



# **COUNCIL'S NEWSLETTER**

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The High Council, Atlas Publishing, LLC, & INRA—Morocco Organize the "Fifth International American Moroccan Agricultural Sciences Conference—AMAS Conference V on June 15—16, 2020 in Tangier, Morocco

The High Council of Moroccan American Scholars and Academics (HC-MASA; <a href="www.hc-masa.org">www.hc-masa.org</a>) and Atlas Publishing, LLC (<a href="www.atlas-publishing.org">www.atlas-publishing.org</a>) in Collaboration with Dr. Faouzi Bekkaoui, Director, INRA, Morocco are organizing the Fifth International American Moroccan Agricultural Sciences Conference (AMAS Conference V) on June 15–16, 2020 at the Hilton Garden Inn, Tangier, Morocco.

The conference organizers Prof. Khalid Meksem, Southern Illinois University, USA (Council's VP-USA) and Prof. My Abdelmajid Kassem, Fayetteville State University, USA (Council's President) and the rest of the Organizing and Scientific Committees are calling all students, faculty, and scientists in Morocco and around the world to attend and present at this international event.

The conference welcomes abstracts from all fields of Agricultural and Plant Sciences from students, faculty, and scientists around the world. Prizes for the best student posters and oral presentations will be awarded.

It is noteworthy to mention that the conference gained international recognition and its attendance increased every year since it started in 2013; however, the organizers decided to limit participants in this fifth edition (AMAS Conference V) to about 150-160 attendees.

#### Long Live AMAS Conference!







The High Council of Moroccan American Scholars and Academics—HC-MASA organizes the Fifth International American Moroccan Agricultural Sciences Conference—AMAS Conference V on June 15—16, 2020 in Tangier, Morocco

#### In This Issue

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- Mohammed Bendahmane Won a Prestigious prize Award
- Atlas Publishing, LLC's Call For Papers
- New Members
- And much more!

### Council's Members Published Articles (July 2019–Jan. 2020)

- Lazzerini PE, Hamilton RM, **Boutjdir M.** Editorial: Cardioimmunology: Inflammation and Immunity in Cardiovascular Disease. Front Cardiovasc Med. 2019 Dec 3;6:181. doi: 10.3389/fcvm.2019.00181.
- Lazzerini PE, Laghi-Pasini F, Acampa M, Srivastava U, Bertolozzi I, Giabbani B, Finizola F, Vanni F, Dokollari A, Natale M, Cevenini G, Selvi E, Migliacci N, Maccherini M, **Boutjdir M**, Capecchi PL. Systemic Inflammation Rapidly Induces Reversible Atrial Electrical Remodeling: The Role of Interleukin-6-Mediated Changes in Connexin Expression. J Am Heart Assoc. 2019 Aug 20;8(16):e011006. doi: 10.1161/JAHA.118.011006.
- Morozova V, Cohen LS, Makki AE, Shur A, Pilar G, **El Idrissi A**, Alonso AD. Normal and Pathological Tau Uptake Mediated by M1/M3 Muscarinic Receptors Promotes Opposite Neuronal Changes. Front Cell Neurosci. 2019 Sep 4;13:403. doi: 10.3389/fncel.2019.00403.
- **El Idrissi A.** Taurine Regulation of Neuroendocrine Function. Adv Exp Med Biol. 2019;1155:977-985. doi: 10.1007/978-981-13-8023-5 81.
- Girardin A, Wang T, Ding Y, Keller J, Buendia L, Gaston M, Ribeyre C, Gasciolli V, Auriac MC, Vernié T, **Bendahmane A**, Ried MK, Parniske M, Morel P, Vandenbussche M, Schorderet M, Reinhardt D, Delaux PM, Bono JJ, Lefebvre B. LCO Receptors Involved in Arbuscular Mycorrhiza Are Functional for Rhizobia Perception in Legumes. Curr Biol. 2019 Dec 16;29 (24):4249-4259.e5. doi: 10.1016/j.cub.2019.11.038.
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- Eleblu JSY, Haraghi A, Mania B, Camps C, Rashid D, Morin H, Dogimont C, **Boualem A**, **Bendahmane A**. The gynoecious CmWIP1 transcription factor interacts with CmbZIP48 to inhibit carpel development. Sci Rep. 2019 Oct 28;9(1):15443. doi: 10.1038/s41598-019-52004-z.
- Kreplak J, Madoui MA, Cápal P, Novák P, Labadie K, Aubert G, Bayer PE, Gali KK, Syme RA, Main D, Klein A, Bérard A, Vrbová I, Fournier C, d'Agata L, Belser C, Berrabah W, Toegelová H, Milec Z, Vrána J, Lee H, Kougbeadjo A, Térézol M, Huneau C, Turo CJ, Mohellibi N, Neumann P, Falque M, Gallardo K, McGee R, Tar'an B, **Bendahmane A**, Aury JM, Batley J, Le Paslier MC, Ellis N, Warkentin TD, Coyne CJ, Salse J, Edwards D, Lichtenzveig J, Macas J, Doležel J, Wincker P, Burstin J. A reference genome for pea provides insight into legume genome evolution. Nat Genet. 2019 Sep;51(9):1411-1422. doi: 10.1038/s41588-019-0480-1.
- Ramirez-Prado JS, Latrasse D, Rodriguez-Granados NY, Huang Y, Manza-Mianza D, Brik-Chaouche R, Jaouannet M, Citerne S, Bendahmane A, Hirt H, Raynaud C, **Benhamed M**. The Polycomb protein LHP1 regulates Arabidopsis thaliana stress responses through the repression of the MY-C2-dependent branch of immunity. Plant J. 2019 Dec;100(6):1118-1131. doi: 10.1111/tpj.14502.
- Le Bris P, Wang Y, Barbereau C, Antelme S, Cézard L, Legée F, D'Orlando A, Dalmais M, **Bendahmane A**, Schuetz M, Samuels L, Lapierre C, Sibout R. Inactivation of *LACCASE8* and *LACCASE5* genes in *Brachypodium distachyon* leads to severe decrease in lignin content and high increase in





### Council's Members Published Articles (July 2019–Jan. 2020)

- saccharification yield without impacting plant integrity. Biotechnol Biofuels. 2019 Jul 15;12:181. doi: 10.1186/s13068-019-1525-5.
- Devani RS, Chirmade T, Sinha S, **Bendahmane A**, Dholakia BB, Banerjee AK, Banerjee J. Flower bud proteome reveals modulation of sex-biased proteins potentially associated with sex expression and modification in dioecious Coccinia grandis. BMC Plant Biol. 2019 Jul 23;19(1):330. doi: 10.1186/s12870-019-1937-1.
- Just J, **Bendahmane M**. Rosa spp. Trends Genet. 2019 Dec 10. pii: S0168-9525 (19)30242-2. doi: 10.1016/j.tig.2019.11.002.
- Naoufal Lakhssassi, Sarbottam Piya, Sadia Bekal, Shiming Liu, Zhou, Catherine Bergounioux, Long Miao, Jonas Meksem, Aicha Lakhssassi, Karen Jones, My Abdelmajid Kassem, Moussa Benhamed3, Abdelhafid Bendahmane, Kris Lambert, Adnane Boualem, Tarek Hewezi, and Khalid Meksem. A pathogenesis related protein GmPR10-08 promotes a molecular interaction between the GmSHMT08 and GmSNAP18 in resistance to Heterodera glycines. Plant Biotechnology, 2020. Accepted.
- Zhou Zhou\*, **Naoufal Lakhssassi\***, Mallory A. Cullen, Abdelhalim El Baz, Tri D. Vuong, Henry T. Nguyen, and **Khalid Meksem.** Assessment of phenotypic variations and correlation among seed composition traits in mutagenized soybean populations. Genes, 2019. 27;10(12). pii: E975. doi: 10.3390/genes10120975.
- Naoufal Lakhssassi, Gunvant Patil, Sarbottam Piya, Zhou Zhou, Azam Baharlouei, Abdelmajid Kassem, David Lightfoot, Dr. Tarek Hewezi, Abdelali Barakat, Henry Nguyen, and Khalid Meksem. Genome reorganization of the GmSHMT gene family in soybean showed a lack of functional redundancy in resistance to soybean cyst nematode. Scientific report, 2019. 9:1506 | https://doi.org/10.1038/s41598-018-37815-w.
- Gunvant B. Patil\*, **Naoufal Lakhssassi\***, Jinrong Wan, Li Song, Zhou Zhou, Mariola Klepadlo, Tri D. Vuong, Adrian O. Stec, Sondus S. Kahil, Vincent Colantonio, Babu Valliyodan, Hollis Rice, Sarbottam Piya, Tarek Hewezi, Robert M. Stupar, **Khalid Meksem** and Henry T. Nguyen. Whole genome re-sequencing reveals the impact of copy number variants of the Rhg4 gene on broad-based resistance to soybean cyst nematode. Plant Biotechnology, 2019. doi: 10.1111/pbi.13086.
- Vitor Amorim-Silva, Álvaro García-Moreno, Araceli Castillo, **Naoufal Lakhssassi**, Alicia Esteban, Abel Rosado, Jéssica Pérez-Sancho, Yansha Li, Pepa Pérez-Rodriguez, Victoriano Valpuesta, Cyril Zipfel, Alberto Macho, Miguel A Botella. TTL proteins scaffold brassinosteroid signaling components at the plasma membrane to optimize signal transduction in Arabidopsis. Plant Cell, 2019. (31):1807–1828, doi/10.1105/tpc.19.00150.
- Uttpal Anand, Nadia Jacobo, Ammar Altemimi, and **Naoufal Lakhssassi.** A Comprehensive Review on Medicinal Plants as Antimicrobial Therapeutics: Potential Avenues of Biocompatible Drug Discovery. Metabolites, 2019. DOI: 10.3390/metabo9110258.
- Ammar Altemimi, Salah Naji Aziz, Asaad R. S. Al-Hilphy, Naoufal Lakhssassi, Dennis G. Watson, and Salam A. Ibrahim. Critical review of radio-frequency (RF) heating applications in food processing. Food Quality and Safety, 2019. XX, 1-11. doi:10.1093/fqsafe/fyz002.
- Alya Alsaad, Ammar B Altemimi, Salah Naji Aziz, **Naoufal Lakhssassi.** Extraction and Identification of Cactus Opuntia dillenii Seed Oil and its Added Value for Human Health Benefits. Pharmacognosy Journal, 2019. 11 (3):579-587.





### Council's Members Published Articles (July 2019–Jan. 2020)

#### **Articles (Continued):**

- Belhaj K., Mansouri F., Sindic M., Fauconnier M-L, Boukharta M, Serghini Caid-H, and **A Elamrani** (2019): A. Effect of Cooking Methods on Fatty Acids Profile and Health Lipid Indices of Beni-Guil Lamb Meat from Eastern Morocco. Journal of Applied Biological Sciences 13 (3): 166-171. <a href="http://www.jabsonline.org/index.php/jabs/article/view/622/589">http://www.jabsonline.org/index.php/jabs/article/view/622/589</a>.
- Said Ait Bahadou, Abderrahman Ouijja, Abdessalem Tahiri and Rachid Lahlali (2020). Fire blight (Erwinia amylovora) disease in Morocco: Current status and action for its management. Moroccan Journal of Agricultural and Veterinary Sciences 8 (1). https://agrimaroc.org/index.php/Actes\_IAVH2/article/view/800.
- Channaoui, S., I. Saghouri El Idrissi, H. Mazouz, et **A. Nabloussi**. 2019. Reaction of some rapeseed (*Brassica napus L.*) genotypes to different drought stress levels during germination and seedling growth stages. OCL 26: 23.
- Channaoui, S., M. Labhilili, H. Mazouz, M. El Fechtali et **A. Nabloussi**. 2019 Assessment of novel EMS-induced genetic variability in rapeseed (*Brassica napus* L.) and selection of promising mutants. Pak. J. Bot. 51: 1629-1639.
- Channaoui, S., M. Labhilili, M. Mouhib, H. Mazouz, M. El Fechtali et **A. Nabloussi**. 2019 Development and evaluation of diverse promising rapeseed (*Brassica napus* L.) mutants using physical and chemical mutagens OCL 26: 35.
- **Nabloussi, A.**, H. Bahri, M. Lakbir, H. Moukane, A. Kajji et M. El Fechtali. 2019. Assessment of a set of rapeseed (*Brassica napus L.*) varieties under waterlogging stress at different plant growth stages. OCL 26: 36.
- Rizki, H., M. Mouhib, **A. Nabloussi**, F. Kzaiber, H. Latrache et H. Hanine. 2019. Effect of different doses of gamma irradiation on biochemical and microbiological properties of sesame (*Sesamum indicum L.*) seeds. Mor. J. Chem. 7: 538-547.
- Gomaa A, Peng D, Chen Z, **Soutto M**, Abouelezz K, Corvalan A, El-Rifai W. Epigenetic regulation of AURKA by miR-4715-3p in upper gastrointestinal cancers. Sci Rep. 2019 Nov 18;9(1):16970. doi: 10.1038/s41598-019-53174-6.
- Wang S, Chen Z, Zhu S, Lu H, Peng D, **Soutto M**, Naz H, Peek R Jr, Xu H, Zaika A, Xu Z, El-Rifai W. PRDX2 protects against oxidative stress induced by H. pylori and promotes resistance to cisplatin in gastric cancer. Redox Biol. 2020 Jan;28:101319. doi: 10.1016/j.redox.2019.101319.
- Soutto M, Chen Z, Bhat AA, Wang L, Zhu S, Gomaa A, Bates A, Bhat NS, Peng D, Belkhiri A, Piazuelo MB, Washington MK, Steven XC, Peek R Jr, El-Rifai W. Activation of STAT3 signaling is mediated by TFF1 silencing in gastric neoplasia. Nat Commun. 2019 Jul 10;10(1):3039. doi: 10.1038/s41467-019-11011-4.
- Zhu S, **Soutto M**, Chen Z, Blanca Piazuelo M, Kay Washington M, Belkhiri A, Zaika A, Peng D, El-Rifai W. Activation of IGF1R by DARPP-32 promotes STAT3 signaling in gastric cancer cells. Oncogene. 2019 Jul;38(29):5805-5816. doi: 10.1038/s41388-019-0843-1.
- Liu S, Ge F, Huang W, **Lightfoot DA**, and Peng D. Effective identification of soybean candidate genes involved in resistance to soybean cyst nematode via direct whole genome re-sequencing of two segregating mutants. Theor Appl Genet. 2019 Sep;132(9):2677-2687. doi: 10.1007/s00122-019-03381-6.

Congratulations to Our Members!
Keep Up The Good Work!





#### Conference Presentations and Funded Grants (July 2019–Jan. 2020)

# Council Members' Poster and Oral Presentations, and Funded Grants:

Kodad S, Melhaoui R, Serghini H, **Elamrani A**, ADDI M, Abid M, Mihamou A: Evaluation of pomological and physicochemical traits of some almond native genetic resources from Eastern Morocco. The fourth International Conference on "Research to Applications & Markets", October.21-23, 2019, Hammamet- Tunisia. Link: <a href="https://sites.google.com/a/fss.usf.tn/ram2019/program">https://sites.google.com/a/fss.usf.tn/ram2019/program</a>. Oral Communication.

Melhaoui R, Kodad S, Abid M, Serghini-Caid H, Sindic M & **Elamrani A**. Characterization and valorization of almond oils mechanically extracted from "Beldi" almond's kernels of low commercial value in eastern Morocco. Poster (BCT-P4), The 4th International Conference on "Research to Applications & Markets", October.21-23, 2019, Hammamet- Tunisia. <a href="https://sites.google.com/a/fss.usf.tn/ram2019/program.">https://sites.google.com/a/fss.usf.tn/ram2019/program.</a> Poster.

Mabrouki Y, Taybi A.F, Sahib N, Abid M, **Elamrani A.** What is attacking almond trees in Eastern Morocco?; Poster (BCT-P4), The 4<sup>th</sup> International Conference on "Research to Applications & Markets", October.21-23, 2019, Hammamet, Tunisia. <a href="https://sites.google.com/a/fss.usf.tn/ram2019/program.">https://sites.google.com/a/fss.usf.tn/ram2019/program.</a>
Poster.

**Elamrani A.** Proximate composition, amino acid profile and mineral content of three sheep meats reared extensively in Morocco: Comparative study, Poster (BCT-P5), The 4<sup>th</sup> International Conference on "Research to Applications & Markets", October.21-23, 2019, Hammamet- Tunisia. <a href="https://sites.google.com/a/fss.usf.tn/ram2019/program.">https://sites.google.com/a/fss.usf.tn/ram2019/program.</a> Poster.

Belhaj K, Mansouri F., Sindic M., Fauconnier M-L., Boukharta M., Serghini Caid H., Elamrani A: Cooking method effects on fatty acids profile and health lipid indices of Beni-Guil lamb meat from eastern Morocco 1er Colloque international "Bioressources, Biotechnologies et Développement Durable" 18-20 Déc., 2019, Université Mohammed Premier, Oujda, Maroc. <a href="https://colloque2b2d.sciencesconf.org/data/pages/">https://colloque2b2d.sciencesconf.org/data/pages/</a>

Mansouri Farid, Aazza Smail, El Goumi Younes, Ben Moumen Abdessamad & **Elamrani Ahmed**: Oxidative stability of refined olive oil enriched with natural antioxidants from industrial essential oil waste, 1er Colloque international « Bioressources, Biotechnologies et Développement Durable » 18-20 Déc., 2019, Université Mohammed Premier, Oujda, Maroc. Link: <a href="https://colloquestable.com/https://colloquestable.com/https://colloquestable.com/https://colloquestable.com/https://colloquestable.com/https://colloquestable.com/https://com/https://com/https://colloquestable.com/https://com/https

Elamrani Ahmed: Grant for "PARA" project on postharvest valorization of almonds, almond oil and its coproducts. (Project PARA-1 (2019 -2021, UMP Oujda): Amandier dans la région orientale du Maroc: Biodiversité et Valorisation en post récolte des Amandes, dérivés et sous-produits d'amande). Link: PARA-1 (2019 -2021)/ Amandier dans la région oriental du Maroc: Biodiversité et Valorisation en post récolte des Amandes, dérivés et sous-produits d'amande.

Bellaloui N, L Khandaker, M Akond, SK Kantartzi, K Meksem, A Mengistu, **DA**Lightfoot, and MA Kassem. Genetic Mapping of QTL Associated with

Seed Nutrition in Soybean. International Conference and Exhibition on
Genome Science, September 27-28, 2019, Hilton Garden Inn Houston
Westbelt, Houston, TX 77072, USA. Oral Presentation By N. Bellaloui. Poster.



Dr. Ahmed Elamrani





American-Moroccan and Other Council Plant Scientists at the International Plant & Animal Genome Conference XXVIII (January 11—15, 2020)



# American-Moroccan and Other Council Plant Scientists Thrive at the International Plant & Animal Genome Conference XXVIII in San Diego, CA

Since 1997, American-Moroccan and other Moroccan Plant Scientists were present at "The International Plant & Animal Genome Conference XXVIII" that was held January 11–15, 2020 in San Diego, CA. These were:

- Dr. Khalid Meksem, Professor, SIUC, IL, USA
- Dr. My Abdelmajid Kassem, Professor and Department Chair, Fayetteville State University, Fayetteville, NC, USA
- Dr. Mohammed Bendahmane, Ecole Normale Supérieure, Lyon, France
- Dr. Naoufal Lakhssassi, Postdoctoral Fellow, SIUC, IL, USA
- Dr. Abdelali Barakat, Nebraska, USA
- Dr. Mohammed Zouine, INPT-ENSAT, France
- Dr. Badr Benjelloun, INRA, Beni-Mellal, Morocco
- Dr. Abdelaziz Smouni, University Mohamed V, Rabat, Morocco
- Mr. Abdelhalim El Baz, PhD Student, SIUC, IL, USA
- Mr. Samir Id-Lahoucine, PhD Student, University of Guelph, Canada
- Mr. Oussama Badad, SIUC, IL, USA

These scientists organized workshops and presented their research findings in oral and poster formats as follows:

#### I. Workshops:

a. Workshop: Teaching Genetics, Genomics, Biotechnology, and Bioinformatics

Organizer: Abdelmajid Kassem, Fayetteville State University, USA Date: Saturday, January 11, 2020, Time: 4:00-6:10 PM



Samir Id-Lahoucine, a
PhD Student at the
University of Guelph
in Canada won a Student Travel Award at
the International Plant
& Animal Genome
Conference XXVIII,
2020!

Congratulations
Samir!



# American-Moroccan and Other Council Plant Scientists at the International Plant & Animal Genome Conference XXVIII (January 11—15, 2020)

#### b. Workshop: Genomics of Plant Development

Organizer: Dr. Khalid Meksem, Southern Illinois University, USA

Date: Sunday, January 12, 2020 Time: 4:00-6:10 PM

#### c. Workshop: Ornamentals

Organizer: Mohamed Bendahmane, Ecole Normale Supérieure, France Date: Sunday, January 12, 2020 Time: 4:00-6:10 PM

#### d. Workshop: Functional Genomics

Organizer: David Lightfoot, Southern Illinois University, Carbondale, IL, USA Date: Sunday, January 12, 2020 Time: 1:30-3:40 PM



Left to Right: Dr. Abdelmajid Kassem, Abdelhalim El Baz, Dr. Naoufal Lakhssassi, and Mr. Samir Id-Lahoucine







L2R: Dr. Khalid Meksem, Dr. Mohammed Bendahmane, and Dr. David Lightfoot







L2R: Dr. Abdelaziz Smouni, Dr. Mohammed Zouine, and Mr. Oussama Baddad.







# American-Moroccan and Other Council Plant Scientists at the International Plant & Animal Genome Conference XXVIII (January 11—15, 2020)

#### **II. Oral Presentations:**

W585 Soybean TILLING by Target Exome Sequencing: Applications in Disease Resistance and Seed Composition @ Sunday, Jan 12 4:50 PM. **Naoufal Lakhssassi**.

W120 Genetic Mapping of Seed Isoflavone Content in Soybean. **Abdelmajid Kassem** @ Saturday, Jan 12 6:35 PM in Bioactive, Nutraceutical and Therapeutic Molecules in Plants

W663 Whole Genome Neutral and Adaptive Diversity in Traditional Sheep Breeds: Case of Morocco. **Badr Benjelloun**, INRA, Morocco

W319 Cloning of a Melon Fruit Shape QTL Contributes to Identify a Common Mechanism that underlies Organ Morphological Diversity in Plants. **Mohammed Zouine** 

#### **III. Poster Presentations:**

PE0738 Molecular Cross Talk between Resistant and Defense Genes Promote Resistance to Heterodera glycines. **Naoufal Lakhssassi** 

PO0733 Correlation Analysis of the Essential Amino Acids with Other Quality Traits in Soybean Mutant FM6-847. Jiazheng Yuan, Naoufal Lakhssassi, Nacer Bellaloui, Safiah Kassem, Zakariah Kassem, Sakinah Kassem, Sonia Viera, Shontia Blount, Layla Rashad, Daniel Okunbor, Khalid Meksem, and Abdelmaiid Kassem.

PE0730 Seed Protein, Oil, and Isoflavone Contents in 'Forrest' By 'Williams 82' Recombinant Inbred Line Population of Soybean. Jiazheng Yuan, **Naoufal Lakhssassi**, Nacer Bellaloui, Francess Betts, Treresa Register, Earl Williams, Tri D. Vuong, Henry T. Nguyen, **Khalid Meksem**, and **Abdelmajid Kassem**.

PO0391 Whole Genome Neutral and Adaptive Diversity in Traditional Sheep Breeds: Case of Morocco. **Badr Benjelloun**, Abdessamad Ouhrouch, Simon Boitard, Abdelmajid Haddioui, Frederic Boyer, Bertrand Servin, François Pompanon, and Ann Blondeau Da Silva.

PE1036 Lead Tolerance and Accumulation in the Brassicaceae "Hirschfeldia Incana": Advances in Molecular Mechanisms. **Abdelaziz Smouni.** 



Congratulations to Our Members!
Keep Up The Good Work!







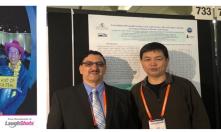






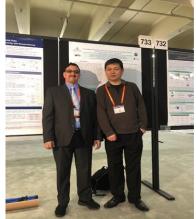
























#### Dr. Mohammed Bendahmane, A Prestigious Science Prize Award Winner!

### 2019 Alexandre Joannidès Prize Winner: Dr. **Mohammed Bendahmane**



The 2019 Alexandre Joannides Prize Académie des sciences is awarded to Dr. Mohammed Bendahmane. Research Director at the National Institute for Aaronomic Research (INRA), École Normale Su-

périeure, Lyon, France.

Dr. Bendahmane has implemented molecular, cellular and genomic approaches to understand how the rose flower develops and produces its fragrance.

With his team, he obtained the first sequencing data of the rose bush and later on its complete genome now considered as one of the best three in plants.

He also identified the genomic and molecular mechanisms associated with the formation of flowers and identified the rose's unexpected function of an enzyme, Nudix hydrolase, allowing the biosynthesis of the perfume by a pathway not previously understood.

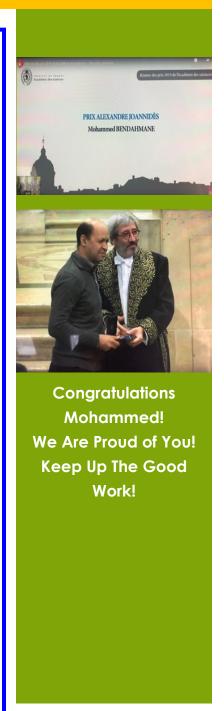
These different discoveries have been welcomed by the international community and suggest new applications in other species of agronomic interest.

With his team he also revealed a major pathway (TCTP), common to plants and animals, which controls cell proliferation and organ growth, an important knowledge also for research against cancer in humans.

The Academy pays tribute to him on the occasion of the solemn presentation of his prize under the Dome of the Institut de France, on November 26, 2019. (1)

(1) Translated from French to English from: https://www.academie-sciences.fr/fr/ Laureats/prix-alexandre-joannides-2019-mohammed-bendahmane.html.







#### Dr. Abdelhafid Bendahmane Published High Impact Research Findings!

# Dr. Abdelhafid Bendahmane And His Research Group Published High Impact Research Findings



**Dr. Abdelhafid Bendahmane**, a Research Directorr at Paris Saclay <u>Institute of Plant Sciences</u> (IPS2-CNRS/INRA/Université Evry-Val d'Essonne/Université Paris-Diderot/Université Paris-Sud), which is part of <u>INRA Île-de-France – Ve</u>rsailles-Grignon and

where Abdelhafid built his international reputation in Plant Genomics and Breeding.

Recently, he published three high impact articles (see page 2 of this Newsletter for full citation):

LCO Receptors Involved in Arbuscular Mycorrhiza Are Functional for Rhizobia Perception in Legumes (Current Biology) where they discovered that "Mutants in Solanaceaous LysM receptors LYK10 are impaired in arbuscular mycorrhiza; LYK10 proteins have a high affinity for lipochitooligosaccharidic signal molecules; LYK10 promoter is expressed in arbuscule-containing cells in tomato roots; and Solanaceaous LYK10 can restore nodulation in legumes mutated in their orthologs". Source: Current Biology.

A comprehensive genome variation map of melon identifies multiple domestication events and loci influencing agronomic traits (Nature Genetics) where they discovered three domestication events and 208 loci associated with important agronomic traits using GWAS analysis.

The gynoecious CmWIP1 transcription factor interacts with CmbZIP48 to inhibit carpel development (Scientific Reports) where they discovered that the sex determination gene CmWIP1 interacts with the transcription factor CmZIP48 and their co-expression leads to the formation of male flowers.

A reference genome for pea provides insight into legume genome evolution (Nature Genetics). Here, the research group published a the pea reference genome that will help in a better understanding of the legumes genomics and evolution.

Congratulations Abdelhafid! We Are Proud of You! Keep Up The Good Work!



Dr. Abdelhafid Bendahmane's Research Group





#### **AMAS Conference V—Call For Abstracts**

The International American—Moroccan Agricultural Conference V (AMAS Conference V), June 15—16, 2020, Tangier, Morocco

Dear Students, Colleagues, and Friends,

We are pleased to announce that the High Council of Moroccan American Scholars and Academics (HC-MASA; <a href="www.hc-masa.org">www.hc-masa.org</a>) and Atlas Publishing, LLC (<a href="www.atlas-publishing.org">www.atlas-publishing.org</a>) in Collaboration with Dr. Faouzi Bekkaoui, Director, INRA, Morocco are organizing the Fifth International American Moroccan Agricultural Sciences Conference (AMAS Conference V) on June 15–16, 2020 at the Hilton Garden Inn, Tangier, Morocco.

We are calling for abstracts for Oral and Poster presentations. Please register at the conference website (<a href="www.amas-conference.org">www.amas-conference.org</a>) and submit your abstract to: <a href="mailto:ab-stracts2020@amas-conference.org">ab-stracts2020@amas-conference.org</a>.

For attendees residing in Morocco, you can deposit the registration fee at the bank account in Morocco and send a scanned copy of your deposit slip. For more information, see the Registration webpage.

For all other attendees residing outside Morocco, please pay your registration fee via PayPal. For more information, see the Registration webpage.

Please register and submit your abstracts ASAP; <u>attendance is limited to 200 people.</u>

If you have any question, please contact <u>ab-stracts2020@amas-conference.org</u> or send a WhatsApp message to Dr. Kassem at +1 (910) 745-2047.

See you in Tangier!

Majid and Khalid

**AMAS Conference Organizers** 



# Atlas Publishing, LLC—Call For Papers

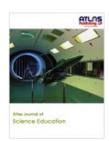
# Atlas Publishing, LLC—Is Calling For Papers For All of Its Journals: <a href="https://www.atlas-publishing.org">www.atlas-publishing.org</a>



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Journal of Sustainable Watershed Science and Management—JSWSM





# The Council Is Growing! (Welcome to our New Members)

- El Mahdi Boutt, Seqirius, Inc., Holly Springs, NC, USA
- Samir Id-Lahoucine, PhD Student, University of Guelph, Canada
- Abdelhalim El Baz, PhD Student, SIU, Carbondale, IL, USA

#### **El Mahdi Boutt**

El Mahdi Boutt earned a BA in Geography at the University of Caddi Ayyad in Morocco in 2009 and worked as a Lab Technician (Microbiologist) in SOTHEMA Company. In 2013, he moved to USA where he earned his Associate degree in Pharmaceutical Industry in 2016 from Wake Technical Community College and a Biowork Certificate. Currently, he works as a Filling Technician for Seqirus, Inc. in Holly Springs, NC which is a Global Company specialized in influenza vaccines.

#### Samir Id-Lahoucine

Samir Id-Lahoucine was born in Sidi Ifni (Morocco) where he passed most of his infancy before moving to Spain (Cataluna) with her family. He earned his B.Sc. in Agricultural Engineering from the Polytechnic University of Catalonia, Spain. During the undergraduate degree, he had the opportunity to work in the Center for Research in Agricultural Genomics, Spain and the Department of Animal and Food Science of the University Autònoma of Barcelona, allowing him to acquire the basic skills of research and progress independently in his career. His strong interest in and enthusiasm for research has led to him pursuing a research career by starting an M.Sc. program in Animal Medicine, Healthcare, and Improvement at the University of Cordoba, Spain and currently a Ph.D. degree in Animal Breeding and Genetics at the University of Guelph, Canada. His Ph.D. thesis focuses on the identification of genomic regions with transmission ratio distortion (TRD) across the whole genome in cattle. The objective is to develop and implement TRD models in the available cattle genomic data from Centre for Genetic Improvement of Livestock, Lactanet (Canadian Dairy Network), Semex Alliance, Angus Genetics Inc. and AqSights to discover genomic regions subject to this phenomenon that could contain lethal alleles affecting reproductive performance or potential genes with biological implications.

#### Abdelhalim El Baz

Mr. Abdelhalim El Baz was born in Casablanca. He earned his MS degree in Bioengineering, University Hassan II, Morocco. Now, he is a PhD student in the Dept. of Plant Soil and Agricultural Systems, Southern Illinois University, USA. His research focuses on using genetics and biotechnology to improve soybean seed quality.



El Mahdi Boutt





Samir Id-Lahoucine



Abdelhalim El Baz

# The Council Is Growing! (Welcome to our New Members)

- Badr Benjelloun, Researcher, INRA, Beni-Mellal, Morocco
- Noureddine Amine, High School Teacher, Tangier, Morocco

#### Dr. Badr Benjelloun

Badr Benjelloun is a researcher in livestock genomics at INRA-Morocco and a visiting scientist at Laboratoire d'Ecologie Alpine, CNRS/UGA in France. After his initial post-graduate education as an Engineer in Agronomy, he completed his Ph.D. education in Biodiversity, Ecology and Environment at the University of Grenoble Alpes in France. He has been involved in many national and international collaboration initiatives, e.g. the FP7 EU funded NextGen project; the ongoing H2020 EU funded IMAGE project (PI for Morocco); the VarGoats initiative of the International Goat Genome Consortium and member of this Consortium. His ongoing work is focusing on the use of various *Omics* technologies for implementing sustainable breeding schemes of terrestrial livestock.

#### **Noureddine Amine**

Noureddine Amine earned his BA degree in History and Geography from Hassan II University in Casablanca in 1991 and began his teaching career in Mossa Bno Nosayr Secondary School in Zagora in 1999. Noureddine moved to several cities around Morocco. He is now settled in Tangier as an Educational Administrator at Ibno Nafis Middle School.

Welcome and Thank You For Joining Us!

INRA, Morocco Announced The First International Workshop "Xylella fastidiosa: Diagnosis, Control, and Management Measures"

The Council's VP-MEA & Africa, Dr. El Hassan Achbani, and other colleagues are preparing and organizing the workshop.

Place and Date: February 2—8, 2020, Morocco.

**Target audience**: Plant Pathologists, Entomologists, Phytosanitary Inspectors and Risk Managers coming from Morocco and other countries and dealing with plant diseases.

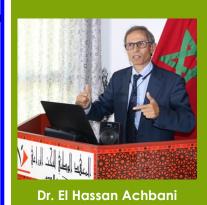
The application **deadline** is **15 January 2020** and complete applications must be sent through this link <a href="https://forms.gle/DBt6TBopATyHMMDS9">https://forms.gle/DBt6TBopATyHMMDS9</a>.



Dr. Badr Benjelloun



**Noureddine Amine** 



HC-MASA
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www.hc-masa.org

## Dr. Fatiha El Hilali's Activities in 2019

# Dr. Fatiha El Hilali, a Council Member and AMAS Conference Coordinator in Morocco Was active in 2019!

**Dr. Fatiha El Hilali was a Member of the Organizing Committee of the** International forum on Medicinal Plants, November 28-30, 2019, Faculty of Science and Technology, Fez

#### She Volunteered at Several Events Including:

- Volunteer with the Lalla Salma Foundation against cancer
- Meknes team of volunteers won a Lalla Salma trophy for the best Moroccan team in 2019
- Volunteer with « Me & You » againt drugs and use of tobacco: awareness programs in high schools, organizing activities (football competitions, photography, art creation, graffiti, drawing, etc.)

#### **Promoting Science**

She participated in a Radio talk show interview (live) and discussed different topics including immunology, immune system, cancer, autoimmune diseases, infections, how to boost the immune system, how to go back to school health, etc. She also participated in:

- Voice of Morocco Belgium
- National Radio
- Medina FM Meknes

And conducted awareness-raising campaign about Health in:

- Prison
- American Language Center
- Universities











Dr. Fatiha El Hilali



#### The Council's Newsletter

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#### Contact

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USA
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abdelmajidk@gmajl.com

## **BOARD OF DIRECTORS**

The Current Board of Directors Was Elected for Two-Year Term (2020-2022)

**President:** Abdelmajid Kassem, FSU, Fayetteville, NC, USA **VP-USA:** Khalid Meksem, SIUC, Carbondale, IL, USA **VP-Europe:** Abdelhafid Bendahmane, INRA, France

VP-MEA (Middle East/Africa):

Hassan Achbani, INRA, Morocco

Secretary & Treasurer: Sanaa Rajaallah, Raleigh, NC, USA
Member at Large: Mohamed Boutjdir, SUNY, NY, USA
Member at Large: Abdeslem El Idrissi, CUNY, NY, USA
Member at Large: Naoufal Lakhssassi, SIU, Carbondale, IL,

USA

### Happy and Prosperous New Year 2020!

Newsletter 19, Volume 7, Issue 11, January 2020

#### **Contact Us:**

Give us a call for more information about our services and/or to join us:

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USA

Tel: +1 (910) 745-2047 info@hc-masa.org, or abdelmajidk@gmail.com

Visit us on the web at: www.hc-masa.org

