



Curriculum Vitae

TALEB Mohammed Sghir
University Professor
Institut Scientifiaue
Mohammed V University in Rabat
P. B. 703, Rabat, 10106 Morocco
E-mail: talebmsg@yahoo.com; mohammed-sghir.taleb@is.um5.ac.ma

EDUCATION

- 2002 PhD in Plant Ecology and Flora.
Thesis Title: « Recherches écologique, phytosociologique et floristique sur le Parc National du Haut Atlas Oriental et ses bordures ». Mohammed V University in Rabat, Faculty of Sciences.
- 1992 Postgraduate doctorate (troisième cycle) in Plant Ecology.
Thesis Title: « Recherches phytosociologiques sur le massif du Bou-Naceur (Moyen Atlas Oriental, Maroc) ». Mohammed I University of Oujda. Faculty of Sciences.
- 1989 Diploma of advanced studies (D.E.A.) in Plant Ecology, Faculty of Sciences, Marrakech.
- 1988 Bachelor in Plant Biology, Faculté des Sciences, Mohammed I University of Oujda. Faculty of Sciences.
- 1983 Baccalaureate in Experimental science. El Fath secondary school, Taourirt, Oujda.

ATTESTATIONS

- 1999 Attestation of training in Biodiversity, Morocco.
- 2006 Attestation of training under title: « Développement des interfaces », Morocco.
- 2006 Attestation of training under title: « Evaluation économique et financière des actions de recherche ».
- 2012 Attestation of participation in a workshop titled « Les Légumineuses au service du développement durable » organized from 23 to 28 September in Nouakchott (Mauritania).
- 2015 Attestation of participation in a workshop related to the Protocol of Nagoya, organized from 8 to 9 October by GIZ and the Ministry of the Environment, Bouregreg-Salé. Morocco.
- 2015 Attestation of participation in a workshop related to the Protocol of Nagoya titled « perspectives stratégiques et rôle des réseaux Recherche & Développement dans la valorisation du patrimoine génétique au Maroc ». Organized by the Ministry of the Environment, the Moroccan CNRST and the ACCN-GIZ. October 29th, Rabat. Morocco.

CERTIFICATES

- 2004 Certificate of training in biodiversity. Training organized by the Convention of the Biological Diversity in Uganda.
- 2008 Certificate of Training in English (Pre-intermediate 4).
- 2009 Certificate of Training in CITES, Morocco.
- 2009 APA (Accès et Partage des Avantages) Training Certificate for multi-stakeholder workshop facilitators, Bonn (Germany)

- 2012 Certificate of participation in the « IUCN Red List Training Workshop » organized from Octobre 30th to 2nd Novembre by IUCN in Istanbul, Turkey.
- 2012 Certificate of participation in the « 13th International Conference of International Association of Botanical Garden (IABG) » organized by the IABG in Guangzhou (China) from 13 to 15 November.
- 2014 Certificate of participation in the « Word Congress on Agroforestry » organized from 10 to 14 February in New Delhi, India.
- 2014 Certificate of participation in the « World Biodiversity Congress » organized from 24 to 27 November 2014 in Colombo, Sri Lanka.
- 2015 Certificate of participation in the « Training course on Access and Benefit Sharing » organized from 1 to 5 June by Cape Town University, the Ministry of Environment, Water and Climate of Zembabwe, in Harare, Zembabwe.
- 2015 Certificate of participation in a workshop in Brussels to develop indicators for monitoring biodiversity. Organized from September 28th to 2nd October at the Royal Institute of Natural Sciences of Belgium.
- 2015 Certificate of Participation in a Training Workshop on Habitat Mapping of Important Plant Areas. Organized from 23 to 27 November by IUCN. Tolox, Malaga, Spain.
- 2016 Certificate of presentation of an oral communication in the 18th International Conference on Biodiversity and Sustainable Energy Development organized in Singapore from 7 to 8 January 2016.
- 2016 Certificate of participation in training on the tool « Système d'Information de suivi » for reporting on the implementation of the National Strategy and Action Plan of Biodiversity, organized by the Ministry of the Environment from 17 to 18 February, Rabat, Morocco.

- 2017 Certificate of participation in the workshop « Pastoralism as a key tool for plant conservation: creating conditions for adequate practice », Kahramanmaraş, Turkey.
- 2017 Certificate of participation in the « International Symposium and Workshop on Native Seeds in Restoration of Dryland Ecosystems », November 20-23, 2017. Kuwait Institute for Scientific Research.

TRAININGS

- 1992 Training of one month in the Scientific Institute of Rabat, Morocco.
- 1996 Training course in France (UTFMOR/FAO project) on flora inventory techniques and management methods.
- 2001 Training titled « Travail en équipe », CNRF, from 19 to 21 February.
- 2001 Training titled « Conception de dispositifs expérimentaux et analyse des résultats », from 19 to 23 March.
- 2005 Training titled « Conception et gestion de bases de données par Access », from 18 to 20 April.
- 2006 Training titled « Evaluation économique et financière des actions de recherche », CRF, from 7 to 9 June.
- 2006 Training titled « Développement des interfaces », from 28 to 30 June.
- 2008 Training in « Statistics », September.
- 2009 Training in « Statistics », November.
- 2010 Training in « Using GPS », from 26 to 27 January.

RESEARCH ACTIVITIES

1. Reports, databases, lists etc.:

- Reports on the monitoring of biodiversity in the Site of Biological and Ecological Interest Oued Mird. ROSELT/OSS (2002, 2003, 2004, 2005 and 2006).

- Document on Vegetation and Flora of the Eastern High Atlas National Park (2008).
- Participation in the redaction of a report on the flora and fauna of Morocco.
- Participation in the preparation of a report on the biodiversity of the Moroccan mountain (2000).
- Production of determination keys for the 3rd volume of the Practical Flora (2011).
- Redaction of a report on the Access and the Sharing of Benefit and Genetic Resources, Flora and Natural Vegetation Component (2012).
- Development of a database on endemic flora and useful flora of Morocco. Project coordinated by the Department of the Environment (2013).
- Participation in the production of the red list of monocolored flora. Project of red list of Mediterranean flora. IUCN Red List (2013).
- Participation in the redaction of a report titled « changement climatique et Biodiversité ». Program: Adaptation to Climate Change / Implementation of the Nagoya Protocol (2014).
- Development of a phytosociological database (80% of achievement).
- Redaction of a list of plant species proposed for the Appendix IV of the CITES (Law 29.05: Protection of Species), 2014.

2. Scientific publications:

1. ABOUROUH M., **TALEB M. S.**, MAKHLOUFI M., BOULMANE M. & ARONSON J., 2005 – Biodiversité et dynamique de la végétation dans la subéraie de la Maâmora (Maroc). Effet de la durée de clôture. Forêt méditerranéenne. Tome XXVI, numéro 4, pp. 275-285.
2. Navarro, T., El Oualidi, J., **Mohammed Sghir Taleb**, Pascual, V., Cabezudo, B., 2009. - Dispersal traits and dispersal patterns in an oro-Mediterranean thorn cushion plant formation of the eastern High Atlas, Morocco. *Flora* 204 . 658-672.

3. **TALEB M.S.**, 1997 : Répartition géographique, écologie et état actuel du Genévrier thurifère au Maroc. Dossiers forestiers de l'ONF, France.
4. **TALEB M.S. & FENNANE M.** , 2000 : Le Sorbier (*Sorbus L.*). *Acta Botanica Malacitana* 25 : 251-261.
5. **TALEB M. S. & EL ALAOUI FARIS F.Z.**, 2003. - Etude de la diversité floristique du Parc National du Haut Atlas Oriental. *Annale de la recherche forestière au Maroc*. Tome 35.
6. **TALEB M.S. & FENNANE M.**, 2003 - Approche à l'étude des groupements forestiers et préforestiers du Parc National du Haut Atlas Oriental et ses bordures. *Naturalia Maroccana*. Revue du Muséum d'Histoire Naturelle de Marrakech.
7. **TALEB M. S. & FENNANE M.**, 2003 - Etude des groupements steppiques du Parc National du Haut Atlas Oriental et ses bordures. *Bulletin de l'Institut Scientifique, Rabat, section Sciences de la Vie*, n°25, 25-41.
8. **TALEB M. S., BELLAKA M. & ACHOUR A.** 2008 - Effet de la clôture sur la biodiversité et la dynamique de l'arganeraie. Actes des premières assises de la recherche forestière.
9. **TALEB M. S. & FENNANE M.**, 2008 – Diversité floristique du Parc National du Haut Atlas Oriental et des massifs Ayachi et Maâsker (Maroc). *Acta Botanica Malacitana* 33. 125-145.
10. **TALEB M., S. & FENNANE M.**, 2008. - Forests, steppes and grasslands in Morocco: Diversity, ecological importance and socio-economic role. XXI International Grassland Congress, VIII International Rangeland Congress. Multifunctional Grasslands in a changing World. Vol. 1. Edited by organizing committee of 2008 IGC/IRC Conference.
11. **AAFI A. & TALEB M.S.** 2010. – Les aires protégées au Maroc. *LE FLAMBOYANT* 66/67. 51-54.

12. Hassan Rankou, Alastair Culham, **MOHAMMED SGHIR TALEB**, Mohamed Fennane, AHMED OUHAMMOU, Gary Martin & Stephen L. Jury. Conservation Assessments and Red Listing of the Moroccan Flora (Monocots). *Botanical Journal of the Linnean Society*, 2015, 177, 504–575. With 63 figures.
13. Jalal EL OUALIDI, Hamid KHAMAR, Mohamed FENNANE, Mohamed IBN TATTOU, Stéphanie CHAUVET et **Mohamed Sghir TALEB** 2012.- Checklist des endémiques et spécimens types de la flore vasculaire de l'Afrique du Nord. DOCUMENTS DE L'INSTITUT SCIENTIFIQUE, N°25, UNIVERSITE MOHAMMED V-AGDAL, RABAT.
14. NAVARRO, T., EL OUALIDI, J., **M. S. TALEB**, M., PASCUAL, V., CABEZUDO, B. 2010. Leaf pattern, leaf size and ecologically related traits in hedgehog heath formations, High Atlas, Morocco. *Plant Ecology* vol 210, Number 2, 275-290.
15. NAVARRO T., EL OUALIDI J., **TALEB M.S.**, BALTAZAR Cabezudo. Seed size, seed dispersal and functional related traits in an Acacia Woodland of south-western Morocco. *Journal of the Arids Environments*. Acceptée.
16. **TALEB M. S.** & FENNANE M. 2010. - Etude phytosociologique des groupements présteppiques du Parc National du Haut Atlas Oriental et ses bordures. *Revue d'Ecologie Terre et Vie*. Vol. 65.
17. **TALEB M. S.** & FENNANE M. 2011. - Zones Importantes pour les Plantes au Maroc dans Zones Importantes pour les Plantes en Méditerranée méridionale et orientale : Sites prioritaires pour la conservation. IUCN, Plantlife et WWF. pp. 29-32.
18. **TALEB M. S.** & ELOUALIDI J., 2013. - Steppes and grasslands in Morocco: Diversity, functional ecology and socio-economic role. pp. 1682-1684. *Proceedings 22nd International Grassland Congress. Revitalising Grasslands to sustain our communities.*

19. **TALEB M. S.** & FENNANE M., 2013.- Les Légumineuses au Maroc: Aperçu floristique, écologique et socio-économique. Actes de la première rencontre internationale scientifique sur la flore de Mauritanie sous le thème : les Légumineuses au service du développement durable en Mauritanie. Nouakchott, du 23 au 28 septembre 2012. pp. 38-50.
20. T. BELADDA, K. ALAOUI, El H. Boudida, Y. Cherrah, **M. S. Taleb**, M. Arahou, R. Hassikou 2014. – Acute toxicity and analgesic action of the essential oil of *Nepeta amethystina*. International journal of Universal Pharmacy and Bio Sciences 3 (3).
21. **Taleb M. S.** 2014. - Argan tree (*Argania spinosa* (L.) Skeels) in Morocco: Function, management and Access and Benefit Sharing. Poster. World Congress on Agroforestry, 10-14 February 2014, Delhi, India.
22. **Taleb M. S.** 2014. – Morocco's tree of life in decline. Story posted on the Agroforestry World blog.
23. Morocco's tree of life in decline.
24. **Taleb M. S.** 2014 - Ecological and floristic diversity in Morocco. J Ecosys Ecograph, 4:3
25. Rahmouni B, Alaoui K, Boudida El-H, Chammache M, **Taleb M.S.**, Cherrah Y, IL Idrissi A. 2015. - Acute Toxicity, Analgesic Activity of *Nepeta granatensis* Essential Oil. J Pharm Biomed Sci; 05(02): 110-117.
26. HASSAN RANKOU, ALASTAIR CULHAM, **MOHAMMED SGHIR TALEB**, AHMED OUHAMMOU, GARY MARTIN and STEPHEN L. JURY. 2015. Conservation assessments and Red Listing of the endemic Moroccan flora (monocotyledons). Botanical Journal of the Linnean Society, 2015, 177, 504–575. With 63 figures.
27. Vall, A.O.M. ; **Taleb, M.S.** ; Abed, N.E. ; Abdellahi, M.L.C ; Kokou, K. & Morou, B. 2015. Contribution à l'étude de la flore de Mauritanie 2. Biodiversité et importance écosystémique des *Fabaceae* *Contribution to the study of the flora of Mauritania 2. Biodiversity and ecosystem importance of*

the Fabaceae. Bulletin de l'Institut Scientifique, Rabat. Section Sciences de la vie. N°37, 29-37.

28. **TALEB M. S.** & FENNANE M. 2016. - Flora of the biological and ecological interest site (BEIS) of Tichoukt mountain (middle atlas, Morocco). Revue « Nature & Technologie ». C- Sciences de l'Environnement, n° 15.
29. **TALEB M.S.** 2016. Moroccan Mountains: Forest Ecosystems and Biodiversity Conservation Strategie. World Academy of Science, Engineering and Technology (WASET). International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering Vol:10, No:1.
30. M. Jamaledine, J. El Oualidi, **M. S. Taleb**, T. Thévenin, F. E. El Alaoui-Faris, 2017.- Inventaire et état de conservation des plantes aromatiques et médicinales (PAM) au Maroc. Phytothérapie. Springer Nature. Pp. 1-9.
31. **TALEB M. S.**, 2017. Aromatic and Medicinal Plants in Morocco: Diversity and Socio-Economic Role. World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:11, No:12.
32. Angel Romo, Grzegorz Iszkuło, **Mohammed Seghir Taleb**, Łukasz Walas, Adam Boratyński. 2017. *Taxus baccata* in Morocco: a tree in regression in its southern extreme. Dendrobiology. vol. 78, 63–74.
33. Hassan Rankou, Stephen L. Jury, AHMED OUHAMMOU, Gary Martin, **MOHAMMED SGHIR TALEB** & Alastair Culham. Setting conservation priorities for the Moroccan flora (endemic monocotyledons) using the IUCN Red Listing and Species Distribution Modelling. Botanical Journal of the Linnean Society. (under press).
34. **Taleb M. S.**, 2018. Contributing Author of Chapter 3: Status, trends and future dynamics of biodiversity and ecosystems underpinning nature's contributions to people. In IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services.

35. Teresa Navarro, Jalal El Oualidi & **Mohammed Sghir Taleb**. 2018. Relationship between seed size and related functional traits in North Saharan Acacia woodlands. *Plant Ecology and Evolution* 151 (1): 87–95.
36. Anne-Julie Rochette¹, Jean Didier T Akpona, Hugues Adeloui Akpona, Gaston S Akouehou, Blanchard Mayundo Kwezi, ChabiAMS Djagoun, Bernadette Habonimana, Rodrigue Idohou, Ingrid S Legba, Benoît Nzigidahera, Augustin Orou Matilo, **Mohammed Sghir Taleb**, Benjamin Toirambe Bamoninga, Sarah Ivory, Luc Janssens de Bisthoven and Maarten PM Vanhove, 2019. Developing policy-relevant biodiversity indicators: lessons learnt from case studies in Africa. *Environ. Res. Lett.* 14 (2019) 035002.
37. Mohammed Jamaledine, Jalal El Oualidi, **Mohammed Sghir Taleb**, Fatima Ezzahra El Alaoui-Faris, Abdelmajid Benzine, 2019. Les plantes aromatiques et médicinales au Maroc : statut, endémisme, chorologie et bioclimat. *Médecine Thérapeutique*. Vol. 25, N° 3.
38. **Taleb, M. S.** & Fennane, M., 2019.- Forests and preforests. *Geobotany studies* pp.1-40. Springer.
39. **Taleb, M. S.** & Fennane, M., 2019.- Aquatic (fresh water) and hygrophile environments. *Geobotany studies* pp.79-88. Springer.
40. **Taleb, M. S.** & Fennane, M., 2019.- Lawns, pozzines and meadows of high mountains. *Geobotany studies* pp.63-69. Springer.
41. **Taleb, M. S.** & Fennane, M., 2019.- Saharan, steppic or pre-steppic vivace communities (Shrublets and/or Graminaceous Herbs) and annual or perennial vegetation (incl. Adventices, Messicoles, Ruderals. *Geobotany studies* pp.119-147. Springer.
42. **Taleb, M. S.** & Fennane, M., 2019.- Coastal, lagoon, estuarian and marine ecosystems. *Geobotany studies* pp.107-117. Springer.
43. **Taleb, M. S.** & Fennane, M., 2019.- Terrestrial (Inland and Coastal) halogypsophile vegetation. *Geobotany studies* pp.89-105. Springer.

44. **Taleb, M. S.** & Fennane, M., 2019.-. Rupicolous communities. Geobotany studies pp.71-78. Springer.

45. **Taleb, M. S.** & Fennane, M., 2019.-. Matorrals and spiny high-mountain xerophytes. Geobotany studies pp.41-62. Springer.

Production of Book:

TALEB M. S. & FENNANE M. 2019. – Vascular Plant Communities of Morocco. Phytosociology, Ecology and Geography. Springer.

Participation in the production of books:

- Participation in the development of a book on: Remarkable species of Moroccan flora (2002)
- Development of a key for determining the Phagnalon taxon. Practical Flora of Morocco. Manual for the determination of vascular plants (Fennane & al., 2014)
- Development of a key for determining the Draceana taxon. Practical Flora of Morocco. Manual for the determination of vascular plants (Fennane & al., 2014)
- Development of a key for determining the Arundo taxon. Practical Flora of Morocco. Manual for the determination of vascular plants (Fennane & al., 2014)
- Development of a key for determining the Puccinellia taxon. Practical Flora of Morocco. Manual for the determination of vascular plants (Fennane & al., 2014)
- Participation in the development of a book on: Trees and shrubs indigenous to North Africa. Biodiversity and the fight against erosion and desertification. Project supported by the International Union for the Conservation of Nature, MAVA Foundation for Nature and Center for Environmental Research of the Mediterranean (CIAMED). 2021.

3. Colloquia, Seminars and Meetings:

3.1. International colloquia, seminars and meetings:

- 1997 Oral presentation at the international conference on the *Juniperus thurifera* in France. Title: « Répartition géographique, écologie et état actuel du Genévrier thurifère au Maroc ».
- 2000 Mission in Spain (CIFOR-INIA, Madrid) from 2 to 7 July.
- 2004 Participation in a course on plant conservation strategies organized in Uganda by the CBD and presentation of an oral communication on biodiversity conservation strategies in Morocco. Organized by the Royal Kew Botanical Garden and Makerere University from 8 to 23 November.
- 2005 Oral presentation at an international congress on botanical gardens in Amman, Jordan, from 19 to 21 March.
- 2005 Oral presentation at a world conference on plant conservation strategies, Dublin, Ireland, from 22 to 25 October.
- 2005 Participation in the Coordinating Committee of Botanic Gardens in Africa, Nairobi, Kenya, from 28 to 29 November.
- 2007 Oral presentation at the thematic workshop "Flora-Vegetation-Map of land occupation", Tunisia, from 5 to 9 February.
- 2007 Participation in the 3rd Global Congress on Plant Diversity and Conservation Strategies, Wuhan, China, from 16 to 20 April.
- 2008 Participation in the 3rd Global Congress on Plant Diversity and Conservation Strategies, held in Wuhan, China, from 28 June to 5 July 2008.
- 2009 Oral presentation at the first Pan-African workshop on the APA and Forests, organized by the GTZ at the UNEP in Nairobi, Kenya, from 22 to 25 2009.

- 2009 Oral presentation at the First Regional Workshop on Important Areas for Plants and Forest Habitats, organized by IUCN and Plantlife in Malaga, Spain, from 15 to 18 December.
- 2010 Participation in a training on Access and the Sharing the advantages arising from the exploitation of genetic resources, organized by the GTZ in Bonn, Germany, from 3 to 7 May.
- 2010 Oral presentation at the Second Regional Workshop on Important Areas for Plants and Forest Habitats, organized by IUCN and Plantlife in Malaga, Spain, 26 and 27 May.
- 2011 Oral presentation at a regional workshop on the management and conservation of natural resources, Istanbul, Turkey, from 14 to 16 April.
- 2011 Oral presentation on biodiversity, important areas for plants and conservation strategies in Morocco during a workshop held in Cultidelta, Amposta, Tarragona, Spain, from 18 to 20 December.
- 2012 Oral presentation on *Fabaceae* in Morocco: floristic, ecological and socioeconomic overview. International Scientific Meeting on the flora of Mauritania under the theme: the leguminous flora at the service of sustainable development. Nouakchott, Mauritania, from 23 to 27 September.
- 2012 Participation in a training workshop "IUCN Red List Training Workshop", Istanbul, Turkey, from 30 October to 2 November.
- 2012 Oral presentation at "The 13th Conference of the International Association of Botanical Gardens (IABG 2012)" Guangzhou, China, from 13 to 15 November.
- 2013 Oral presentation at the 22nd International Grassland Congress in Sydney, Australia, from 15 to 19 December.
- 2014 Presentation of a poster at the "World Congress on Agroforestry", Delhi, India, from 10 to 13 February.

- 2014 Oral presentation at the African Mountains Regional Forum, Arusha, Tanzania, from 22 to 25 October.
- 2014 Oral presentation at the World Biodiversity Congress, Colombo, Sri Lanka, from 24 to 27 November.
- 2015 Participation in a training on Access and the Sharing of advantages arising from the use of genetic resources organized by the APA, University of Cape Town and GIZ, Harare, Zembabwe, from 1 to 5 June.
- 2015 Participation in the First Author Workshop for the Regional Assessment of Biodiversity and Ecosystem Services for Africa, organized by The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), Pretoria, South Africa, from 3 to 7 August.
- 2015 Oral presentation at a workshop as part of the call for proposals for the development of indicators for monitoring biodiversity, Brussels, Belgium, from 28 September to 2 October.
- 2015 Participation in a training workshop on habitat mapping organized by IUCN, Tolox, Spain, from 23 to 27 November.
- 2016 Oral presentation at the 18th International Conference on Biodiversity and Sustainable Energy Development in Singapore, 7 and 8 January.
- 2016 Oral presentation at the World Mountain Forum, held, Mbale, Uganda, from 17 to 20 October.
- 2016 Presentation of a Poster in the first week of the conservation of Mediterranean plants, Ilcinj, Montenegro, from 24 to 29 October.
- 2017 Oral presentation "Resilience Colloquium for Development", Johannesburg, South Africa, from 8 to 10 May. Initiative of the Southern African Program on Ecosystem Change and Society (SAPECS) in collaboration with GRAID (Guidance for Resilience

in the Anthropocene: Investments for Development) under the theme 'Assessment Methods and Transformation Practices'.

- 2017 Presentation of a Poster at the International Botanical Congress (IBC), Shenzhen, China, from 23 to 29 July.
- 2017 Participation in the Third Authors Meeting (TAM) of the Africa Regional Assessment (AFRA), Addis Ababa, Ethiopia, from 7 to 11 August.
- 2017 Oral presentation at the workshop "Pastoralism as a key tool for plant conservation: creating conditions for adequate practice", Kahramanmaraş, Turkey, from 9 to 12 October
- 2017 Oral presentation in KER's Symposium and Workshop on Native Seed in Restoration Dryland Ecosystems, Kuwait, from 20 to 23 November.
- 2017 Oral presentation in the ICOAPP 2017: 19th International Conference on Organic Agriculture and Plant Protection in Kuala Lumpur, Malaysia, 11 and 12 December.
- 2018 Participation in the Plenary of Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Medellin, Colombia, from 17 to 24 March.
- 2018 Oral presentation in Africa Regional Mountains Forum. 12-14 September 2018. Kigali (Rwanda).
- 2018 Participation in the 11th meetings of the IPBES Bureau and MEP 25 - 29 June 2018, Bonn, Germany
- 2018 Participation in the 1st meeting of the Management Committee for the IPBES assessment on the sustainable use of wild species, 17-19 September 2018, Paris, France.
- 2018 Participation in the 12th meetings of the MEP and Bureau. Bonn, 22-26 October 2018.

- 2018 Participation in the first international meeting of the authors of IPBES Assessment of the Sustainable Use of Wild species. Montpellier 3-7 December.
- 2019 Participation in the Plenary7 of Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Paris, France, from 29 April to 04 May.
- 2019 Oral presentation in the 7th Sustainable Development Conference organized by Tomorrow People Organization. Bangkok, Thailand, from 7 to 9 July.
- 2019 Participation in the 13th meetings of the MEP and Bureau. Bonn, 22-26 July 2019.
- 2019 Oral presentation at the training and formulation workshop for the MRV projects (2019-2021) of the CEBioS program from 14 to 18 October 2019 at the DJEGBA Hotel in Ouidah, Benin.
- 2019 Participation in the Thematic Workshop on Ecosystem Restoration Ref.: CBD/SSSF/AS/SBG/LJ/88237 for the Post-2020 Global Biodiversity Framework. 6-8 November 2019 - Rio de Janeiro, Brazil.
- 2019 Participation in IPBES second authors meeting for the assessment of the sustainable use of wild species. 18-24 November, Nairobi, Kenya.
- 2020 Participation in the 14th meetings of the MEP and Bureau. Bonn, 20-24 January.
- 2020 Participation in the 15th meeting of the IPBES MEP and Bureau. Organized online, in sessions of approximately 2 hours per day on September 3, 2020, from September 8 to 11, 2020 as well as on September 14, 2020 and from September 16 to 17, 2020.
- 2020 Participation in various webinars organized by IUCN on ecosystem restoration.

- 2020 Participation in various webinars organized by IUCN on Nature based Solutions.
- 2020 Participation in Global Taxonomy Initiative virtual Forum organized by CBD. 7-9 December.
- 2020 Participation in the International Mountain Day Celebration organized virtually by Albertine Rift Conservation Society (ARCOS). 11 December.
- 2021 Oral presentation at the "Online Pilot Dialogue to Promote the Use of IPBES Assessment Results in Policy Making in Africa". 2021.
- 2021 Participation in IPBES-8 virtual Plenary. 14-24 June 2021.
- 2021 Participation in the 5^o Workshop on the Summary for Policy Makers (SPM). IPBES Assessment of the Sustainable Use of Wild Species.
- 2021 Participation in IPBES 17th MEP and Bureau virtual meeting. 11-19 October.
- 2021 Participation in virtual International Grassland and Rangeland Congress. (23-29 October) Kenya.
- 2021 Virtual participation in COP26 (31 October to 12 November).

3.2. National colloquia, seminars and meetings (in Morocco):

- 1995 Participation in the French meeting of cooperation and partnership on biological diversity and enhancement of plant genetic resources organized by the Agency for Cultural and Technical Cooperation ACCT of French-speaking countries at IAV, from 4 to 8 September.
- 1999 Oral presentation at the first days of the UFR at the Faculty of Sciences Semlalia, Marrakech, from 20 to 23 April.
- 1999 Participation in the biodiversity training at I.A.V. - Hassan II, Rabat. Organized by the Institute of Energy and Environment of the Francophonie, the University of Quebec in Montreal, the Canadian

Museum of Nature and the Agronomic and the Hassan II Veterinary Institute, from 20 to 29 June.

- 1999 Participation in the International Workshop on Drought Adaptation Strategies organized by the Ministries of Equipment and Agriculture of Rural Development and Maritime Fisheries, 1 and 2 November.
- 2000 Participation in the workshop "Preservation and sustainable management of natural resources", relating to the definition of mountain policy, 14 February.
- 2000 Participation in the preparation of the report on forest resources for a definition of mountain policy, from 14 to 30 April.
- 2000 Participation in the national conference on agricultural research, 10 and 11 March.
- 2000 Participation in the awareness day on the conservation and enhancement of the forest and the environment in the Dir de Beni Mellal. Organized in the Chamber of Industry and Commerce of Beni Mellal, March 25th.
- 2000 Participation in the study day on biodiversity, ENFI, Salé, May 26th.
- 2000 Participation in the first congress of the Moroccan Association of Biodiversity. Management and enhancement of biodiversity in Morocco. Faculty of Science, Rabat, from 19 to 21 June.
- 2001 Presentation of a poster on the floristic diversity of the National Park of the Eastern High Atlas. First Congress of the Moroccan Association of Biodiversity. Management and enhancement of biodiversity in Morocco, Faculty of Science, Rabat from 19 to 21 June.
- 2001 Presentation of a poster on the floristic and ecological diversity of Oued Mird Site (Zaoura province). First Congress of the Moroccan Association of Biodiversity Management and enhancement of

biodiversity in Morocco, Faculty of Science, Rabat from 19 to 21 June.

- 2001 Participation in the cultural and tourist days of the city of Debdou (Taourirt province), from 10 to 22 July.
- 2001 Participation in the Arab Meeting on Legislation and Regulations for the Protection of Land and Water Resources organized by the Arab Organization for Agriculture, from 13 to 15 September.
- 2001 Participation in the Wetlands Workshop and Indicators of Biodiversity Monitoring, Marrakesh, from 2 to 5 October.
- 2001 Oral presentation at the ROSELT / OSS North Africa sub-regional workshop "Towards Harmonization of Monitoring Methods: Sampling and Harvesting Protocol for Desertification Monitoring", Ouarzazate, Morocco, from 7 to 10 November.
- 2003 Oral presentation at the ROSELT workshop, CNRF, RABAT, 27 and 28 May.
- 2003 Participation in the first national workshop of the North African Network of Taxonomy (NAFRINET). Scientific Institute, Rabat, 23 and 24 October.
- 2003 Participation in the implementation of a ROSELT (Long Term Ecological Monitoring Observatory Network) methodology for monitoring biodiversity in North Africa.
- 2004 Oral presentation at the ROSELT workshop on monitoring biodiversity in Oued Mird (Zagoura Province), Rabat, from 16 to 19 March.
- 2004 Participation in the National Workshop on the Regional Project EP/INT/204/UNEP-GEF: "Study, testing and evaluation of best in-situ conservation practices of wild plant species of economic importance in Morocco". National workshop on project editing, from 21 to 23 July.

- 2004 Participation in the GEF Protected Areas Project Workshop (GEF-TF 023494-MOR). Rabat, from September 30th to October 2nd.
- 2004 Participation in the workshop: Important Plant Areas (ZIP) in Morocco organized by IUCN and Plantlife, 11 and 12 October.
- 2004 Participation in the seminar on biodiversity for food security organized by the Ministry of Agriculture, Rural Development and Maritime Fisheries on the occasion of the celebration of World Food Day, October 14th
- 2004 Participation in a workshop on the sustainable use of wild biological resources in Morocco. Rabat, December 22th.
- 2005 Participation in an international day on Biodiversity organized in Rabat, May 19th.
- 2005 Participation in a training organized by CITES for the countries of North Africa (Rabat-Morocco), from 5 to 7 December.
- 2006 Participation in a meeting on sustainable development and environmental techniques in the Mediterranean Basin organized at the International Center of Mohammed VI Conferences in Skhirat, from 16 to 18 January.
- 2006 Oral presentation at the first meeting of forestry research under the theme: argan forest: a bulwark against desertification organized in Essaouira by the High Commission for Water and Forests and the fight against desertification, 25 and 26 May.
- 2006 Oral presentation at the study day under the theme: Desertification at the level of Eastern Morocco organized on the occasion of World Environment Day by the Faculty of Sciences of Oujda, June 5th.
- 2007 Participation in the second meeting of forest research under the theme: rehabilitation of cork oak forests. Kenitra, 16 and 17 May.
- 2007 Participation in the second national workshop on Important Plant Areas (IPA) in Morocco, 27 and 28 June.

- 2008 Participation in a Capacity Building Workshop on Access to Genetic Resources and Benefit-Sharing (ABS), held in Marrakech, from 19 to 23 November.
- 2008 Training course in the Department of Botany of the University of Malaga (Spain) on the study of plant regeneration strategies with a view to developing eco-indicators to develop conservation strategies, from 18 to 22 February.
- 2008 Participation in the training workshop on the Rapid Assessment Method of the Efficiency of Management and Prioritization of Protected Area Systems (RAPPAM), from March 31st to April 3rd.
- 2008 Participation in the meeting of the Working Group of the Cedar Biosphere Reserve, September 17th.
- 2008 Participation in the 3rd Assises of forest research: the cedar ecosystem is a strategic issue for regional development, Khénifra, 16 and 17 October.
- 2009 Participation in the meetings related to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Office of the High Commissioner for Water and Forests and the fight against desertification, 12 and 13 January.
- 2009 Participation in a workshop on forest certification organized by WWF in Ifrane, June 16th.
- 2009 Participation in a meeting held at the Office of the High Commissioner for Water and Forests and Combating Desertification with an Austrian delegation (presentation of an organic product and a desalination and purification unit for water), July 7th.
- 2009 Participation in the Regional Workshop on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Rabat, from 27 to 30 October.

- 2010 Co-organizer of a workshop organized at the Scientific Institute by the High Commission for Water and Forests and the Fight against Desertification, the Scientific Institute and the Ministry of the Environment on Important Plant Areas in Morocco and presentation of an oral communication, April 6th.
- 2011 Oral presentation at the World Environment Day, organized by the 2011 Department of Environment, Rabat, June 7th.
- 2011 Participation in the first SOMAPAM school, theme "National strategy and distinctive signs of origin and quality" SDOC "of Aromatic and Medicinal Plants. IAV Hassan II, Rabat, November 22th.
- 2012 Oral presentation at the APA workshop and forest genetic resources organized by the Department of the Environment. Rabat, January 26th.
- 2012 Participation in the Expert Workshop on Taxonomy organized by the Department of the Environment, Marrakech, from 15 to 17 February.
- 2012 Participation in the workshop on the preparation of the national report on forest genetic resources, Rabat, March 20th.
- 2012 Participation in a meeting on Climate Change Adaptation and Biodiversity Enhancement. Organized by GIZ and the Department of the Environment, Rabat, March 26th.
- 2012 Participation in the celebration of the International Day of Biodiversity under the theme: "An ocean, several worlds of life". Department of the Environment, Rabat, from May 12th.
- 2012 Participation in the workshop and discussion of the results of the study on ABS capacity building needs in Morocco. Department of the Environment, Rabat, July 22th.

- 2013 Oral presentation at the Workshop on Plant Conservation and Local Livelihoods in Morocco. Organized by Global Diversity Foundation, Marrakesh, from May 31th to June 2nd.
- 2013 Participation in a meeting organized by the Office of the High Commissioner for Water and Forests and the Combat Desertification for the proposed list of endangered species of fauna and flora whose trade jeopardizes their survival. Forest Research Center, Rabat, June 6th.
- 2014 Participation in the National Biodiversity Strategy Review Workshop organized by the Department of the Environment. Rabat, 19 and 20 March.
- 2014 Participation in the Workshop for the implementation of the Global Strategy for Plant Conservation organized by BGCI and GDF. Marrakesh, from March 31th to April 1st.
- 2014 Participation in the Start-up Workshop of the Moroccan-Allied Cooperation Program on Adaptation to Climate Change and Implementation of Biodiversity - Nagoya Protocol. Organized in Rabat by the Department of the Environment, GIZ and the Office of the High Commissioner for Water and Forests and the Fight against Desertification, June 25th.
- 2014 Attended a preparatory meeting for COP-12. Department of the Environment, September 12th.
- 2014 Participation in a Preparatory Workshop for the COP-12. Department of the Environment, September 25th.
- 2014 Participation in the 1st Workshop: The Nagoya Protocol on ABS: Role and Challenges for Research & Development in Morocco. Component 3 of the Climate Change Adaptation and Biodiversity Valorization Program (ACCN). Organized by GIZ and the

Department of the Environment at CNRST-Rabat, 11 and 12 October.

- 2015 Participation in the workshop on the valorization of the natural products of the undergrowth organized at INFI Salé. Organized by the World Rural Development Association (ADMR), January 30th.
- 2015 Participation in the regional workshop under the theme: Strengthening the capacities of young communication professionals in the field of environmental protection and sustainable development: assessment and perspectives. Organized by the Med VI Foundation for the Protection of the Environment, ISESCO and UNEP. Hotel Mercure, Rabat, March 17th.
- 2015 Participation in the thematic workshops of presentation of the ten-year plan 2015-2024 of the Office of the High Commissioner for Waters and Forests and the Luppe Against Desertification. Ifrane, May 26th.
- 2015 Participation in the workshop of presentation of phase 1 of the action plan of the PAM project: Elaboration of the Action Plan for the conservation, the sustainable management and the valorization of Spontaneous Aromatic and Medicinal Plants in Morocco. Forest Research Center, Rabat, July 10th.
- 2015 Participated in the upgrade workshop on access to genetic resources and benefit sharing from their use (APA) related to the Nagoya Protocol. Salé, October 8th-9th..
- 2015 Presentation of the Forest and Agriculture Action Plan at the National Strategy and Action Plan Workshop on Biological Diversity in Morocco. Organized by the Ministry of Environment and UNDP, October 20th.
- 2015 Presentation of the Forest and Agriculture Action Plan at the Validation Workshop National Strategy and Action Plan for

- Biological Diversity in Morocco. Organized by the Ministry of Environment and UNDP, December 4th.
- 2015 Participation in the national closing workshop of the PAM project "Integrating Biodiversity into the Mediterranean Aromatic and Medicinal Plants Value Chain". Organized by the High Commission for Water and Forests and the fight against desertification at the Public Works Club, Rabat, December 14th.
- 2016 Participation in a training on the tool "Monitoring Information System" for the reporting of the implementation of the National Strategy and Action Plan for Biodiversity organized by the Ministry Delegate in Charge of the Environment. Rabat, February 17th-18th.
- 2016 Participation in the presentation workshop of the draft Law on Access to Genetic Resources and Benefit Sharing arising from their use Prepared by the Ministry in Charge of the Environment and GIZ. Hotel Golden Tulip Farah-Rabat, March 3rd.
- 2016 Participation in the workshop of presentation of the forest inventory sheet within the framework of the cooperation project between the High Commission for Water and Forests and the fight against desertification and the FAO. Hotel Rabat, Rabat, March 9th.
- 2016 Participation in the feedback workshop of the 4th meeting of the Plenary of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES-4) organized by the Ministry Delegate in Charge of the Environment with the support of GIZ. Rabat, April 18th.
- 2016 Participation in a meeting of the National Biodiversity Committee for the validation of the NBSAP organized by the Minister Delegate for the Environment Hotel Golden Tulip Farah in Rabat, May 18th.
- 2016 Oral presentation at the Workshop on the Review of Important Plant Area Limits in Morocco organized by the Scientific Institute,

the High Commission for Water and Forests and the fight against desertification and IUCN. CRF Rabat, May 31th.

- 2016 Participation in a consultation meeting on the creation of the CHM-APA. Organized by the Minister Delegate for the Environment organizes in partnership with GIZ. Rabat, June 30th.
- 2016 Participation in a dialogue workshop for the establishment of national structures for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) in French-speaking African countries organized by the Ministry of Environment and the French Ministry of the Environment Foreign and International Development co-organizes, in collaboration with the French Foundation for Research on Biodiversity and GIZ Morocco. Hotel Mercure, Rabat, September 27th-29th.
- 2016 Participation as a panelist at the Pre COP 22 held at the Mohammedia School of Rabat, November 8th.
- 2016 Participation as a panelist at the COP 22 held in Marrakech, Late November.
- 2017 Participation in the award ceremony of the "Lalla Hasnaa Littoral Durable Trophies" 2016 Edition. Mohammed VI International Conference Center. Skhirat, March 6th.
- 2017 Participation in the workshop on integrating climate change adaptation into development planning in Morocco organized by GIZ, the Department of the Environment, UNDP and UNITAR. Formation of focal points. Marrakesh, April 17th-20th.
- 2017 Participation in the meeting of the National Biodiversity Committee for the preparation of SBSTTA 21 and WGT8j, and for monitoring the implementation of the Nagoya Protocol. State Secretariat in charge of Sustainable Development. Rabat, October 24th.

- 2017 Participation in the reflection workshop for the preparation of a GCF project for the implementation of the National Adaptation Plan for Climate Change. Organized by the State Secretariat in charge of Sustainable Development. Rabat, October 31th to November 1st.
- 2018 Participation at the meeting of the National Committee for Biological Diversity for the presentation of the guide on access to traditional knowledge in Morocco. Ministry in Charge of Sustainable Development. Rabat.
- 2018 Participation in the meeting of the steering committee of the QCN / BUR 2 project. Ministry in charge of Sustainable Development. Rabat.
- 2018 Oral presentation at the International Day of Biodiversity organized at the Scientific Institute, Mohammed V University in Rabat. May 14th.
- 2018 Meeting of the National Biodiversity Committee for the preparation of COP14 on November 2, Department of Environment, Rabat.
- 2018 Participation in the National Workshop on Community Heritage Areas and Territories (ICCAs). Support conservation by local communities. Organized by the Department of the Environment in collaboration with GEF, SPG, UNDP, the association ADEPE.
- 2018 Participation in the workshop on the preparation of the sixth national report on biodiversity, 07 and 08 November 2018. Rabat.
- 2019 Participation in the workshop on the launch of the project entitled "Ecosystem Services in Morocco". Cooperation project between the State Secretariat for Sustainable Development and German Cooperation (GIZ) Rabat.

- 2019 Participation in the meeting of the steering committee of the Fourth National Communication / BUR, LECB and Operational Strengthening projects of 4C Morocco. Rabat.
- 2019 Participation in the celebration of the International Day of Biological Diversity organized by the Department of the Environment. 22 May Rabat.
- 2019 Participation in Sustainability Science workshop. Nexus “sustainable production and consumption- biodiversity-water globalization organized by IRD, 28-29 October 2019. Rabat.
- 2019 Participation in the workshop "Ecosystem services in Morocco: quantification, integration and participation of the private sector. Organized by GIZ and the Department of the Environment. December 09, Rabat.
- 2019 Participation in a CNDB meeting to report on the work of the SBSTTA 23 meeting and to examine the consultation products of the SES project. Organized by GIZ and the Department of the Environment 24 December, Rabat, Morocco.
- 2020 Oral presentation on the international and national context of biodiversity. Video conference organized by the Ministry of Energy, Mines and the Environment, in collaboration with the German Technical Cooperation (GIZ). International Day for Biological Diversity. May 22. Rabat.
- 2020 Oral presentation on the important areas for Plants in Morocco. Webinar on rare and threatened plants in Morocco. Organized by the Nature Solutions Association, the Department of Water and Forests, the Department of the Environment, the Scientific Institute and the Critical Ecosystem Partnership. 5th June, 2020.
- 2021 Participation in the virtual meeting of the National Biodiversity Sub-Committee / Preparation of the 24th session of the Subsidiary

Body on Scientific, Technical and Technological Advice (SBSTTA-24), and of the 3rd meeting of the Subsidiary Body responsible for the application (SBI-3). April 28.

2021 Oral presentation on Nature-based solutions (SfN): lever for ecosystem restoration and biodiversity conservation for human well-being. Webinar organized by the Mohammed VI Foundation on the occasion of World Environment Day.

PEDAGOGICAL ACTIVITIES

1. Teaching:

- Participation in teaching, as a temporary, practical biology work for BG1 and BG2. (1990-1992). Faculty of Sciences, Mohammed Premier University, Oujda.
- Facilitator of several trainings for engineers and technicians of the High Commission for Water and Forests and the fight against desertification of the Oujda, Kenitra, Marrakech and Agadir regions on aromatic and medicinal plants. (2004-2005).
- Participation, in 2014, in training in biodiversity provided by the Mohammed VI Foundation to young journalists. The course of this training concerns the terrestrial ecosystems component of Morocco.
- Presentation of two posters for high school students at the second edition of the National Science Week organized by Mohammed V University under the theme "innovation for economic and social development". Scientific Institute, April 28th-May 2nd, 2014.

2. Thesis direction:

- Supervision in floristry, plant ecology and functional ecology of two PhD students Hamid KHAMAR (enrolled in the Kenitra Faculty of Sciences) and Younès ABOUALI (enrolled in the Faculty of Sciences of Fez).

- Co-director of PhD thesis on Aromatic and Medicinal Plants of the doctoral candidate Mohammed Jamaledine enrolled at the Faculty of Sciences of Rabat.

3. Thesis Jury:

- Participation, as a reporter, in a jury of PhD thesis of state in sciences realized on the “Chêne liège” (Morocco). Faculty of Sciences of Kenitra, February 12, 2005.
- Participation, as a reporter, in a PhD thesis jury of state in science under the theme: Study of the natural regeneration of cork oak (*Quercus suber* L.) in the forests of Mamora and Temara (Morocco). Faculty of Sciences of Kenitr, March 26th, 2005.
- Participation, as a reporter, in a National PhD thesis jury under the theme: Contribution to the study of the interests of the Cytises in the rehabilitation of degraded environments, case of *Cytisus grandiflorus* in the Ourika catchment. Faculty of Sciences of Kenitra, July 19th, 2008.
- Participation, as a reporter, in a PhD thesis jury under the theme: Rehabilitation of degraded pastures of the High Plateaux of Eastern Morocco using native pastoral species. Faculty of Sciences of Oujda, December 25, 2013.
- Participation, as a reporter, in a PhD thesis jury under the theme: Phytoecological, ecophysiological study and enhancement of the Atlas Pistachio (*Pistacia atlantica* Desf.) And the Red Juniper (*Juniperus phoenicea* L.) of the Eastern Region from Morocco. Faculty of Sciences, Med University 1st Oujda, January 14th, 2012.
- Participation, as a reporter, in a PhD thesis jury under the theme: Rehabilitation of degraded pastures of the High Plateaux of Eastern Morocco using native pastoral species. Faculty of Sciences of Oujda, May 18th, 2013.
- Participation, as a reporter, in a doctoral defense jury under the theme "Contribution to the floristic study of coastal dunes and to the phytoecological and ecophysiological study of the oyat (*Ammophila arenaria* L.) in the eastern

Mediterranean region" from Morocco ". Faculty of Sciences of Oujda, February 28th, 2014.

- Participation, as a reporter, in a PhD thesis jury under the theme "Ethnobotanical study and valorisation of the essential oils of two aromatic and medicinal herbs from the Moroccan Sahara (*Ammodaucus leucotrichus* subsp. *leucotrichus* Coss. & Durieu and *Ammodaucus leucotrichus* ssp. *nanocarpus* Beltran). Faculty of Sciences, Kenitra. June 13th, 2015.
- PhD thesis jury member under the theme: ecological and floristic study of the region between Midelt and Maaziz, Morocco. Faculty of Sciences of Meknes. June 29, 2019.
- PhD thesis jury member (reporter) under the theme: Potentiel des terres de parcours arides au Maroc: vers un système de gestion durable, cas des hauts plateaux de l'oriental, Maroc. Faculty of Sciences, Mohammed V University in Rabat. December 07, 2019.
- PhD thesis jury member (reporter) under the theme "modeling the risk of desertification in the context of global changes in Morocco (case of the argan ecosystem of Essaouira and Tiznit and dune ecosystems in Errachidia). Faculty of Science, Mohammed V University of Rabat. December 19, 2020
- PhD thesis reporter under the theme "Use of decision support methods in the management of Moroccan forests". Faculty of Science, Mohammed V University in Rabat. July 10, 2021.

4. Recruitment jury:

Member of the Jury for the recruitment of an assistant professor in the Department of Botany and Plant Ecology of the Scientific Institute, Mohammed V University in Rabat. November 25, 2019.

EXPERTISE

- Participation in a project coordinated by the Department of the Environment on Access and Benefit Sharing and Genetic Resources, Flora and Natural Vegetation Component (2012)
- Member of the National Biodiversity Committee
- Participation in a project concerning the development of a Flora and Fauna database; flora endemic flora and useful flora of Morocco. Project coordinated by the Department of the Environment (2013)
- Participation in the Red List Project (IUCN Red List). 2013) of the Mediterranean flora (red list of monocotyledonous flora).
- Participation in a project concerning the evaluation of investments in the field of the protection and the valorization of the natural resources and the perspectives of developments. Project coordinated by the Department of the Environment, 2013.
- Participation in a Moroccan-Allied cooperation project on Adaptation to Climate Change and Implementation of Biodiversity - Nagoya Protocol. 2014-2016.
- Coordinator of the IUCN Important Plant Areas Project in Morocco (2015-2017).
- Consultant on forest and agricultural biodiversity. Project: National biodiversity planning in support of the implementation of the 2011-2020 Strategic Plan of the Convention on Biological Diversity (CBD).
- Lead Author of the IPBES regional assessment of biodiversity and ecosystem services in Africa.

OTHER ACTIVITES

- Member of the board of the National Association of Biodiversity in Morocco.
- Member of the Institut Scientifique Council

- Member of Mohammed V University Council
- Member of the Research Commission of Mohammed V University in Rabat
- Member of the International Association of Botanical Gardens.
- Member of the CEM / EMP International IUCN program:
 - 1- Ecosystem Red List
 - 2- Dryland Ecosystem
 - 3- Mountain Ecosystem
 - 4- IUCN Thematic Group Nature based Solutions (NbS)
 - 5- Member of the IUCN Ecosystem Restoration Expert Group since 2020
- Member of the Multidisciplinary Expert Panel (MEP) of Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).
- Member of The Asahi Glass Foundation
- Member of the Mountain Research Initiative (MRI) for several years.