fourth year students, Faculty of Pharmacy, Minia University, since 2004.

6- Alternative medicine (elective course for fourth year students), Faculty of Pharmacy, Minia University, (2004-2007).

7- Botany and Medicinal Plants for first semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2006.

8- Pharmacognosy (I) for second semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2007.

9- Pharmacognosy (II) for third semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2007.

10- Phytochemistry (I) for fourth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2008.

11- Phytochemistry (II) for fifth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2008.

12- Quality Control of Medicinal Plants, for sixth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2008.

13- Phytotherapy for eighth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University, since 2012.

b) Participating in teaching the theoretical courses of the following (since 2014):

1- Pharmacognosy and Medicinal plants for second year students, Faculty of Pharmacy, Minia University.

2- Phytochemistry for third year students, Faculty of Pharmacy, Minia University.

3- Applied Pharmacognosy (Chromatography and Spectral analysis of natural products) for fourth year students, Faculty of Pharmacy, Minia University.

4- Pharmacognosy (I) for second semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.

5- Phytochemistry (I) for fourth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.

6- Phytochemistry (II) for fifth semester students, clinical pharmacy programme, Faculty of Pharmacy, Minia University.

B) Research Experience:

1- Isolation of naturally occurring phytochemicals using different chromatographic techniques such as thin layer chromatography, paper chromatography, column chromatography and HPLC.

2- Structure elucidation of various groups of natural products such as alkaloids, flavonoids, triterpenes, sterols, phenolic compounds, etc. using different spectroscopic techniques including UV, IR, 1D and 2D NMR as well as different types of mass spectrometry.

3- Biological evaluation of plant extracts and their phytoconstituents including analgesic, anti-inflammatory, antimicrobial, anti-obesity and antioxidant activities.

C) Practical Experience:

1- Morphological study of medicinal plants.

2- Microscopical study and identification of medicinal plants.

3- Preliminary phytochemical screening of different plant constituents.

4- Extraction of various active compounds from plants.

5- Organic solvent fractionation of total plant extracts.

6- Isolation and purification of active principles from plants using various chromatographic methods.

7- Determination of physical, chemical and chromatographic properties of the isolated phytochemicals.

8- Structure elucidation of natural products using different spectroscopic techniques such as IR, UV, different tools of NMR including 1D ^1H - and ^{13}C -NMR, and 2D techniques such as ^1H - ^1H COSY, HETCOR, HMQC, HMBC, NOESY, ROESY, TOCSY, in addition to various mass spectrometry analyses such as EI, CI, FD, FAB, ESI methods.

- 9- Quantification of active constituents of medicinal plants.
- 10- Determination of total polyphenol contents of medicinal plants.
- 11- Preparation and GC/MS analysis of plant volatiles.
- 12- Preparation and analysis of the unsaponifiable matter and fatty acids content of plants using GC/MS technique.
- 13- Biological investigation of plant total extracts and different fractions as well as the isolated phytochemicals (e.g. antibacterial, anti-inflammatory, antioxidant and analgesic activities).
- 14- Investigation of the effects of plant extracts and their phytoconstituents on adipogenesis using 3T3-L1 cells.

V- List of Publications:

1) "Antifouling alkaloids from *Crinum augustum* (Amaryllidaceae)"

J. Refaat, A.A. Abdel-Lateff, M.S. Kamel, A.A. Ali, M.A. Ramadan, T. Okino and Y. Nogata, *Pharmacognosy Research*, 2009; 1(2): 43-52.

2) "GC-MS studies of *Crinum asiaticum* L. leaves and flowers"

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *Research Journal of Pharmacognosy and Phytochemistry*, 2011; 3(5): 232-235.

3) "Analgesic, Anti-inflammatory and Antimicrobial activities of *Crinum augustum* Rox. and *Crinum asiaticum* L."

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *Research Journal of Pharmacognosy and Phytochemistry*, 2011; 3(6): 289-296.

4) "*Crinum*; an endless source of bioactive principles: A Review. Part 1- *Crinum* Alkaloids: Lycorine-type alkaloids"

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *International Journal of Pharmaceutical Sciences and Research*, 2012; 3(7): 1883-1890.

5) "*Crinum*; an endless source of bioactive principles: A Review. Part 2- *Crinum* Alkaloids: Crinine-type alkaloids"

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *International Journal of Pharmaceutical Sciences and Research*, 2012; 3(9): 3091-3100.

6) "*Crinum*; an endless source of bioactive principles: A Review. Part 3- *Crinum* Alkaloids: Belladine-, Galanthamine-, Lycorenine-, Tazettine-type alkaloids and other minor types"

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *International Journal of Pharmaceutical Sciences and Research*, 2012; 3(10): 3630-3638.

7) "Crinum; an endless source of bioactive principles: A Review. Part 4- Non-alkaloidal constituents"

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *International Journal of Pharmaceutical Sciences and Research*, 2013; 4(3): 941-948.

8) "Crinum; an endless source of bioactive principles: A Review. Part 5- Biological profile"

J. Refaat, M.S. Kamel, M.A. Ramadan and A.A. Ali, *International Journal of Pharmaceutical Sciences and Research*, 2013; 4(4): 1239-1252.

9) "Bombacaceae: A Phytochemical Review"

J. Refaat, S.Y. Desoukey, M.A. Ramadan and M.S. Kamel, *Pharmaceutical Biology*, 2013; 51(1): 100-130.

10) "Bombacaceae between the ethnomedical uses and pharmacological evidences: A Review"

J. Refaat, S.Y. Desoukey, M.A. Ramadan and M.S. Kamel, *The Natural Products Journal*, 2014; 4(4): 254-270.

11) "Comparative polyphenol contents, DPPH radical scavenging properties and effects on adipogenesis of *Chorisia chodatii* and *Chorisia speciosa*"

J. Refaat, S.Y. Desoukey, M.A. Ramadan, M.S. Kamel, J. Han and H. Isoda, *Journal of Herbal Drugs*, 2015; 5(4): 193-207.

12) "Chemical constituents from *Chorisia chodatii* flowers and their biological activities"

J. Refaat, M. N. Samy, S.Y. Desoukey, M.A. Ramadan, S. Sugimoto, K. Matsunami and M.S. Kamel, *Medicinal Chemistry Research*, 2015, 24(7), 2939-2949.

13) "Rhoifolin: A review of sources and biological activities"

J. Refaat, S.Y. Desoukey, M.A. Ramadan and M.S. Kamel, *International Journal of Pharmacognosy*, 2015; 2(3): 102-109.

14) "Production of rhoifolin and tiliroside from callus cultures of *Chorisia chodatii* and *Chorisia speciosa*"

J. Refaat, G. A. Hegazi, R. E. Abo El-Fadl, M. R. Abd El-Magid, S.Y. Desoukey, M.A. Ramadan and M.S. Kamel, *Phytochemistry Research*, 2015; 13, 218-227.

15) Participated in writing the following chapter in the annual book of the Alliance for Research on North Africa (ARENA) under the title:

"Biological evaluation of *Chorisia chodatii* Hassl. and *Chorisia speciosa* A. St.-Hil."

J. Refaat, S.Y. Desoukey, M.A. Ramadan, M.S. Kamel, J. Han and H. Isoda, March 2013; 4-18.

- 16) "Botanical studies of the leaf of *Melissa officinalis* L., Family: Labiatae, cultivated in Egypt".**
W.A. Abdel-Naime, **J. Refaat**, M.A. Fouad M.S. Kamel, *Journal of Pharmacognosy and Phytochemistry*, 2016; 5, 98-104.
- 17) "Chodatiionosides A and B: two new megastigmane glycosides from *Chorisia chodatii* leaves".**
M.N. Samy, **J. Refaat**, S. Sugimoto, H. Otsuka, K. Matsunami and M.S. Kamel, *Journal of Natural Medicines*, 2017; 71, 321-328.
- 18) "The Genus *Rhodococcus* as a source of novel bioactive substances: A review".**
Y. Elsayed, **J. Refaat**, U.R. Abdelmohsen and M.A. Fouad, *Journal of Pharmacognosy and Phytochemistry*, 2017; 6, 83-92.
- 19) "Botanical studies of leaves of *Malvaviscus arboreus* Cav. family: Malvaceae, cultivated in Egypt".**
O.H. Abdel Hafez, **J. Refaat**, U.R. Abdelmohsen and S.Y. Desoukey, *Journal of Pharmacognosy and Phytochemistry*, 2017; 6, 149-153.
- 20) "Rhodozepinone, a new antitrypanosomal azepino-diindole alkaloid from the marine sponge-derived bacterium *Rhodococcus* sp. UA13".**
Y. Elsayed, **J. Refaat**, U.R. Abdelmohsen, S. Ahmed, M.A. Fouad, *Medicinal Chemistry Research*, 2017, 26(11), 2751-2760.
- 21) "Metabolomic profiling and biological investigation of the marine sponge-derived bacterium *Rhodococcus* sp. UA13".**
Y. Elsayed, **J. Refaat**, U.R. Abdelmohsen, E.M. Othman, H. Stopper, Fouad MA, *Phytochemical Analysis*, 2018, 29(6), 543-548.
- 22) "Hepatoprotective potential of *Malvaviscus arboreus* against carbon tetrachloride-induced liver injury in rats".**
O.H. Abdelhafez, M.A. Fawzy, **J. Refaat**, S.Y. Desoukey, M. Krischke, M.J. Mueller, U.R. Abdelmohsen, *PLoS ONE*, 2018, 13(8), e0202362.
- 23) An overview on the chemical and biological aspects of lycorine alkaloid".**
M. Khalifa, E.Z. Attia, **J. Refaat**, Kamel M.S., *Journal of Advanced Biomedical and Pharmaceutical Sciences*, 2018, 1(2), 41-49.
- 24) "The phenolic profile of pea (*Pisum sativum*): a phytochemical and pharmacological overview".**
J. Refaat, E.Z. Attia, Kamel M.S., *Phytochemistry Reviews*, 2019, 18, 173-198.

VI- Workshops:

Attended and successfully completed the following workshops within the Faculty and Leadership Development Project (FLDP) in Egypt:

- 1- Skills of Thinking (July 2005).
- 2- Code of Ethics (August 2005).
- 3- Skills of Effective Communication (May 2007).
- 4- Skills of Effective Presentation (May 2007).
- 5- Skills of Effective Teaching (June 2007).
- 6- Quality Assurance and Accreditation (June 2007).
- 7- Organization of Scientific Conferences (June 2009).
- 8- International Scientific Publishing (July 2009).
- 9- Applying Technology in Teaching (July 2009).
- 10- Systems of Exams and Students evaluation (July 2009).
- 11- Meetings and Time Management (July 2009).
- 12- Strategic Planning (October 2009).
- 13- Endnote (January 2015).

VII- Participation in Accreditation Programs:

Participating in different activities in the "Quality Assurance and Accreditation Project (QAAP)" in addition to the "Continuous Improvement and Qualifying for Accreditation Project (CIQAP)" such as preparation and revision of action plans, budget, academic standards, academic criteria, curriculum, gap analysis, accreditation standards, workshops, ...etc., Faculty of Pharmacy, Minia University, since 2005.

VII- Skills:

B) Languages Skills:

- 1) Arabic : Mother Tongue.
- 2) English : Reading and Writing: Excellent- Listening and Speaking: Very Good
- 3) French : Fair.

C) Self-Studies: has got the "ICDL" in June 2010.