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CURRICULUM VITAE



PERSONAL DATA:

**Name:** Mustapha El Bouhssini

**Place of birth:** Ksar El Kebir, Morocco

**Date of birth:** 25 December 1955

**Citizenship:** Canadian

**CONTACT ADDRESS:**

International Center for Agricultural Research in the Dry Areas (ICARDA)

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**EDUCATION:**

* Ph.D., Entomology, 1992, Kansas State University, Manhattan, USA
* M.S., Entomology, 1986, Kansas State University, Manhattan, USA
* B.S., Techniques in Agronomy, 1980, National School of Agriculture, Meknes, Morocco

**AWARDS:**

* *Hassan II Grand Prize* for Invention and Research for the development of high-yielding durum wheat varieties with excellent grain quality and resistance to Hessian fly, and diseases, adapted to dryland conditions, 2009 (team member).
  + International Plant Protection *Award of Distinction* from the International Association for the Plant Protection Sciences (IAPPS), 2007.
* CSO (Civil Society Organizations)/*CGIAR* (Consultative Group on International Agricultural Research) *Award for Innovative Partnership* between ICARDA and the University of Vermont on IPM of Sunn Pest, 2006 (team leader).
* ICARDA O*utstanding Research Team* (IPM of Sunn Pest Research Group), 2005 (team leader).

* ICARDA O*utstanding Scientific Article*, 2005: M. Aquino de Muro, S. Elliott, D. Moore, B. L. Parker, M. Skinner, W. Reid, and M. El Bouhssini. 2005. Molecular characterization of *Beauveria bassiana* isolates obtained from overwintering sites of Sunn pests (*Eurygaster* and *Aelia* species). Mycological Research 109(3): 294–306.
* *Basel Award for Scientific Agricultural Research in Syria*, 2002. Member of the team that developed an integrated pest management package for the chickpea leaf miner.
* *Research and Development Prize*, 2002, ‘Scientific studies and new technologies’, from the Ministries of Higher Education, Industries and Agriculture, Morocco, for development of the first Hessian fly- resistant durum wheat varieties in Morocco and the Mediterranean region (team member).
* ICARDA *Scientist of the Year*, 1998.
* R.C. Smith Award for *Outstanding Ph.D*. *Student* at Kansas State University, USA, 1991.

**LANGUAGES:**

Fluent in Arabic, English, and French

**CONTINUING EDUCATION:**

* *Visiting Scientist* at the University of Vermont: worked on the use of entomopathogenic fungi against insect pests, October 2003 to February 2004.
* Workshop on *project cycle management/logical framework*, organized by the University of Wolverhampton, U.K., at ICARDA, 21–25 November 1999.
* Workshop on *scientific writing*, organized by the Department of Journalism, University of Nebraska, USA, and held in Settat, Morocco, 1993.
* Workshop on *research management*, organized by OICD (Office of International Cooperation and Development)-USDA, Alexandria, VA, USA, 1993.
* Workshops on *project research management* (method log frame and team), organized by Team Technologies Inc., and held in Settat, Morocco, 1992.

**POSITIONS HELD:**

* *Adjunct Associate Professor*, Entomology Department, Kansas State University, Manhattan, KS, USA, December 2005 to date.
* *Senior Entomologist* (IPM of cereal and legume insect pests), ICARDA, Aleppo, Syria, September 1997 to date.
* *Consultant Entomologist* (IPM of cereal and food legume insect pests), ICARDA, Aleppo, Syria, May 1996 to August 1997.
* *Research Entomologist* (IPM of cereal insect pests), Dryland Research Center (INRA), Settat, Morocco, April 1992 to April 1996.
* *Research Entomologist* (IPM of cereal insect pests), Dryland Research Center (INRA), Settat, Morocco, September 1985 to August 1988.

**TEACHING EXPERIENCE:**

* Advised 12 M.S. and 5 Ph.D. students, and trained over 500 junior scientists and technicians from North Africa and West and Central Asia. The various courses (and related details) that I conducted are categorized as follows:
* **Integrated Pest Management**:
  + - * Cereal and legume pests, Settat, **Morocco,** 11-15 May 2009.
      * Sunn pest, Isfara, **Tajikistan**, 23-25 May 2007.
      * Sunn pest, Al Maty, **Kazakhstan**, 14–17 March 2006.
      * Cereal pests, Tashkent, **Uzbekistan**, 18–23 May 2004.
      * Sunn pest, University of Kabul, **Afghanistan**, 24–29 August 2003 and 6–8 March 2004.
      * Cereal and legume pests, ICARDA headquarters (Tel Hadya), **Syria**, every other year from 1996 to date.
      * Cereal insects for engineers and technicians from the West Asia and North Africa region, ICARDA, Aleppo**, Syria**, 1994.
      * Cereal insects, for engineers and technicians from the Maghreb countries, **Algeria**, 1992.
      * Cereal insects, for engineers from Syria (Southern Regional Agricultural Development Project), Settat, **Morocco**,1995
* **Host Plant Resistance to Insects**:
  + - * Graduate course at the Institut Agronomique et Vétérinaire (IAV Hassan II), Rabat, **Morocco**, 1992–1996.
      * Genetic resistance of wheat to Hessian fly and other insects. Med. Campus: "Valorisation agronomique et industrielle des céréales Méditerranéennes", **Tunis**, 1995.

##### MEMBERSHIPS AND ACTIVITIES IN PROFESSIONAL ORGANIZATIONS:

* Moroccan Association of Plant Protection; Arab Society for Plant Protection; Entomological Society of America; International Association for the Plant Protection Sciences.
* Member, Organizing Committee of the Conference ‘Acquis et Perspectives de la Recherche Agronomique dans les Zones Arides et Semi-arides du Maroc’, Rabat, **Morocco** (May 1994).
* Chair, International Organizing Committee of the Second International Conference on Sunn Pest, ICARDA, Aleppo, **Syria** (July 2004).
* Co-organizer (T. Shanower and M. El Bouhssini), Symposium on “Advances in Managing Wheat Insect Pests: A Global Perspective”, XXII International Congress of Entomology, Brisbane, **Australia** (August 2004).

**Journal Reviews:**

Journal of Applied Entomology, Crop Protection, Annals of Applied Biology, Journal of Insect Science, Bulletin of Entomological Research, Arab Journal of Plant Protection

**MAJOR RESEARCH INTERESTS:**

Integrated pest management, including:

* Biological control (parasitoids and entomopathogenic fungi)
* Host-plant resistance (screening of germplasm, mechanisms of resistance and biotypes characterization through differential and molecular techniques)

##### PUBLICATIONS:

Refereed Journal Articles

Darkoh, C., M. **El Bouhssini**, M. Baum, and B. Clack. 2010. Characterization of a prolyl endoprotease from *Eurygaster integriceps* Puton (Sunn Pest) Infested Wheat. Archives of Insect Biochemistry and Physiology 74(3):163-178.

**El Bouhssini**, M., K. Street, A. Amri, M. Mackay, F. C. Ogbonnaya, A. Omran, O. Abdalla, M. Baum, A. Dabbous, and F. Rihawi. 2010. Sources of resistance in bread wheat to Russian wheat aphid (*Diuraphis noxia*) in Syria identified using the Focused Identification of Germplasm Strategy (FIGS). Plant Breeding (In press).

Liu, X., J. L. Marshall , P. Stary, O. Edwards , G. Puterka , L. Dolatti, M. **El Bouhssini**, J. Malinga, J. Lage, and C. M. Smith. 2010. Global phylogenetics of *Diuraphis noxia* (Hemiptera: Aphididae), an invasive aphid species: Evidence for multiple invasions into North America. Journal of Economic Entomology 103(3): 958-965.

Trissi A. N., M. **El Bouhssini**, M. N. Al-Salti, B. L. Parker, M. Skinner, and A. Massri. 2010. Efficacy of *Beauveria bassiana* on Sunn pest *Eurygaster integriceps* Put. (Hem.: Scutelleridae) and effects on the egg parasitoid, *Trissolcus grandis* Thomson. Arab Journal of Plant Protection (In press).

Ali, L., M. **El Bouhssini**, M. N. Al-Salti, J. Valkoun, M. Nachit, O. Abdallah, and M. Singh. 2009. Evaluation of some wheat and its wild relative accessions for resistance to Sunn pest (*Eurygaster integriceps* Put.). Arab Journal of Plant Protection 27 (1): 10-13.

Chen, M. S., X. M. Liu, H.Wang, and M. **El Bouhssini**. 2009. Hessian fly (*Mayetiola destructor*) interactions with barley, rice, and wheat seedlings. Journal of Economic Entomology 102(4): 1663-1672.

**El Bouhssini**, M., K. Street, A. Joubi, Z. Ibrahim, and F. Rihawi. 2009. Sources of wheat resistance to Sunn pest, *Eurygaster integriceps* Puton, in Syria. Genetic Resources and Crop Evolution 56: 1065-1069.

**El Bouhssini**, M., M. Chen, S. Lhaloui, G. Zharmukhamedova, and F. Rihawi. 2009. Virulence of Hessian fly (Diptera: Cecidomyiidae) in the Fertile Crescent. Journal of Applied Entomology 133: 381-385.

Ennahli, S., M. **El Bouhssini**, S. Grando, R. Anathakrishnan, T. Niide, L.Starkus, S. Starkey, and C. M. Smith. 2009. Comparison of categories of resistance in wheat and barley genotypes against biotype 2 of the Russian wheat aphid, *Diuraphis noxia* (Kurdjumov). Arthropod Plant Interactions 3 (1): 45-53.

Trissi, A.N., M. **El Bouhssini**, and A. Kzaez. 2009. The Effect of temperature on some biological characteristics of *Trissolcus* *vassilievi* Mayer, an egg parasitoid of Sunn Pest (*Eurygaster integriceps* Puton.). Arab Journal of Plant Protection 27 (1): 73-78.

**El Bouhssini**, M., K. Mardini, A. Babi, R. S. Malhotra, A. Joubi, and N. Kagka. 2008. Effects of planting dates, varieties and insecticides on chickpea leaf miner (*Liriomyza cicerina* R.) infestation and the parasitoid *Opius monilicornis* F. Crop Protection 27: 915-919.

**El Bouhssini**, M., A. Sarker, W. Erskine, and A. Joubi. 2008. First sources of resistance to Sitona weevil (*Sitona crinitus* Herbst) in wild Lens species. Genetic Resources and Crop Evolution 55: 1-4.

**El Bouhssini**, M., M. Nachit, J. Valkoun, O. Abdalla, and F. Rihawi. 2008. Sources of resistance to Hessian fly (Diptera: Cecidomyiidae) in Syria identified among *Aegilops* species and synthetic derived bread wheat lines. Genetic Resources and Crop Evolution 55:1215-1219.

Edgington, S., D. Moore, M. **El Bouhssini**, and Z. Sayyadi. 2007. *Beauveria bassiana* for the control of Sunn Pest (*Eurygaster integriceps*) (Hemiptera: Scutelleridae*)* and aspects of the insect’s daily activity relevant to a mycoinsecticide. Biocontrol Science and Technology, 17(1) 63-79.

Ibrahim, J., M. **El Bouhssini**, M. Abdulhai, and A. N. Trissi. 2007. The effect of egg parasitoids in regulating Sunn pest (*Eurygaster integriceps* Puton) population. Research Journal of Aleppo University, 52:13-22.

Malhotra, R. S., M. **El Bouhssini**, and A. Joubi. 2007. Registration of seven improved chickpea breeding lines resistant to leaf miner. Journal of Plant Registrations, 1(2):145-146.

Thomas, R. J., E. De Pauw, M. Qadir, A. Amri, M. Pala, A. Yahyaoui, M. **El-Bouhssini**, M. Baum, L. Iñiguez, and K. Shideed. 2007. Increasing the resilience of dryland agro-ecosystems to climate change. Journal of Semi-Arid Tropical Agricultural Research 4(1): 1-37.

Canhilal, R, W. Reid, H. Kutuk, and M. **El Bouhssini**. 2006. Natural occurrence of entomopathogenic nematodes (Rhabditida*:* Steinernematidae and Heterorhabditidae) in Syrian soils. Research Journal of Agriculture and Biological Sciences 2(6):493-497.

Chen, M. S., J. P. Fellers, Y. C. Zhu, J. J. Stuart, S. Hulbert, M. **El-Bouhssini**, and X. Liu. 2006. A super-family of genes coding for secreted salivary gland proteins from the Hessian fly, *Mayetiola destructor*. Journal of Insect Science 6:12.

Liu, X., J. P. Fellers, Y. C. Zhu, N. S. Mutti, M. **El Bouhssini**, and M. S. Chen. 2006. Cloning and characterization of cDNAs encoding carboxypeptidase-like proteins from the gut of Hessian fly [*Mayetiola destructor* (Say)] larvae. Insect Biochemistry and Molecular Biology 36:665-673.

Trissi, A. N., M. **El Bouhssini**, J. Ibrahem, M. Abdulhai, Bruce L. Parker, W. Reid, and F. J. El-Haramein. 2006. Effect of egg parasitoid density on the population suppression of Sunn Pest, *Eurygaster integriceps* (Hemiptera: Scutelleridae), and its resulting impact on bread wheat grain quality. Journal of Pest Science 79 (2): 83-87.

Aquino de Muro, M., S. Elliott, D. Moore, M. Skinner, W. Reid, B. L. Parker, and M. **El Bouhssini**. 2005. Molecular characterisation of *Beauveria bassiana* isolates obtained from overwintering sites of Sunn Pest (*Eurygaster* and *Aelia* spp). Mycological Research 109: 294-306.

Canhilal, R., H. Kutuk, A. Duran Kanat, M. Islamoglu, F. Jaby El-Haramein, and M. **El Bouhssini**. 2005. Economic threshold for the Sunn Pest, *Eurygaster integriceps* Put. (Hemiptera: Scutelleridae) on wheat in southeastern Turkey. Journal of Agricultural and Urban Entomology **22 (3&4):** 191-201.

Porter, D. R., C. A. Baker, and M. **El Bouhssini**. 2005. Resistance in wheat to a New North American-Russian wheat aphid biotype. Plant Breeding 124, 1-2.

Abdul Hay M., M. **El Bouhssini**, and A. Babi. 2004. Some biological characteristics of two egg parasitoids (*Trissolcus grandis* Thomson) and (*Trissolcus simoni* Mayr) of Sunn pest (*Eurygaster integriceps* Put.) under laboratory conditions in Syria. Arab Journal of Plant Protection 22: 82-84.

**El Bouhssini**, M. Abdul Hay, and A. Babi. 2004. Sunn Pest (Hemiptera: Scutelleridae) oviposition and egg parasitism in Syria. Pakistan Journal of Biological Sciences 7 (6):934-936.

El Damir, M., M. **El Bouhssini**, and M. N. Al-Salty. 2004. Embryo development and egg hatching of *Sitona crinitus* Herbst (Coleoptera: Curculionidae) under constant temperature regimes. Pakistan Journal of Biological Sciences 7(7): 1191-1193.

Al-Houssari, F., M. **El Bouhssini**, J. Ibrahim, and M. N. Al Salti. 2003. Effect of methanol extract from fruits of *Melia azedarach* on *Coccinnella septempunctata* (Coleoptera: Coccinellidae). Arab Journal of Plant Protection 22: 85-88*.*

**El Bouhssini**, M., F. Bakkoush, M. Assol, and I. Ghariani. 2003. Survey of major insect pests of wheat and barley in Libya. Arab Journal of Plant Protection 21: 35-38.

Naber, N., M. **El Bouhssini**,and S. Lhaloui. 2003. Biotypes of Hessian fly (Diptera; Cecidomyiidae) in Morocco. Journal of Applied Entomology 127: 174-176.

Nsarellah N., A., Amri, M., Nachit, M. **El Bouhssini**, and S. Lhaloui. 2003. New durum wheat with Hessian fly resistance from T*riticum araraticum* and *Triticum carthlicum* in Morocco. Plant Breeding 122: 435-437.

Nsarellah, N., A. Amri, M. M. Nachitt, M. **El Bouhssini**, et S. Lhaloui. 2003. Transfert de la résistance à la cécidomyie des sources de blé tendre H5, H11 et PI 321644 au blé dur. Al Awamia 107: 47-57.

Parker, B. L., M. Skinner, Scott D. Costa, S. Gouli, W. Reid, and M. **El Bouhssini**. 2003. Entomopathogenic fungi of *Eurygaster* *integriceps* Puton (Hemiptera: Scutelleridae): collection and characterization for development. Biological Control 27: 260-272.

Parker, B. L., Scott D. Costa, M. Skinner, and M. **El Bouhssini**. 2002. Sampling Sunn Pest (*Eurygaster integriceps* Puton) in overwintering sites in northern Syria. Turkish Journal of Agriculture and Forestry 26: 109-117.

Shahadi, F., M. **El Bouhssini**, and A. Babi. 2002. First record of parasitoids on the predator seven spotted coccinellid, *Coccinella septempunctata* L. (Coleoptera: Coccinellidae) in Syria. Arab Journal of Plant Protection 20: 49-51.

Benlhabib, O., G. Diria, M. **El Bouhssini**, S. Lhaloui, and M. Nachit. 2001. Characterization of Moroccan *Aegilops* spp. for germplasm enhancement. Actes Institut Agronomique et Vétérinaire 21 (4): 193-198.

**El Bouhssini**, M., J. H. Hatchet, T. S. Cox, and G. Wilde. 2001. Genotypic interaction between resistance genes in wheat and virulence genes in the Hessian fly *Mayetiola destructor* (Diptera: Cecidomyiidae). Bulletin of Entomological Research 91, 327-331.

Lhaloui, S., M. **El Bouhssini**, S. Ceccarelli, S. Grando, and A. Amri. 2001. The Russian wheat aphid on barley in Morocco: Survey, and identification of new sources of resistance. Bulletin of the International Organization of Biological Control for the West Palaearctic Regional Section 24 (6): 33-37.

Lhaloui, S., M. **El Bouhssini**, and A. Amri. 2001. The Hessian fly in Morocco: Surveys, loss assessment, and genetic resistance in bread wheat. Bulletin of the International Organization of Biological Control for the West Palaearctic Regional Section 24 (6): 101-107.

Lhaloui**, S**., M. **El Bouhssini**, N. Nsarellah, M. M. Nachitt, and A. Amri. 2000. Biotic stress limiting durum wheat production in Morocco, Hessian fly and the Russian wheat aphid: surveys, loss assessment, and identification of sources of resistance. Options Méditerranéennes 40: 373-379.

**El Bouhssini**, M., and M. Nachit. 2000. New sources of resistance in durum wheat and wild relatives to Russian wheat aphid (Homoptera: Aphididae). Options Méditerranéennes 40:393-395.

El Damir, M., M. **El Bouhssini**, and M. N. Al-Salti. 2000. Effect of *Melia azedarach* (L.) (Meliaceae) fruit extracts on *Sitona crinitus* (H) (Coleoptera: Curculionidae) adults feeding. Arab Journal of Plant Protection 18: 64-67.

El Damir, M., M. N. Al-Salti, and M. **El Bouhssini**. 2000. Ecology and biology of *Sitona crinitus* H. in northern Syria. Bassel Al-Assad Journal for Engineering Sciences:109-119.

Naber, M. **El Bouhssini**, M. Nachit, S. M. Udupa, M. Nachit, M. Baum, S. Lhaloui, A. Benslimane, and H. El Abbouyi. 2000. Genetic variation among populations of the Hessian fly *Mayetiola destructor* (Diptera: Cecidomyiidae) in Morocco and in Syria. Bulletin of Entomological Research 90: 245-252.

Parker, B. L., M. Skinner, M. Brownbridge, and M. **El Bouhssini**. 2000. Control of insect pests with entomopathogenic fungi. Arab Journal of Plant Protection 18: 133-138.

Abdul Hay M., A. Babi, and M. **El Bouhssini.** 1999. Survey of egg parasitoids of Sunn pest *Eurygaster integriceps* (Hemiptera: Scutelleridae) in Syria. Research Journal of Aleppo University: 9-16.

**El Bouhssini**, M., J. H. Hatchett, and G. E. Wilde. 1999. Hessian fly (Diptera: Cecidomyiidae) larval survival as affected by wheat resistance alleles, temperature and larval density. Journal of Agriculture and Urban Entomology 16:245-254.

**El Bouhssini**, M., N. Nsarellah, M. M. Nachit, A. Bentika, O. Benlhabib, and S. Lhaloui. 1999. First source of resistance in durum wheat to Hessian fly (Diptera: Cecidomyiidae) in Morocco. Genetic Resources and Crop Evolution 46:107-109.

Mardini, K., M. **El Bouhssini**, and A. Babi. 1999. Effect of food quality on some biological parameters of two coccinellids *Harmonia axyridis* and *Coccinella septumpunctata* (Coleoptera: Coccinellida*e*) under laboratory conditions. Research Journal of Aleppo University: 165-172.

Mardini, K., M. **El Bouhssini**,and A. Babi. 1999. Preliminary study of two parasitoids *Diglyphus* *isaea* and *Opius monilicornis* on larvae of chickpea leafminer *Liriomyza cicerina* R. in Syria. Research Journal of Aleppo University: 47-54.

**El Bouhssini**, M., and J. H. Hatchett. 1998. Survival of Hessian fly (Diptera: Cecidomyiidae) larvae on wheat cultivars carrying different genes for antibiosis. Journal of Agricultural Entomology 15(3): 183-193.

**El Bouhssini**, M., O. Benlhabib, M. M. Nachit, A. Houari, A. Bentika, Nsarellah, and S. Lhaloui. 1998. Identification in *Aegilops* species of resistant sources to Hessian fly (Diptera: Cecidomyiidae) in Morocco. Genetic Resources and Crop Evolution 45:343-345.

El-Damir, M., M. **El Bouhssini**, and N. Al-Salti. 1998. A simple screening technique of lentil germplasm for resistance to *Sitona crinitus* H. (Coleoptera: Curculionidae) under artificial infestation. Arab Journal of Plant Protection 17(1):33-35.

Azzam A., S. Azzam, S. Lhaloui, A. Amri, M. **El Bouhssini**,and M. Moussaoui. 1997. Economic returns to research in Hessian fly (Diptera: Cecidomyiidae) resistant bread wheat varieties in Morocco. Journal of Economic Entomology 90(1): 1-5.

**El Bouhssini**, M., S. Lhaloui, J. H. Hatchett, et N. Naber. 1997. Nouveaux gènes de résistance efficaces contre la mouche de Hesse (Diptera: Cecidomyiidae) au Maroc. Al Awamia 96:55-63.

**El Bouhssini**, M., J. H. Hatchett, and S. Lhaloui. 1996. Larval survival on wheat plants carrying resistance genes to Hessian fly (Diptera: Cecidomyiidae) in Morocco. Arab Journal of Plant Protection 13(2): 103-105.

**El Bouhssini**, M., S. Lhaloui, A. Amri, M. Jlibene, J. H. Hatchett, N. Nsarellah, and M. Nachit. 1996. Wheat genetic control of Hessian fly (Diptera: Cecidomyiidae) in Morocco. Field Crops Research 45: 111-114.

**El Bouhssini**, M., S. Lhaloui, N. Naber, M. Mergoum, A. Ben Belkacem, and J. H. Hachett. 1996. A New Source of Resistance to Hessian fly (Diptera: Cecidomyiidae) identified in an Algerian bread wheat collection. Arab Journal of Plant Protection 14(2): 102-104.

Khalifi, L., M. **El Bouhssini**, A. Amri, et S. Lhaloui. 1996. Effet de la Température sur l'expression de la Résistance à la mouche de Hesse (Diptère: Cecidomyiidae) chez le blé tendre (*Triticum aestivum* L.). Al Awamia 92: 33-42.

Ryan, J., M. Abdel Monem, J. P. Shroyer, M. **El Bouhssini**, and M. M. Nachit. 1996. Potential for nitrogen fertilization and Hessian fly-resistance to improve Morocco's dryland wheat yields. European Journal of Agronomy 8:153-159.

Amri, A., M. **El Bouhssini**, M. Jlibene, T. S. Cox, and J. H. Hatchett. 1992. Evaluation of *Aegilops* and *Triticum* species for resistance to the Moroccan Hessian fly (Diptera: Cecidomyiidae*).* Al Awamia 77: 109-118.

Amri, A., M. **El Bouhssini**, S. Lhaloui, T. S. Cox, and J. H. Hatchett.1992. Estimates of yield loss due to Hessian fly (Diptera: Cecidomyiidae) on bread wheat using near-isogenic lines. Al Awamia 77: 75-87.

Amri, A., M. **El Bouhssini**, T. S. Cox, and J. H. Hatchett. 1992. Expression of genes for resistance to Hessian fly (Diptera: Cecidomyiidae) at three temperature regimes. Al Awamia 77: 119-127.

**El Bouhssini**, M., A. Amri, J. H. Hatchett, and S. Lhaloui. 1992. New sources of resistance in wheat to Hessian fly, *Mayetiola destructor* (Say), (Diptera: Cecidomyiidae) in Morocco. Al Awamia 77:89-107.

**El Bouhssini**, M., J. H. Hatchett, S. Lhaloui, and A. Amri. 1992. Suppression of Hessian fly (Diptera: Cecidomyiidae) populations in Morocco by the use of resistant wheat cultivars. Al Awamia 77: 129-145.

Lhaloui, S., L. Buschman, M. **El Bouhssini**, A. Amri, J. H. Hatchett, D. Keith, K. Starks, and K. El Houssaini.1992. Infestations of *Mayetiola* spp. (Diptera: Cecidomyiidae) in bread wheat, durum wheat and barley: Results of the five annual Surveys in the major cereal- growing regions of Morocco. Al Awamia 77: 21-53.

Lhaloui, S., L. Buschman, M. **El Bouhssini**, K. Starks, D. Keith, and K. El Hossaini, 1992. Control of *Mayetiola* species (Diptera: Cecidomyiidae) with Carbofuran in bread wheat, durum wheat and barley with yield loss assessment and its economic analysis. Al Awamia 77: 55-73.

Sekkat, A., and M. **El Bouhssini**. 1992. Les pucerons du blé dans le Sais. Al Awamia 75: 11-23.

Gagné, R. J., J. H. Hatchett, S. Lhaloui, and M. **El Bouhssini**. 1991. The Hessian fly and the barley stem gall midge, two different species of Mayetiola (Diptera: Cecidomyiidae) in Morocco. Annals of Entomological Society of America 84(4): 436-443.

Amri, A., J. H. Hatchett, T. S. Cox, M. **El Bouhssini**, and R.G. Sears. 1990. Resistance to Hessian fly from North African durum wheat germplasm. Crop Science 30:378‑381.

**El Bouhssini**, A. Amri, and J. H. Hatchett. 1988. Wheat genes conditioning resistance to the Hessian fly (Diptera:Cecidomyiidae) in Morocco. Journal of Economic Entomology 81:709‑712.

**Conference proceeding papers:**

**El Bouhssini**, M., S. Lhaloui, A. Amri, et N. Trissi. 2009. Implications du changement climatique sur les insectes: cas des céréales et légumineuses alimentaires en Afrique du Nord, l’Ouest et le Centre de l’Asie. Proceedings of the colloque international sur la gestion des risques phytosanitaires, 9-11 November, Marrakech, Morocco, p. 89-94.

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