



Prof. Dr. Mohammed Hmamouchi
 President of the Arab Federation Aromatic and medicinal plants
 Pr. Faculty of Medicine and Pharmacy, Rabat, Morocco
 Founder and ex Director of National Institute of Medicinal and Aromatic Plants
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Fields Specialization:

Education, R/D/I, Agro-industries, Health,
 Pharmaceutical, Cosmetic, Herbs and Environment

Current employment and position/title:

President of Arab Federation of Medicinal, Aromatic Plants, Founder and ex Director of National Institute of Medicinal and Aromatic Plants and other environmental initiatives including Administration of large-scale projects, Strategies management in Natural Products and Medicinal / Aromatic Plants including Conservation, Education, Valorization, Monitoring, Research / Innovation, Rural developments, Processing technologies, Marketing and Business Development, mainland medium businesses, investment, Management and Project Finance, Evaluation, Production, Management and Human Resource Development.

Professional background:

Mohammed Hmamouchi is specialist in Phytochemistry and Medicinal, Aromatic Plants, Natural Products and has a PhD in Phytochemistry and Natural Products from University Laval, Canada in 1986, a Master degree Sciences (Chemistry) from Mohamed V University, Rabat, Morocco in 1982 and a B.Sc. (1978). After his graduation, Dr. Hmamouchi worked as a teacher from 1971. September 1987, he joined Research group in Faculty of medicine and pharmacy, Rabat to set-up and run the Natural products Research Unit program as a Senior Scientist for twenty two years, Head/Director. October 1999 to 2009, he became for ten years Director of Moroccan National Institute of Medicinal, Aromatic Plants and Natural Products where he was responsible for the development and implementation of national environmental policies and he setup works in Moroccan program in natural products. He was also the focal point of different international conventions and agreements, especially the National coordinators of Networks and international projects. He was appointed in 2010 as President of the Arab Federation of Medicinal and Aromatic plants to coordinate and develop a strategy management, including Research / Innovation, Valorization, Monitoring, Storage, Production, and Communication.

Dr. Hmamouchi also served as Interim Chair of the Department of Pharmacology and Biology Metz University in French (2001 and 2009).

Experience in Research/ Development:

The focus of Dr. Hmamouchi' research involves investigating the Conservation, Innovation, Production, Ethno botanical, Phytochemistry, Structure elucidation, Biological activities, Constituents with Antimicrobial, Antifungal, Antiradical, Anti-oxidant, Antiviral, Antiparasital, Anti diabetic, Anti-inflammatory, Hypertonic, Immunostimulating and Antiviral activity, Standardization and development pharmacological screening of plants and Isolated bio active.

Dr. Hmamouchi' research involves a variety of techniques ranging from growing to production and development strategies of new natural products. He published over 80 publications in high quality peer-reviewed international journals; he is a standing member of several professional societies, received many grants and awards such as the prestigious ISESCO (1997), President of the Republic of Tunisia (2001) and European Business Innovation (Clusters) in 2009.

Experience in Publications:

His academic publications, both in the form of books, articles, Patent in several fields in Natural Products and Medicinal / Aromatic Plants, Nutraceuticals, Pharmaceutical, Cosmetic, Perfumer, Agro-industries.

Work published in J. of Ethno pharmacology, J. Phytochemistry, Journal of Polymer sciences, J. American Chemical Society, Macromolecules, The Journal of Essential Oil Research, Phytomedicines, Journal of Ethno Biology and Ethno Medicine, Tetrahedron Letters, Journal of Organic Chemistry, J. Am. Chem. Society, J. of Nat. Product, J. International de Phytotherapy, Pharmaceutical Biology, Journal of Pharmacy and Pharmacology, Pharmacological Research, Fitoterapia, Fundamental & Clinical Pharmacology, Therapies, Pharmazie, Phytopathologia Mediterranean, The British Journal of Nutrition, Pest Management Science and others....

Experiences on Environmental, Economic and Social Policy:

Head of National Institute of Medicinal, Aromatic Plants and Natural Products (8 years), responsible for the conception and implementation of the PAM national plan for agricultural, transformation, research and extension. Also responsible for national and regional development, rural development, development of agricultural cooperative movements, PME/PMI, integration of women in PAM agricultural policy, etc.

He also contributed to the establishment of small businesses in rural environments.

He involved in the mobilisation of Civil Society and Public Opinion to promote nature conservation, the fight against the overexploitation of natural resources, the degradation of biodiversity, whilst defending the idea of the equitable sharing of the benefits arising from natural resources.

Experience in international collaboration:

Mohamed Hmamouchi has developed his experience through works with Moroccan and international institutions, Companies, ONG and international level with many institutions in: Morocco, United States (U.S.A), Canada, France, Spanish, Italy, Turkey, Romania, Belgium, Greece, Cyprus, Holland, Switzerland, Egypt, Tunisia, Jordan, Palestine, Senegal, Algeria, E.U., OMS, AUPELF-UREF, GTZ and Arab countries....

Experience in Education and Communication:

Mohamed Hmamouchi has regular appearances on TV on national and international Radio, TV, (TVM, 2M, MEDISAT, France II, Aljazeera, NBC, and publication in different News Journals.

He has been regular guest at the conferences and Panel organizer, member of the advisory board and the organizing committee of many national and international meeting.

I- PERSONAL DATA**Name:** M. HMAMOUCHI**Surname:** MOHAMMED

POSITION: -Professor Faculty of medicine and pharmacy, Rabat, Morocco
 -President of the Arab Federation of Medicinal and Aromatic Plants: 2010 -----
 -Director, National Institute of Medicinal, Aromatic Plants: 2004 - 2009

EXPERIENCES PROFESSIONALS: 39 years**Contact Information**

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Subject Specialization Area of Research Natural Products and Medicinal / Aromatic Plants
 Plant Improvement
 Agro-industries, Health, Nutrition, Nutraceuticals, Pharmaceutical, Cosmetic and Herbs

EDUCATION QUALIFICATION**Biographical data: (1971 - 1986)****Qualifications**

Year	Degree/Diploma	University/Institution
1971	Baccalaureate: Sciences,	Fes , Morocco
1978	DEA (B.Sc): Chemistry,	University Med V. Rabat. Morocco,
1982	Thesis: Doctorate of 3cycle in Chemistry. Morocco,	University Med V. Rabat.
1986	Ph.D: Phytochemistry in Natural products and macromolecular (Centers of Engineers of macromolecular); Faculty of Sciences and Engineers. University Laval, Quebec, Canada	

LANGUAGES: French, Arabic, English

WORK HISTORY and EMPLOYMENT

Years	Employer	Department	Title	Responsibilities
2010	Minister of Higher Education,	Arab Federation of Medicinal, Aromatic Plants	President	Responsible for the Management and the Coordination of activities related to Medicinal and Aromatic Plants (to Develop a Strategy Management, Including Research / Innovation, Valorization, Monitoring, Communication.....).
2002 to 2009		National Institute of Medicinal, Aromatic and Natural Products	Director	Responsible for the Establishment of the National Institute for Plant Research at Medicinal /Aromatic Moroccan and natural products. Responsible at all stages of a development project, from identification to economical studies, technical assistance, building set up business, supervise and fire staff.
1987 to 2009	University Faculty of Medicine and Pharmacy	Chemistry, Biology and Pharmacology	Senior Lecturer, Full Professor	Responsible of high level courses, participation in courses of analytical chemistry, organic and Natural Products. Design, and supervise management of training courses and teaches to large classes, typically 100-500 students. Carry out Phototherapy treatment sessions. Publish and edit books. Organize biennial, congress, meeting international.
2001, 2009	Academy of Nancy, French.	Biology and Pharmacology	Professor Invited	Participation in courses and conference and seminars
2000 to 2009	Ministry of Higher Education	National Moroccan Network	National Coordinator	Responsible of high level courses and R/D programs, Herbal Medicines, Research Methods, Research Projects, Identification, conservation, valorization and use of medicinal and aromatic plants
1997 to 2005	University Faculty of Medicine and Pharmacy	UFR(Unity of Formation and Research in Natural products) Chemistry, Biology and pharmacology	Director Professor	He designed and executed R/D programs. Participation in level high R/D (Doctorate, PhD.)
1982 to 1987	University Laval, Canada	Engineers Chemistry Natural products	Research Assistant,	Researcher, he executed research programs
1978-1982	Ministry of Education	Chemistry	Professor	Participation in courses and teaches first-year chemistry to large classes, typically 100 students and Member of the exam boards, assessment committees and of the curriculum committees.

KEY EXPERIECES

- Expertise in knowledge, valorization and economically important in medicinal/aromatics plants
- Rural development, agriculture and agro-industry for sustainable development such as training Workshops, ,
- Involved in purchasing, installing and maintaining laboratory and field equipment,
- Technology to process medicinal and aromatic herbs (gowning, hydro distillation, liquid - liquid extraction, solid liquid extraction, lyophilization, solvent extraction, formulation, analysis and quality control...),
- Proceeding to grow medicinal and aromatic plants for conservation and valorisation in situ and ex situ,
- Proceeding to obtain Natural extracts, conventional natural products, drugs to traditional medicine, analyse, standardized and bio active Natural compounds,

Research focus:

- Scientific research include studies on ethno botanical, phytochemical, antimicrobial, antifongical, antiradical, anti-oxidant, antiviral compounds from plants and herbs used in traditional Moroccan medicine,
- Ethnobotanical, ethno ecological, ethno medical knowledge, food-medicines Food ethno botany, Traditional Knowledge (TK) on use and management of wild, semidomesticated, and neglected food plants,
- Medical ethno botany, Traditional Medicines (TMs), and ethno veterinary use and perceptions, medical provision of health care or for improving the quality of dairy products and related outcomes for public health/nutrition policies and strategies,
- Sustainable use of bio-diversity and agro-bio-diversity (i.e. small-scale harvesting and trade of local food products and medicinal herbs; eco-tourism; rural development),
- Potential hits for the ethno pharmacological research, for the modern clinical Phytotherapy, and for the medical herbalism as well,
- Bioactivity-guided isolation, characterization and structure elucidation of natural products from higher plants, the biological evaluation of natural products,
- Engineering of gowning, extraction, formulation, analysis, synthesis, hemisynthesis proceeding of natural products, Some aspects concerning Phytochemistry and fitobiology,

EXPERTISE: CBD (GTZ), FEM-4 5PNUD), WHO/EMRO, FIDA-ICARDA, AUF, Arab Union WMAP....
Joint Commission Interuniversitaire, Morocco-Spain, Morocco - Tunisia, National Commission CNAE....)

- International expertise : Access and Benefit sharing ; Capacities Building Initiative for Africa; Capacity building for APA in Africa to the Maghreb, West Africa and the islands of the Indian Ocean on Access and Benefit Sharing. Convention on Biological Diversity, GTZ, the Germano-Dutch initiative of strengthening the capacity of ABS in Africa, the Moroccan Ministry of Territory Planning, Water and Environment, and the High Commission for Water Forests and the Fight Against Desertification, 2007, 2008,2009,
- International expertise: Resource Committee, Evaluation Document Preparatory Phase Project Integration of Biodiversity in the component sectors of WFP Mediterranean – Morocco, SUBJECT: ID PROJECT AGENCY FEM: 4050. Name of Project:: Mainstreaming Biodiversity Conservation of chains of medicinal and aromatic plants Mediterranean, Value Chains in Morocco;
- FEM-4 STRATEGIC PROGRAMS: SP5 Promotions markets for goods and services of biodiversity, 2009
- International expertise: Arab/Asia countries group FIDA-ICARDA, Syria, 2006,
- International expertise: participant on WHO/EMRO future strategy on traditional medicine which guide our technical assistance to the countries in the area. Regional consultation on

Development of EMRO Guidelines for National Policies on Traditional Medicine, Emirate arable Unie, 2005,

- National Expert: National commission of Ministry of Higher Education, Scientific research. Morocco, 1997,
- National Expert: Joint Commission Accreditation and Evaluation, CNAE, DESA, DOCTORAT, 2002,
- International expertise: Joint Commission Interuniversitaire, Morocco-Spain, 2003,
- International expertise : Expertise research projects Morocco-Tunisian, 2000/20001,
- National Expert: Moroccan Association Research / Development. Morocco,1998,
- International expertise courses: Herbs, Phytotherapy, Cosmetic(University Andalou- Morocco, International Atomic Energy Agency/Technical Cooperation, Regional (AFRA) Training Course on Irradiation of Aromatic and Herbal Plants, French Universities, 2009,

OTHER CONSULTANCIES /ABILITIES:

- Assistance at all stages of a development project, from identification to economical studies, provision
- of technical assistance , implementation and technical, project management,
- Modernization technology, Installation processing factory for growing, extractor, analytical and production for cosmetic, perfumer, medicine conditioning, growing, extraction, qualities, formulation,
- Information's in Ethno botany-pharmacology, Chemistry.....,
- Aanalysis, economically, integration of Medicinal Plants, and Natural Medicine,
- Design, Realization, Coordination projects and run to work of the following installations on MAP Garden, pilot and platform(example: National Institute of Medicinal, Aromatic and Natural Products),
- Current activities include ethno botanical surveys and economic mapping, domestication, conservation, and utilization, through the introduction of systematic cultivation mostly of exploited natural flora,
- Valorization of medicinal plants, and their use by population and establishing a format application by contacting traditional herbalist,
- Managment and Evaluation of project and Establishment of joint society for producing herbal extracts.

SOCIO ECONOMIC/DEVELOPMENT ACTIVITIES

Implementation and coordination of projects relating to economic and social development within Human Development focused on PAM (see list of projects to 5.2)

RESEARCH / DEVELOPMENT ACTIVITIES

- Coordinator and heads several research projects at national and international;
- Establishment of several agreements and partnerships;
- Directed Studies Research / Development;
- Organization of seminars, workshops ... Search. ;
- Organizer Congress and scientific events nationally and internationally;
- Participation in conferences, seminars, workshops (national and international);
- conferences nationally and internationally;
- Publications and scientific papers;
- publication of book;
- Patents;
- Participation in Board theses nationally and internationally;
- Supervision of post-graduate research students, PhD, MSc, MPharm, BSc;
- More 50 Thesis in medicinal and aromatic plants was prepared;
- External examination of PhD students.

MARKET RESEARCH

-Expert serves as a resource to Market research services for customized marketing research in industries or areas related to PAM and natural Products (Agro-industries, Health, Nutrition, Nutraceuticals, Pharmaceutical, Traditional medicine, Cosmetic and Chemistry).

-Experts are an invaluable source of overall industry insight as well as insight into specific companies and firms for custom business to business (b2b) and industrial market research from Guideline who's Research Directors manage the research and analysis of the qualitative and quantitative data as well as report writing for the custom studies. The methods and tools used by our market research combine the insights of technical experts and industry insiders with secondary research to provide the custom b2b and industrial market research you need.

INVENTION (PATENTS) and PUBLICATIONS

Title	Edition
BOOK: 2 1- Medicinal and Aromatic Morocco Plants /Les Plantes Médicinales et Aromatiques Marocaines. 450 pages. 1999. Feddala. MOROCCO, IBSN/ 9954-8007-0-0.	1 st edition 1999, 2nd edition 2001
2- Invest in medicinal and aromatic plants / Investir dans les plantes médicinales et aromatiques, Livre de 250 pages. 2002 Feddala. MOROCCO, IBSN/ 9954-8007-1-9.	1st edition 2002
3- Data base: Medicinal and aromatic plants,	2004
- 70 original publications on medicinal, aromatic plants and Natural products, - Supervision of post-graduate research students, PhD, MSc:- More 50 Thesis in medicinal and aromatic plants was prepared,	1988- 2009
INVENTION (PATENTS) : 1 - Argan oil (Argania spinosa L.) in the treatment of hyperlipidemia and hypertension, 2 - Proceeding to obtain: Extract of Oregano products, process of preparation, method of processing and formulation, use and applications in cosmetics, medical, pharmaceutical and food industries. 3 - Proceeding: natural protection by organic pesticides: Composition for controlling natural pathogens and a method of application as plant protection products, 4 - Proceeding: Use of Peganum harmala L. and products in which drift in the treatment of hypertension and some vascular diseases	4

AWARDS, Special recognitions

Name of the Award	Name of the Award	Year
Clusters Animation Tools	European Business & Innovation Centre Network, UE,	2009
Prize of the President of the Republic of Tunisia Maghreb		2001
ISESCO	44 Islamic countries ISESCO	1999

List of Projects handled by Hmamouchi (1988 to 2009)
Management of National and International projects

Title of Project	Funding Agency	Years
National projects:		
All Moroccan Coordinated projects for the Conservation, valorization of PAM. The building of physical infrastructures, particularly of a productive nature, is combined with the setting up and/or strengthening of viable Professionals, Associations and Cooperatives related to agricultural and transformation for development. Valorization of medicinal plants, and their use and establishing a format application by contacting traditional herbalist include farmers, women, young, promoters, cooperatives.	Department of Research , Minister of Higher Education, and Ministry of Agriculture and Rural Development, Morocco	2002- 2010
Establishment of a pilot area for conservation, production (25ha). Agro technology for cultivation PAM. Experimentation, Characterization and micro propagation of some important medicinal plants <i>in-vitro</i> , in vitro, in situ and ex situ production. Biotechnology, Production, Transformation in Conservation of Economic Plant Diversity in Morocco. Developing database on Nutraceuticals and novel products,	National Institute of Medicinal, Aromatic and Natural Products and Provincial Council/Region Taounate	1999-2009
Feasibility study and Installation a pilot area for the extraction, recovery and protection, bio prospecting, economical research and Business plan for development PAM in North of Morocco	Agency for Development North of Morocco	1997- 2000
Scientific research include studies on ethno botanical, phytochemical, compounds from plants and herbs used in traditional Moroccan medicine	National center Research (CNRF)	1998-2000
Scientific research include studies on phytochemical, compounds from plants	National center Research Nuclear (CNESTEN)	1999-2000
Universities Collaborations		
Scientific research include studies on ethno botanical, phytochemical, antimicrobial, antifongical, antiradical, antioxidant, antiviral compounds, isolation, characterization and structure elucidation of natural products from plants and herbs used in traditional Moroccan medicine,	Morocco : Universités: Casablanca, Agadir, Fès, Marrakech, Oujda, Tétouan, Kenitra,	2002-2009
	International Universities : Neuchâtel en SUISSE, Degli Studi Di Palermo, Italie, CORSICA Pascale Paoli (Corte), Louvain, Belgique;	2008-2010
USA :		
Biological evaluation and Bioactivity-guided isolation of Moroccan natural products,	National Cancer Institute and National Institute of Health, USA	2009
Draft Agricultural Partnerships for Productivity and Prosperity (Communication and Capacity Building)	USAID: Programme Américain AP3	2007
France		
Scientific research include studies on phytochemical, actives compounds from plants and herbs used in traditional Moroccan medicine, Support, capacity building	National center Research (CNRS, GIF sur Yvette, French Cooperation,	2007-2008
	Faculty of Pharmacy, Montpellier Toulouse, National Institute Agronomic Research INRA, Narbonne and Bordeaux,	2005-2008
	Phytotherapy Institute, Toulouse	1994-1998 1993-1997
Spain		
Support, capacity building associations, Garden experimental Promotion de la mujer a través the valorización de las plantas medicinales y aromáticas" Revalorización de recursos naturales de la región mediterránea de España y Marruecos: reparación del Fijador of perfumería Ambrox y productos relacionados a olorosos From Precursores abundantes in plant species cultivated	COPCA, Forest Technological Center of Catalan, Faculty of Pharmacy, Granada, Faculty of Pharmacy, Seville, Faculty of Sciences of Cadiz,Fons de Menorca Cooperation ADEO 2007/403 (AECI).	2006-2007

European Union:		
Actions International Research Staff Exchange Scheme (IRSES)	UE Network Projects:Marie Curie	2010-2011
Circum-Mediterranean ethno botanical and ethnographic heritage in traditional technologies, tools, and uses of wild and neglected plants for food, medicine, textiles, dying, and handicrafts	European Community Thematic Network INCO. EU :Acronym: RUBIA,INCO-MED) RUBIAContract number ICA3-10023	2007-2008
Improved Quality Management in the Euro-Mediterranean Fruits and Vegetables Processing Industry	European Community Thematic Network: INCO. EU :Acronym IQM-MED (Proposal No.ICA3	1994-2009
Native wild Food and non Food Mediterranean Plants	European Community Thematic Network: INCO.EU Acronym: MEDUSA	1990-1994
International organizations		
Scientific research include studies on phytochemical, antimicrobial compounds from Moroccan plants	AUPELF-UREF, FICUI) University SCHERBROOKE, Canada, Faculty of Pharmaceutical, Toulouse.	1991-1993
Current activities include ethno botanical surveys and economic mapping of medicinal and aromatic plants. Development of database on plant resources in Morocco	O.M.S	1993-1995
Current economical activities include conservation, sensibilisation, training, promotion, experimentation, marketing of natural products from medicinal and aromatic plants	French: Network for development in Euro-Mediterranean (CEDDEM) : Ministry of Agriculture and Fisheries, French, University Scent and Flavour, Region PACA INPMA, CEPPAM, CHIHEF, CRIEPPAM Region Calabria Region, Sicily, Sardinia Region, Office of Environment Corsica	2009-2011
Private Companies		
Production, promotion, Culture, Analyse, distillation, formulation and PAM commercialization	Company Hofigal, Romania	2008
R/D, production, formulation and PAM commercialization;	Compagnie Bioactif, Belgique	2008
Economical activities include : production, promotion, formulation	Compagnie Nutri Services, Morocco,	2009
Installation processing for PAM growing, extractor, analytical	Compagnie VIALIS - Casablanca	2007
Experimentation, Installation processing factory for growing	Company AGRIN Morocco,, Fez	2008
Installation processing factory for growing and PAM Garden	Company AICHA, Morocco,	2009
Modernization technology to obtain herbal extracts, Installation processing factory for PAM growing	Company ZNIBER, Morocco,	2009
Economical activities include: production, promotion, Analyse, distillation, formulation and PAM commercialization	Company BIOPAM -Taounate	2007
Partnerships and agreements with associations and cooperatives		
Training and Good Practice for PAM collection, growing,	Cooperatives Alghair(49 municipalities) Taounate, Morocco,	2006
Training and Good Practice for PAM collection, growing, distillation, processing, conditioning, marketing Organization	Association of Women Development Initiative and human works- Oudrzagh, Morocco,	2007
Training and Good Practice for PAM collection, growing, distillation, processing	Association Ariaf Kissane. Kissane, Taounate, Morocco,	2009
Organization, Training and Good Practice for PAM growing, distillation, processing, conditioning, marketing (Rose, Saffron, Thyme, verbena)	Association SAHLA of Women Development, Taounate, Morocco,	2008
Training and Good Practice for PAM collection, growing, distillation, processing	Association Zitouna Ghafsai, Morocco,	2009

MEMBERSHIP

- 2010: International coordinator of Arab Union of wild, Medicinal and Aromatic plants (to design and to develop a strategy management, including Research / Innovation, Valorization, Monitoring, Storage, Production, and Communication).
 - 2000-2008: National Coordinator of Moroccan Network REPAM (Identification, conservation, Valorization and use of Medicinal and Aromatic plants)
 - 2001: Member of the Moroccan Professional Association for Development of Medicinal and Aromatic Plants (ADEPAM),
 - 1998: Member of Academy of Sciences of NEW YORK.
 - 1998: Member of International Executive comity of International Confederation of Foundations for Science, Technology and Innovation (Suisse),
 - 1994: Member Foundation and Member of International scientific comity of Foundation Afrique, Sciences, Technology ands Development. DAKAR. (SENEGAL),
 - 1997: National Coordinator of Medusa Network of the Mediterranean Region (Identification, Conservation and use of Wild plants of the Mediterranean Region). Greece,
 - 1992-1998: President of Moroccan – Canadian Association of Universities laureates,
 - 1998: Member of International Society of ethno pharmacology. France,
 - 1996: Member of International Group Polyphenol. France.
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PUBLICATIONS

Original Research papers/Reviews	71
Papers in Proceedings/Invited Lectures	85
TV/Radio interview	06
Lab Manuals	04
Books	02
Reports	15
Patents	4
Popular Article	15
More 50 Thesis in medicinal and aromatic plants was Supervised (DUSS, Doctorates, PhD, MSc)	50

71 original publications on medicinal, aromatic plants and Natural products:

Ethno botanical, Phytochemistry, structure elucidation, biological activities, constituents with antimicrobial, antifongical, antiradical, anti-oxidant, antiviral, antiparasital, anti diabetic, anti-inflammatory, hypertonic, immunostimulating and antiviral activity, standardization and development pharmacological screening of plants and isolated bio active.

Work published in J. of Ethno pharmacology, J. Phytochemistry, Journal of Polymer sciences, J. American Chemical Society, Macromolecules, The Journal of Essential Oil Research, Phytomedicines, Journal of Ethno Biology and Ethno Medicine, Tetrahedron Letters, Journal of Organic Chemistry, J. Am. Chem. Society, J. of Nat. Product, J. International de Phytothérapie, Pharmaceutical Biology , Journal of Pharmacy and Pharmacology , Pharmacological Research, Fitoterapia, Fundamental & Clinical Pharmacology, Therapies, PHARMAZIE, Phytopathologia Mediterranean, The British Journal of Nutrition, Pest Management Science and others.....

PUBLICATIONS

2010

1. 2010: Chaouki Wahid; Leger David Y; Eljastimi Jamila; Beneytout Jean-Louis; **Hmamouchi Mohamed** Antiproliferative effect of extracts from *Aristolochia baetica* and *Origanum compactum* on human breast cancer cell line MCF-7. *Pharmaceutical biology* 2010; 48(3):269-74.
2. 2010: Hmamouchi M. MOROCCAN ESSENTIAL OILS: AN OVERVIEW; Proceeding of IFEAT International Conference ,*North African and Mediterranean Essential Oils and Aromas*, 2010

2009

3. 2009: Chaouki Wahid; Leger David Y; Liagre Bertrand; Beneytout Jean-Louis; **Hmamouchi Mohamed** Citral inhibits cell proliferation and induces apoptosis and cell cycle arrest in MCF-7 cells. *Fundamental & clinical pharmacology* 2009; 23(5):549-56.
4. 2009 :Chaouki Wahid, Leger David Y, Liagre Bertrand, Cherrah, Yahia, Beneytout Jean-Louis, **Hmamouchi Mohamed**, MCF-7Roots of *Daphne gnidium* L inhibit cell proliferation and induces apoptosis in the human breast cancer cell line MCF-7, *PHARMAZIE*, 2009
5. 2009: Alvarez-Manzaneda Enrique, Chahboun Rachid, Cabrera Eduardo, Alvarez Esteban, Haidour Ali, Ramos Jose Miguel, Alvarez-Manzaneda Ramón, **Hmamouchi** Mohammed, Es-Samti Hakima. A thermal 6pi electrocyclization strategy towards taiwaniaquinoids. First enantiospecific synthesis of (-)-taiwaniaquinone G. *Chemical communications (Cambridge, England)* 2009 ,(5):592

2008

6. 2008: González-Tejero M R, Casares-Porcel M, Sánchez-Rojas C P, Ramiro-Gutiérrez J M, Molero-Mesa J, Pieroni A, Giusti M E, Censorii E, de Pasquale C, Della A, Paraskeva-Hadjichambi D, Hadjichambis A, Houmani Z, El-Demerdash M, El-Zayat M, **Hmamouchi** M, Eljohrig S, Medicinal plants in the Mediterranean area. *Journal of ethno pharmacology* 2008, 116(2):341-57.
7. **2008**: Hadjichambis Andreas Ch; Paraskeva-Hadjichambi Demetra; Della Athena; Giusti Maria Elena; De Pasquale Caterina; Lenzarini Cinzia; Censorii Elena; Gonzales-Tejero Maria Reyes; Sanchez-Rojas Cristina Patricia; Ramiro-Gutierrez Jose M; Skoula Melpomeni; Johnson Chris; Sarpaki Anaya; **Hmamouchi Mohamed**; Jorhi Said; El-Demerdash Mohamed; El-Zayat Mustafa; Pieroni Andrea Wild and semi-domesticated food plant consumption in seven circum-Mediterranean areas. *International journal of food sciences and nutrition* 2008;59(5):383-414.

2007

8. 2007: E Alvarez-Manzaneda, R Chahboun, I Barranco, E Cabrera, E Alvarez, A Lara, R Alvarez-Manzaneda, M **Hmamouchi** , H Es-Samti , Diastereoselective routes towards the austrodorane skeleton based on pinacol rearrangement: synthesis of (+)-austrodoral and (+)-austrodoric acid, *Tetrahedron*. 63, no. 48, (2007): 11943-11951

9. 2007:EJ Alvarez-Manzaneda, R Chahboun, E Cabrera, E Alvarez, A Haidour, JM Ramos, R Alvarez-Manzaneda, **M Hmamouchi** , H Bouanou , Diels-Alder cycloaddition approach to puupehenone-related metabolites: synthesis of the potent angiogenesis inhibitor 8-epipuupehedione. , The Journal of organic chemistry, 2007 Apr 27, 72(9): 3332-9

2006

10. 2006: Berrougui Hicham, Martín-Cordero Carmen, Khalil Abdelouahed, **Hmamouchi** Mohammed, Ettaib Abdelkader, Marhuenda Elisa, Herrera María Dolores. Vasorelaxant effects of harmine and harmaline extracted from Peganum harmala L. seeds in isolated rat aorta. Pharmacological research : Pharmacological Society 2006,54(2):150-7.
11. 2006: Berrougui Hicham, Isabelle Maxim, Cloutier Martin, **Hmamouchi** Mohammed, Khalil Abdelouahed, Protective effects of Peganum harmala L. extract, harmine and harmaline against human low-density lipoprotein oxidation. The Journal of pharmacy and Pharmacology 2006,58(7):967-74.
12. 2006: Pieroni Andrea, Giusti Maria Elena, de Pasquale Caterina, Lenzarini Cinzia, Censorii Eleonora, Gonzáles-Tejero María Reyes, Sánchez-Rojas Cristina Patricia, Ramiro-Gutiérrez Jose M, Skoula Melpomeni, Johnson Chris, Sarpaki Anaya, Della Athena, Paraskeva-Hadijchambi Demetra, Hadjichambis Andreas, **Hmamouchi** Mohammed, El-Jorhi Said, El-Demerdash Mohamed, El-Zayat Mustafa, Al-Shahaby Omar, Houmani Zahia, Scherazed Mekious. Circum-Mediterranean cultural heritage and medicinal plant uses in traditional animal healthcare: a field survey in eight selected areas within the RUBIA project. Journal J Ethnobiol Ethnomed. 2006 Mar 24;2:16.

2005

13. Berrougui Hicham, Lopez Lazaro, Martin Cordero, Ettaib Abdelkader, **Hmamouchi** Mohamed, Herrera MD. Cytotoxic activity of methanolic extract and two alkaloids extracted from seeds of Peganum harmala L. Journal of Natural Remedies 2005, 5:41-45.
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