

# Mohammad Mehrabadi

Associate Professor & Head

Department of Entomology, Faculty of Agriculture  
Biocompounds group, Faculty of Interdisciplinary  
Science and Technology,

Research and Development Center for Biotechnology,  
Tarbiat Modares University, Tehran 14115-336, Iran.

☎ (+98 21) 48292276

📠 (+98 21) 48292200



✉ [m.mehrabadi@modares.ac.ir](mailto:m.mehrabadi@modares.ac.ir)

💻 <http://www.modares.ac.ir/~m.mehrabadi>

💻(Lab) <https://www.researchgate.net/lab/Mohammad-Mehrabadi-Lab>

## Research interests

Insect-microbe-pathogen interactions  
Novel pest management methods  
Vector biology and management  
Genetic control of insect/vector pests  
Area-wide integrated pest management

## QUALIFICATIONS

**PhD visiting student**, Molecular Biology (host-pathogen interactions), The University of Queensland, Australia. 2012-13

**PhD** in Agricultural Entomology (Insect Physiology and Toxicology), University of Tehran, Iran. 2009-13.

**MSc** in Agricultural Entomology, University of Tehran, Iran, 2007-09

**BSc** in Plant Protection, University of Gorgan, Iran, 2003-07.

## EMPLOYMENT

**Assistance Professor**, Department of Entomology, Tarbiat Modares University, Tehran, Iran. 2013-2019.

**Associate Professor**, Department of Entomology, Tarbiat Modares University, Tehran, Iran. 2019-on going.

---

---

## **EDITORIAL ROLES**

---

**Associate Editor:**

Physiological Entomology, Wiley  
Frontiers in Physiology- Invertebrate Physiology

**Editorial Board:**

Journal of Applied Entomology, Wiley  
Journal of Insect Biodiversity and Systematics

**Topic Editor:**

Understanding How the Physiology of Insect Vectors Influences Vector-Borne Disease Transmission, in Frontiers in Physiology- Invertebrate Physiology

---

---

## **WORKSHOPS**

---

Gene transfer to bacteria and mammalian cells, Stem Cell Technology Company, Iran, November 27, 2008.

Biotechnology of insect microbial pathogens, Agriculture, Biotechnology Research Institute of Iran (ABRII), November 9-12, 2009.

Recombinant antibodies and their application in agriculture, Agriculture Biotechnology Research Institute of Iran (ABRII), December 23-25, 2010.

CLC Genomics for biologists, Institute for Molecular Biosciences, The University of Queensland, Queensland, Brisbane, Australia. April 15, 2012.

---

---

## **TEACHING EXPERIENCE**

---

Insect Biotechnology (MSc), Tarbiat Modares University

Insect Pathology (MSc and PhD), Tarbiat Modares University

Insect Molecular Genetics (PhD), Tarbiat Modares University, Bu-Ali Sina University

Vectors of Plant Pathogens (PhD), Tarbiat Modares University

Advanced Insect Physiology (PhD), Shahid Chamran University

Molecular Diagnostic Methods (PhD), Tarbiat Modares University

Complementary Toxicology (MSc), Tarbiat Modares University

Molecular Insect-Plant Interactions (PhD), Tarbiat Modares University

Teaching assistance, Insect Physiology (laboratory skills), University of Tehran. 2008-2011.

Teaching assistance, Insect Biochemistry (laboratory skills), University of Tehran. 2008-2011.

Teaching assistance, Insect Toxicology (laboratory skills), University of Gorgan. 2008.

---

---

## **HONORS & AWARDS**

Rank first student among the BSc students of Plant Protection, University of Gorgan, 2004-2007.

The excellent student in MSc degree, University of Gorgan, 2007-2008.

Distinguished researcher student (MSc) of the Faculty of Agricultural and Natural Resources, University of Tehran, 2008.

Member of Iran's Young Elite National Foundation since 2008.

Rank first student among the MSc students of Entomology, University of Tehran, 2009.

Distinguished researcher student (MSc), University of Tehran, 2009.

Rank first in the PhD entrance exam, University of Tehran, 2009.

Rank first PhD student in the comprehensive exam, University of Tehran, 2010.

Rank first MSc thesis, University of Tehran, 2010.

Distinguished researcher student (PhD), University of Tehran, 2012.

Distinguished researcher student (PhD) of the Faculty of Agricultural and Natural Resources, University of Tehran, 2012

Dr. Kazemi Ashtiani Fund (INEF) for early carrier Assistant Professors

Distinguished MSc thesis supervision (1<sup>st</sup> Rank), Selected by the Entomological Society of IRAN, 2<sup>nd</sup> IICE, 2017

Distinguished MSc theses supervision (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Ranks), Selected by the Entomological Society of IRAN, 3<sup>rd</sup> IICE, 2019.

Laureate of the 21st Khwarizmi Young Award (KYA) at the 21st session, in the category of Fundamental Research. 2019.

Distinguished Young Professor, Tarbiat Modares University, 2020

Keynote speaker at 24<sup>th</sup> Iranian Plant Protection Congress, Tehran, Iran. 2022.

---

---

## **MEMBERSHIP**

Entomological Society of Iran

Acarological Society of Iran

---

**Grants &  
projects**

---

Targeting insect pests using novel approaches based on physiology and development. TMU Early Career Academic Grant (2013-2014)

Role of miRNAs in antiviral immunity of lepidopteran insects. Dr. Kazemi Ashtiani Research Grant Award for Young Assistant Professors, INEF (2013-14)

Microbial control of some lepidopteran insect pests of horticultural crops: Isolation and identification of native strains. MSRT Project Grant (2013-15)

Functional analysis of RNAi pathway in *Helicoverpa armigera* and designing an RNAi-based strategy for management of this insect pest. INSF Project Grant (2016-19)

Role of epigenetics in *Spodoptera frugiperda* (Sf9) cells – AcMNPV interaction. INSF Research Dissertation Grant (2017-2019)

Molecular interaction underlying baculovirus-host insect interactions. CISSC-ICARD Project Grant (2018-19), in collaboration with Prof. Sassan Asgari, the University of Queensland, Australia.

*Wolbachia* bacteria in the parasitoid wasps, *Habrobracon hebetor*: Detection, functional characterization and its application in improving mass rearing process of this parasitoid wasp. INSF Project Grant (2020-2021)

Microbial control of some lepidopteran insect pests: mass production of entomopathogenic bacteria and nematodes. MSRT Project Grant

Identifying and transferring endosymbionts in parasitoids of pests to improve biological control, CISSC-ICARD Project Grant (2022-2024), in collaboration with Prof. Ary Hoffmann, The University of Melbourne, Australia.

Host-microbe interactions: from molecular mechanisms to novel microbial based strategies for pest management, INSF Research Grant (2022-2025), in collaboration with Prof. Sassan Asgari (The University of Queensland, Australia) and Prof. Ary Hoffmann (The University of Melbourne, Australia).

---

**Thesis supervision  
& co-supervision**

---

Karamipour, N (MSc. 2013-15), Bacterial endosymbionts in the striped shield bug, *Graphosoma lineatum*: detection, and identification and their interactions with the host.

Bidari F (MSc. 2014-16) Isolation and identification of *Bacillus thuringiensis* and *Serratia* sp from infected insects and their insecticidal effects on some lepidopteran pests

Khanamani, M (PhD. 2014-17, Co-supervisor)

Riahi, E (PhD. 2014-17, Co-supervisor)

Baradaran M (MSc. 2015-2017) Expression analysis of some epigenetic-related genes in cotton bollworm *Helicoverpa armigera* (Lep.: Noctuidae) and their suppression by RNAi

Bagheri Z (MSc. 2015-2017) The endosymbiotic *Wolbachia* bacteria in the parasitoid wasp, *Habrobracon hebetor* (Hym.: Braconidae): Detection, identification and its effects on the host

Hemmati, SA (PhD. 2014-18, Co-supervisor) Rational design of trypsin inhibitors for control of *Plodia interpunctella*

Kashkouli, M (PhD. 2014-2018, Co-supervisor) bacterial symbionts in heteroptrons associated with pistachio

Hemmati, Ch (PhD. 2014-2018, Co-supervisor) Microbial symbionts in *Hishimonus phycitis* and their interactions with the host

Ayoubi, A (PhD. 2015-2018, Co-supervisor) Bacterial symbionts in three aphid species and their importance in the aphids host

Fami-Tafreshi, T (Msc. 2015-2017, Co-supervisor) Metagenomics of the olive psyllid, *Euphyllura olivina*

Hosseinzadeh, S (PhD. 2015-2018, Co-supervisor) Role of microRNAs and bacterial symbionts in *Candidatus Liberibacter asiaticus* – insect vector interactions

Rahimpour, M (MSc, 2017-2019) Role of miRNA pathway in *Helicoverpa armigera* and its application in control of this insect pest

Sarvari, M (MSc, 2017-2019) Role of DNA methylation in regulation of gut microbes in the waxworm *Galleria mellonella*

Karamipour, N (PhD, 2016-2020) Identification of some native strains of SeMNPV and investigating the role of epigenetics in interaction of SeMNPV and AcMNPV with the beet army worm, *Spodoptera exigua*

Vahabi, M. (PhD, 2016-2020, Co-supervisor); Gholami, R. (PhD, Ongoing, 2017-2021, Co-supervisor); Attarianfar, M. (PhD. Ongoing, Co-supervisor); Jamal, M. (PhD. Ongoing, Co-supervisor); Pirmorady, N. (PhD. Ongoing, Co-supervisor); Dehghani, S. (PhD. Ongoing, Co-supervisor); Hassanzadeh, M. (MSc, Ongoing); Golboni, H (MSc, Ongoing); Saffari, S. (MSc, Ongoing); Doostalizadeh, A (MSc, Ongoing); Amini, S. (MSc, Ongoing).

---

## PUBLICATIONS

---

### 2022 (published & in the publication process)

Ayoubi, A., Talebi, A.A., Fathipour, Y. & **Mehrabadi, M.** *Hamiltonella defensa* imposes parasitoid resistance in the green peach aphid, *Myzus persicae*, *Manuscript submitted*

Ghavamabad, R. G., Talebi, A. A., **Mehrabadi, M.**, Farashiani, M. E., & Pedram, M. Efficacy of entomopathogenic nematodes against *Cydalima perspectalis* and *Hyphantria cunea*, two new invasive pests in Iran, *Manuscript submitted*

Attarianfar, M., Mikani, A. & **Mehrabadi, M.** Fenoxy carb exposure modulates antiviral immunity and affects HaNPV infection in the cotton bollworm, *Helicoverpa armigera*, *Pest Management Science, under revision*.

Karamipour, N., Talebi, AA., Fathipour, Y., Asgari, S. & **Mehrabadi, M.** DNA methyltransferases modulate antiviral immunity and affect *Autographa californica* multiple nucleopolyhedrovirus infection in *Spodoptera frugiperda* (Sf9) cells. *Insect Biochemistry and Molecular Biology, under revision*.

Attarianfar, M., Mikani, A. & **Mehrabadi, M.** Fenoxy carb, the juvenile hormone analog, modulates gut immunity and gut bacteria titer in the cotton bollworm, *Helicoverpa armigera*, *Pesticide Biochemistry and Physiology, under revision*.

Tafreshi, T., Askarianzadeh, A., Saeidi, A., Karamipour, N., & **Mehrabadi, M.** (2022) Comparative metagenomic analysis of bacterial symbionts in the olive psyllids, *Euphyllura straminea* and *E. pakistanica*, *Journal of Applied Entomology* (In press). <https://doi.org/10.1111/jen.13056>.

Bidari., F., Fathipour, Y., Asgari, S., **Mehrabadi, M.** (2022) Targeting the microRNA pathway core genes, Dicer1 and Argonate1 , negatively affects the survival and fecundity of *Bemisia tabaci*. *Pest Management Science* (In Press). <https://doi.org/10.1002/ps.7041>.

Rezaei, M., Talebi, A.A., Fathipour, Y., Karimzadeh, J., **Mehrabadi, M.**, Reddy, G.V.P. (2022) Optimization of mass rearing of *Aphidius matricariae* on tritrophic plant-aphid-parasitoid systems. *BioControl* (In Press). <https://doi.org/10.1007/s10526-022-10146-6>.

Alizadeh, M., Safaie, N., Shamsbakhsh, M., **Mehrabadi M.** (2022) *Neoscytalidium novaehollandiae* causes dieback on *Pinus eldarica* and its potential for infection of urban forest trees, *Scientific Reports*, **12**(1), 1-15.

Nasehi, S.F., Fathipour, Y., Asgari, S. & **Mehrabadi, M.** (2022) Environmental temperature, but not male age, affects *Wolbachia* and prophage WO thereby modulating cytoplasmic incompatibility in the parasitoid wasp, *Habrobracon hebetor*, *Microbial Ecology* **83**, 482-491.

Bagheri, Z., Talebi, A.A., Asgari, S. & **Mehrabadi, M.** (2022) *Wolbachia* promote successful sex with siblings in the parasitoid, *Habrobracon hebetor*, *Pest Management Science*, **78** (1), 362-368.

## 2021

Ghavamabad, R. G., Talebi, A. A., **Mehrabadi, M.**, Farashiani, M. E., & Pedram, M. (2021). First report of *Steinernema borjomiense* Gorgadze et al., 2018 (Rhabditida: Steinernematidae) from Iran and its efficacy against two exotic invasive forest pests in laboratory condition. *Russian Journal of Nematology*, **29**(2):127-141.

Kashkouli, M., **Mehrabadi, M.**, & Fathipour, Y. (2021). The Symbionts. In *Microbial Approaches for Insect Pest Management* (pp. 217-269). Springer, Singapore.

Khadem Safdarkhani, H., Hajiqanbar, H., & **Mehrabadi, M.** (2021) Description of all active life stages of the *Pimeliaphilus lindquisti* sp. nov. (Acari: Prostigmata: Pterygosomatidae) with review of host specificity and world distribution of the genus. *Systematic and Applied Acarology*. **26** (11), 2002-2017

Abbad, M., Safaie, M., Gholivand, Kh., **Mehrabadi, M.** Bonsaii M. & Ebrahimi Valmoozi, A.A. (2021) A study of fungicidal and anti-phenol oxidase activity of some α-amino phosphonate derivatives. *Chemical and Biological Technologies in Agriculture*. **8**: 48.

Nasehi, S.F., Fathipour, Y., & **Mehrabadi, M.** (2021) *Wolbachia* and cytoplasmic incompatibility in parasitoid wasp *Habrobracon hebetor* (Hymenoptera: Braconidae). *Plant Pest Research*, **11**(2): 53-66.

Attarianfar, M., Mikani, A., & **Mehrabadi, M.** (2021) The role of histone acetylase in *Autographa californica* multicapsid nucleopolyhedrovirus (AcMNPV) replication and immune response in *Spodoptera frugiperda* (Sf9) cells. *Plant Pest Research*, **11**(2): 39-51.

**Mehrabadi, M.**, Darsouei, R. and Karimi, J. (2021) Insect pathogenic viruses, microsporidians and Endosymbionts. In: Karimi J., Madadi H. (eds) Biological Control of Insect and Mite Pests in Iran. Progress in Biological Control, vol 18. Springer, Cham. [https://doi.org/10.1007/978-3-030-63990-7\\_13](https://doi.org/10.1007/978-3-030-63990-7_13).

Ghavamabad, R. G., Talebi, A. A., **Mehrabadi, M.**, Farashiani, M. E., & Pedram, M. (2021). First record of *Oscheius myriophilus* (Rhabditida: Rhabditidae) from Iran; and its efficacy against two economic forest trees pests, *Cydalima perspectalis* (Walker, 1859) (Lepidoptera: Crambidae) and *Hyphantria cunea* (Lepidoptera: Erebidae) in laboratory condition. *Journal of Nematology*, **53**, 1-16.

Rezaei, M., Talebi, A. A., Fathipour, Y., Karimzadeh, J., **Mehrabadi, M.** (2021) Age-dependent functional response of *Aphidius matricariae* (Hymenoptera: Braconidae) on tobacco aphid, *Myzus persicae nicotianae* (Hemiptera: Aphididae). *Journal of Asia-Pacific Entomology*. **24** (1), 470-476.

Karamipour, N., Fathipour, Y. & **Mehrabadi, M.** (2021) Obligatory gut bacterial symbionts affects life table parameters of the stink bug, *Graphosoma lineatum*, *Ecology and Evolution*, **11** (6), 2515-2523.

Vahabi Mashhor, M., Moharrampour, S., Mikani, A., & **Mehrabadi, M.** (2021) Erucin modulates digestive enzyme activity via crustacean cardioactive peptide in the elm leaf beetle *Xanthogaleruca luteola* (Coleoptera: Chrysomelidae). *Journal of Insect Physiology*, **130**, 104196.

Kashkouli, M., Castelli, M., Floriano, A.M., Bandi, C., Epis, S., Fathipour, Y., **Mehrabadi, M.**, Sassera, D. (2021) Characterization of a novel Pantoea symbiont allows inference of convergent genome reduction patterns in symbionts of Pentatomidae. *Environmental Microbiology*, **23** (1), 36-50.

Kashkouli, M., Fathipour, Y. & **Mehrabadi, M.** (2021) The crucial role of the endosymbiont Pantoea sp. in morphology and mating of the pistachio green stink bug, *Brachynema germari* (Hemiptera: pentatomidae). *Journal of Agricultural Science and Technology* **23**(1): 137-148.

Vahabi Mashhor, M., Moharramipour, S., Mikani, A. & **Mehrabadi, M.** (2021) Antifeedant activity of nanoemulsion formulation of arugula *Eruca sativa* oil on elm leaf beetle *Xanthogaleruca luteola* (Coleoptera: Chrysomelidae), *Journal of Agricultural Science and Technology*, **23**(1): 125-136.

Hemmati SA., Takallooc Z., Taghdir, M., **Mehrabadi, M.**, Balalaeie S., Moharramipour S. & Sajedi HR. (2021) The trypsin inhibitor pro-peptide induces toxic effects in Indian meal moth, *Plodia interpunctella*. *Pesticide Biochemistry & Physiology*, **171**:104730.

## 2020

Rezaei, M., Talebi, A.A., Fathipour, Y., Karimzadeh, J., **Mehrabadi, M.**, & Reddy, G.V. (2020) Effects of cold storage on life-history traits of Aphidius matricariae. *Entomologia Experimentalis et Applicata*. **168** (11), 800-807.

Sarvari, M., Mikani, A., & **Mehrabadi, M.** (2020) The IMD pathway regulates gut bacteria population in the model insect *Galleria mellonella*. *Developmental and Comparative Immunology*, **110**: 103732.

Hemmati, S. A., & **Mehrabadi, M.** (2020). Structural ensemble-based computational analysis of trypsin enzyme genes discovered highly conserved peptide motifs in insects. *Archives of Phytopathology and Plant Protection*, **53** (7-8), 335-354.

Rezaei M., Talebi A.A., Fathipour, Y., Karimzadeh, J. **Mehrabadi, M.** & Dindo, M.L. (2020) Effects of constant low-temperature storage on the performance of a commercial strain of *Aphidius colemani*, *Bulletin of Insectology*, **73** (1), 125-135

Abbad, M., Safaie, M., Gholianvand, Kh., **Mehrabadi, M.** & Bonsaii, M. (2020). Mode of action of 3-butylidene phthalide as a competent natural pesticide. *Pesticide Biochemistry and Physiology*, **164**, 228-236.

Alipour, M., Talebi, A.A., Fathipour, Y. & **Mehrabadi, M.** (2020) Life table parameters of *Cephalonomia tarsalis* (Hym.: Bethylidae), a parasitoid of *Oryzaephilus surinamensis* (Col.: Silvanidae), *Plant Protection*, **42** (4), 39-46 (in Persian).

Fathipour, Y., Kianpour, R., Bagheri, A., Karimzadeh, J., Hosseini Naveh, V., & **Mehrabadi, M.** (2020) Targeting *Plutella xylostella* digestive enzymes by applying resistant Brassicaceae host cultivars. *Journal of Crop Protection*, **9**(1), 65-79.

Kashkouli, M., Fathipour, Y. & **Mehrabadi, M.** (2020) Habitat visualization, acquisition features and necessity of the Gammaproteobacterial symbiont of pistachio stink bug, *Acrosternum heegeri* (Hem.: Pentatomidae). *Bulletin of Entomological Research*, **110**(1):22-33.

Ayoubi, A., Talebi, A.A., Fathipour, Y. & **Mehrabadi, M.** (2020) Coinfection of the secondary symbionts, *Hamiltonella defensa* and *Arsenophonus* sp. contribute to performance of the major aphid pest, *Aphis gossypii*, *Insect Science*, **27**, 86-98.

## 2019

Rezaei, M., Talebi A.A., Fathipour, Y., Karimzadeh, J. & **Mehrabadi, M.** (2019) Foraging behavior of *Aphidius matricariae* (Hymenoptera: Braconidae) on tobacco aphid, *Myzus persicae nicotianae* (Hemiptera: Aphididae), *Bulletin of Entomological Research*, **109**(6): 840-848.

Kashkouli, M., Fathipour, Y. & **Mehrabadi, M.** (2019) Heritable gammaproteobacterial symbiont improves the fitness of the pistachio stink bug, *Brachynema germari* Kolenati (Hem.: Pentatomidae). *Environmental Entomology*, **48**, 1079-1087.

Baradaran, E., Moharramipour, S., Asgari, S. & **Mehrabadi, M.** (2019) Induction of DNA methyltransferases in *Helicoverpa armigera* following injection of pathogenic bacteria modulates expression of antimicrobial peptides and affect bacterial proliferation. *Journal of Insect Physiology*, **118**, 103939.

Karamipour, N., Fathipour, Y., Talebi, A.A., Asgari, S. & **Mehrabadi, M.** (2019) The microRNA pathway is involved in *Spodoptera frugiperda* (Sf9) cells antiviral immune defense against *Autographa californica* multiple nucleopolyhedrovirus infection. *Insect Biochemistry and Molecular Biology*, **112**, 103202.

Hosseinzadeh, S., Shams-bakhsh, M., Mann, M., Fattah-Hosseini, S., Bagheri, A., **Mehrabadi, M.**, Heck, M. (2019) Distribution and variation of bacterial endosymbiont and 'Candidatus Liberibacter asiaticus' titer in the Huanglongbing insect vector, *Diaphorina citri* Kuwayama. *Microbial Ecology*, **78** (1), 206-222.

Rahimpour, H., Moharramipour, S., Asgari, S. & **Mehrabadi, M.** (2019) The microRNA pathway core genes are differentially expressed during the development of *Helicoverpa armigera* and contribute in the insect's development. *Insect Biochemistry and Molecular Biology*, **110**, 121-127.

Bagheri, Z., Talebi, A.A., Asgari, S. & **Mehrabadi, M.** (2019) *Wolbachia* induce cytoplasmic incompatibility and affect mate preference in *Habrobracon hebetor* to increase the chance of its transmission to the next generation. *Journal of Invertebrate Pathology*, **163**, 1-7.

Baradaran, E., Moharramipour, S., Asgari, S. & **Mehrabadi, M.** (2019) Upregulation of *Helicoverpa armigera* core RNAi genes by bacterial infections and its effects on the insect-bacteria interaction. *Insect Molecular Biology*, **28** (2), 290-299.

Kashkouli, M., Fathipour, Y. & **Mehrabadi, M.** (2019) Potential Management Tactics for Pistachio Stink Bugs, *Brachynema germari*, *Acrosternum heegeri* and *A. arabicum* (Hemiptera: Pentatomidae): High Temperature and Chemical Surface Sterilants Leading to Symbiont Suppression, *Journal of Economic Entomology*, **112** (1), 244-254.

## 2018

Riahi, E., Fathipour, Y., Talebi, A. A., & **Mehrabadi, M.** (2018) Interactions among food diets and rearing substrates affect development and population growth rate of *Typhlodromus bagdasarjani*, *Systematic and Applied Acarology* **23**(9), 1845-1856.

Hemmati, Ch., Moharramipour, S., Askari-Seyahooei, M., Bagheri, A. & **Mehrabadi, M.** (2018) Population genetic structure of *Hishimonus phycitis* (Hem.: Cicadellidae), vector of lime witches' broom phytoplasma, *Journal of Agricultural Science and Technology*, **20** (5), 999-1012.

Riahi, E., Fathipour, Y., Talebi, A. A., & **Mehrabadi, M.** (2018) Factitious prey and artificial diets: do they all have the potential to facilitate rearing of *Typhlodromus bagdasarjani* (Acari: Phytoseiidae)?, *International Journal of Acarology*, **44**, 121-128.

Karamipour, N., Fathipour, Y., Talebi, AA. Asgari, S., & **Mehrabadi, M.** (2018) Small interfering RNA pathway contributes in antiviral immunity of *Spodoptera frugiperda* (Sf9) cells following *Autographa californica* multiple nucleopolyhedrovirus infection. *Insect Biochemistry and Molecular Biology*, **101**, 24-31.

Abbasi-Moqadam, F., Hajiqanbar, H., & **Mehrabadi, M.** (2018) Contribution to the knowledge of the genus Petalomium (Acari: Neopygmephoridae) associated with ants from Iran. *Systematic and Applied Acarology*, **23** (6), 1180-1189.

Tahmasebi A., Afsharifar, A., Heydari, A. & **Mehrabadi, M.** (2018) Expression analysis of host defense responses against the 8K (KDa) cysteine-rich viral silencing suppressor protein in *Nicotiana benthamiana*. *Plant Omics*, **11** (2), 113-117.

Tahmasebi, A., Afsharifar A., Heydari, A. & **Mehrabadi, M.** (2018) Genetic variations of 8K (KDa) suppressor protein and host defense responses to 8K expression, *Molecular Biology Research Communications*, **7**(1), 43-50.

## 2017

Bidari, F., Shamsbakhsh, M. & **Mehrabadi, M.** (2017) Isolation and characterization of a *Serratia marcescens* with insecticidal activity from *Polyphylla olivieri* (Col.: Scarabaeidae), *Journal of Applied Entomology*, **42**(1-2), 162-172.

Hemmati, Ch., Moharramipour, S., Askari-Seyahooei, M., Bagheri, A. & **Mehrabadi, M.** (2017) Identification of yeast and yeast-like symbionts associated with *Hishimonus phycitis* (Hemiptera: Cicadellidae), the insect vector of lime witches' broom phytoplasma, *Journal of Crop Protection*, **6** (4), 439-446.

Riahi, E., Fathipour, Y., Talebi, A. A., & **Mehrabadi, M.** (2017) Attempt to develop cost-effective rearing of *Amblyseius swirskii* (Acari: Phytoseiidae): assessment of different artificial diets. *Journal of Economic Entomology*, **110**(4), 1525-1532.

Hemmati, S.A., Sajedi, R.H., Moharramipour, S., Taghdir, M., Rahmani, H., Etezad, S.M. & **Mehrabadi, M.** (2017) Biochemical characterization and structural analysis of trypsin from *Plodia interpunctella* midgut: Implication of determinants in extremely alkaline pH activity profile. *Physiological Entomology*, **42**, 307-318

Khanamani, M., Fathipour, Y., Talebi, A.A. & **Mehrabadi, M.** (2017) Quantitative analysis of long-term mass rearing of *Neoseiulus californicus* (Acari: Phytoseiidae) on almond pollen, *Journal of Economic Entomology*, **110**(4):1442-1450.

Riahi, E., Fathipour, Y., Talebi, A. A., & **Mehrabadi, M.** (2017) Natural diets versus factitious preys: comparative effects on development, fecundity and life table of *Amblyseius swirskii* (Acari: Phytoseiidae). *Systematic and Applied Acarology*, **22**(5):711-723.

Khanamani, M., Fathipour, Y., Asghar Talebi, A., & **Mehrabadi, M.** (2017) Evaluation of different artificial diets for rearing the predatory mite *Neoseiulus californicus* (Acari: Phytoseiidae): diet-dependent life table studies, *Acarologia*, **57**(2):407-419.

Doryanizadeh, N., Moharramipour, S., Hosseininaveh, V., & **Mehrabadi, M.** (2017) Antixenotic resistance of eight Cucumis genotypes to melon aphid *Aphis gossypii* (Hemiptera: Aphididae) and some associated plant traits. *Journal of Crop Protection*, **6** (2), 207-214.

Khanamani, M., Fathipour, Y., Asghar Talebi, A., & **Mehrabadi, M.** (2017) How pollen supplementary diet affect life table and predation capacity of *Neoseiulus californicus* on two-spotted spider mite. *Systematic and Applied Acarology*, **22**(1), 135-147.

Riahi, E., Fathipour, Y., Talebi, A. A., & **Mehrabadi, M.** (2017) Linking life table and consumption rate of *Amblyseius swirskii* (Acari: Phytoseiidae) in presence and absence of different pollens. *Annals of the Entomological Society of America*, **110**(2):244-253.

Khanamani, M., Fathipour, Y., Talebi, A. A., & **Mehrabadi, M.** (2017) Linking pollen quality and performance of *Neoseiulus californicus* (Acari: Phytoseiidae) in two-spotted spider mite management programmes. *Pest management Science*. **73** (2):452-461.

## 2016

Riahi, E.M., Fathipour, Y., Talebi, A.A., & **Mehrabadi, M.** (2016) Pollen quality and predator viability: life table of *Typhlodromus bagdasarjani* on seven different plant pollens and two-spotted spider mite *Systematic and Applied Acarology* **21**(10), 1399-1412.

Doryanizadeh, N., Moharramipour, S., Hosseininaveh, V., & **Mehrabadi, M.** (2016) Effect of Eight Cucumis Genotypes on Life Table and Population Growth Parameters of Melon Aphid: An Approach to Assess Antibiosis Resistance. *Journal of Agricultural Science and Technology*, **18**, 1819-1832.

Karamipour, N., Fathipour, Y., & **Mehrabadi, M.** (2016) Gammaproteobacteria as essential primary bacterial symbiont in striped shield bug, *Graphosoma lineatum* (Hemiptera: Pentatomidae), *Scientific Reports* **6**, 33168.

Abbasi-Moqadam, F., Hajiqanbar, H., & **Mehrabadi, M.** (2016) First record of the ant-associate genus *Acinogaster* (Acari: Neopygmephoridae) from Asia with redescription of the *A. microchaetus* (Sebastianov, 1967) *Persian Journal of Acarology*, **5**(2)

**Mehrabadi, M.**, Hussain, Matindoost, L. & M. Asgari, S. (2015) The Baculovirus Antiapoptotic p35 Protein Functions as an Inhibitor of the Host RNA Interference Antiviral Response, *Journal of Virology* **89**(16):8182-92.

## 2014 and before

**Mehrabadi, M.**, Bandani, A.R., Dastranj, M. (2014) Salivary digestive enzymes of the wheat bug insect, *Eurygaster integriceps* (Hemiptera: Scutelleridae), *Comptes Rendus Biologies* **337**: 373–382.

**Mehrabadi, M.**, Hussain, M., & Asgari, S. (2013) MicroRNAome of *Spodoptera frugiperda* cells (Sf9) and its alteration following baculovirus infection. *Journal of General Virology* **94** (6): 1385-1397.

Dastranj, M., Bandani, A.R., **Mehrabadi, M.** (2013) Age-specific digestion of *Tenebrio molitor* (Coleoptera: Tenebrionidae) and inhibition of proteolytic and amylolytic activity by plant proteinaceous seed extracts, *Journal of Asia-Pacific Entomology* **16** (3): 309–315.

**Mehrabadi, M.**, Hussain, M., & Asgari, S. (2013) Cloning and characterization of dim1-like mitosis protein form *Spodoptera frugiperda* cells (Sf9) which is induced by AcMNPV infection, *Journal of Invertebrate Pathology* **113** (2): 152–159.

**Mehrabadi, M.**, Franco, O.L., & Bandani, A.R. (2012) Plant proteinaceous  $\alpha$ -amylase and protease inhibitors and their use in insect pest control, in *New Perspectives in Plant Protection*. Edited by Bandani A.R., InTech Press (Book chapter).

**Mehrabadi, M.**, Bandani, A.R., Mehrabadi, R., & Alizadeh, H. (2012) Inhibitory activity of proteinaceous  $\alpha$ -amylase inhibitors from Triticale seeds against *Eurygaster integriceps* salivary  $\alpha$ -amylases: interaction of the inhibitors and the insect digestive enzymes, *Pesticide Physiology and Biochemistry* **102** (3): 220–228.

**Mehrabadi, M.**, Bandani, A.R., Allahyari, M., & Serrao J.E. (2012) The Sunn pest, *Eurygaster integriceps* Put. (Hemiptera: Scutelleridae) digestive tract: Ultrastructure, histology and its physiological significance, *Micron*, **43** (5): 631–637.

**Mehrabadi, M.**, & Bandani, A.R. (2011) Secretion and formation of perimicrovillar membrane (PMM) in digestive system of the Sunn pest, *Eurygaster integriceps* (Hemiptera: scutelleridae) in response to feeding, *Archive of Insect Biochemistry and Physiology*, **78** (4): 190-200.

**Mehrabadi, M.**, Bandani, A.R., Saadati F., & Mahmoudvand, M. (2011)  $\alpha$ -Amylase activity of stored product insects and its inhibition by medicinal plant extracts, *Journal of Agriculture Science and Technology*, **13**: 1173-1182.

**Mehrabadi, M.**, Bandani A.R., & Kwon O. (2011) Biochemical characterization of digestive  $\alpha$ - and  $\alpha$ -glucosidase from salivary glands and midgut of wheat bug, *Eurygaster maura* (Scutelleridae: Hemiptera) *Entomological Research*, **41**: 83-87.

**Mehrabadi, M.**, Bandani A.R., & Saadati F. (2010) Inhibition of Sunn pest, *Eurygaster integriceps*,  $\alpha$ -amylases by  $\alpha$ -amylase inhibitors (T-  $\alpha$ AI) from Triticale, *Journal of Insect science* **10**:179

**Mehrabadi, M.**, & Bandani A.R. (2010) New approach toward  $\alpha$ -amylase electrophoresis and isoamylase detection in insects, *Munis Entomology & Zoology*, **5**, suppl.: 1085-1087.

Bandani, A.R., Kazzazi, M., & **Mehrabadi, M.** (2009) Purification and characterization of  $\alpha$ -amylase from sunn pest, *Eurygaster integriceps* put (Hemiptera: scutelleridae, *Entomological Science*, **12**: 25-32.

**Mehrabadi, M.**, Bandani, A.R. & Saadati, F. (2009) Sunn pest, *Eurygaster integriceps* Put (Scutelleridae: Hemiptera) digestive  $\alpha$ - amylase,  $\alpha$ - glucosidase and  $\alpha$ -glucosidase, *Journal of Asia-Pacific Entomology*, **12**: 79-83.

Ravan, M., **Mehrabadi, M.**, & Bandani A.R. (2009) Biochemical characterization of digestive amylase from the wheat bug, *Eurygaster maura*, *African Journal of Biotechnology*, **8** (15): 3640-3648.

**Mehrabadi, M.**, & Bandani A.R. (2009) Expressing of digestive amylase in varius developmental stages of *Eurygaster maura*, an enzymatic approach, *Munis Entomology & Zoology*, **4** (1): 219-226.

**Mehrabadi, M.**, & Bandani A.R. (2009) Assessing of alpha-amylase activity of midgut in wheat bug *Eurygaster maura*, *American Journal of Applied Sciences*, **6**(3): 78-483.

**Mehrabadi, M.**, & Bandani A.R. (2009) Study on salivary glands alpha-amylase in wheat bug *Eurygaster maura* (Hemiptera: Scutelleridae), *American Journal of Applied Sciences*, **6**(4): 555-560.

**Mehrabadi, M.**, & Bandani A.R. (2009) Mechanisms of cytoplasmic incompatibility induced by *Wolbachia* in insects. *Giahpezeshk va Ghaza*, **3**: 1-10. (Review in Persian)

**Mehrabadi, M.**, & Bandani A.R. (2009) Biology of *Wolbachia* and its interaction with insects. *Giahpezeshk va Ghaza*, **2**: 1-8. (Review in Persian)

## PRESENTATIONS

Karamipour, N., Talebi, AA., Fathipour, Y., Asgari, S. & Mehrabadi, M. DNA methylation pathway influence on Toll, IMD and siRNA pathways and increased AcMNPV replication in *Spodoptera frugiperda* (Sf9) cells. 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Attarianfar, M., Mikani, A. & Mehrabadi, M. Effect of JH analog on the gut immunity and gut bacterial titer in the cotton bollworm, *Helicoverpa armigera*. 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Attarianfar, M., Mikani, A. & Mehrabadi, M. Effect of Fenoxyacrb on antiviral immunity responses RNAi and Apoptosis in cotton bollworm *Helicoverpa armigera*. 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Pirmoradi, N., Moharramipour, S., Mikani, A. & Mehrabadi, M. The relationship between diapause induction and cold hardiness in grapevine moth *Lobesia botrana* (Lepidoptera: Tortricidae). 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Dehghani, S., Moharramipour, S., Mikani, A. & Mehrabadi, M. The effects of temperature and photoperiod on biology of tomato leaf miner *Tuta absoluta* (Lepidoptera: Gelechiidae). 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Khadem-Safdarkhani, H., Hajiqanbar, H. & Mehrabadi, M. Second report of *Harpyrhynchoides* Fain, 1972 (Acariformes: Harpirhynchidae) from Iran. 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Nouri, M., Moharramipour, S. & Mehrabadi, M. Ice nucleating effects of *Xanthomonas campestris* on the n supercooling point and cold tolerance of *Scrobipalpa ocellatella* and *Plodia interpunctella*. 24th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute. 28-31 August 2022.

Rezaei, M., Talebi, A.A., Fathipour, Y., Karimzadeh, J. & Mehrabadi, M. Comparison of life table parameters of *Aphidius matricariae* (Hymenoptera: Braconidae) and tobacco aphid, *Myzus persicae* nicotianae (Hemiptera: Aphididae). 1st International and 10th National Biological Control Congress in Agriculture and Natural Resource, Shahid Chamran University of Ahvaz. 5-6 February 2022.

Kashkouli, M., Castelli, M., Floriano, A.M., Bandi, C., Epis, S., Fathipour, Y., Mehrabadi, M., Sassera, D. Genome characteristics of the bacterial symbiont of the stinkbug *Acrosternum arabicum* (Hem.: Pentatomidae). 3rd Iranian International Congress of Entomology, 17-19 August 2019.

Rezaei, M., Talebi, A.A., Fathipour, Y., Karimzadeh, J. & Mehrabadi, M. Life history parameters of *Aphis gossypii* Glover (Hemiptera: Aphididae) on three host plants. 3rd Iranian International Congress of Entomology, 17-19 August 2019.

Karamipour, N., Talebi, AA., Fathipour, Y., Asgari, S. & Mehrabadi, M. Toll and Imd pathways in *Spodoptera frugiperda* cells are induced following *Autographa californica* multiple nucleopolyhedrovirus infection. 3rd Iranian International Congress of Entomology, 17-19 August 2019.

Karamipour, N., Talebi, AA., Fathipour, Y., Asgari, S. & Mehrabadi, M. The antiviral role of microRNA pathway in the *Spodoptera frugiperda* cells following *Autographa californica* multiple nucleopolyhedrovirus infection. 23th Iranian Plant Protection Congress, Gorgan University. 27-30 August 2018.

Rahimpour H., Moharramipour, S. & Mehrabadi M. Suppression of miRNA pathway in the cotton bollworm *Helicoverpa armigera*. 23th Iranian Plant Protection Congress, Gorgan University. 27-30 August 2018.

Nasehi, S.F., Talebi, A.A., Bagheri, Z. & Mehrabadi, M. *Wolbachia* enhance sex-ratio in the inbred and outbred lines of *Habrobracon hebetor*. 23th Iranian Plant Protection Congress, Gorgan University. 27-30 August 2018.

Kashkouli, M., Castelli, M., Floriano, A.M., Bandi, C., Epis, S., Fathipour, Y., Mehrabadi, M., Sassera, D. Exploring genomic traits of a midgut bacterial symbiont of the stinkbug *Acrosternum arabicum* (Hem. Pentatomidae). 7<sup>th</sup> Conference on Bioinformatics, 3-5 January 2018.

Ayoubi, A., Talebi, A.A., Fahipour, Y. & Mehrabadi, M. Identification of *Hamiltonella defensa* in *Myzus persicae* and its role in defense against the parasitoid *Aphidius matricariae*. 8th National Biological Control Congress in Agriculture and Natural Resource. Guilan University, 1-2 November 2017.

Fami-Tafreshi, T., Askarianzade, A., Saeedizade, A. & Mehrabadi, M. The gut microbiota of the olive psyllids, *Euphyllura straminea* and *Euphyllura pakanica* (Hemiptera: Aphalaridae). 2nd Iranian International Congress of Entomology. 2017, Karaj, Iran.

Bagheri Z., Talebi A.A. & Mehrabadi, M. *Wolbachia*-induced and cytoplasmic incompatibility CI in the parasitoid wasp *Habrobracon hebetor*. 2nd Iranian International Congress of Entomology. 2017, Karaj, Iran.

Bagheri Z., Talebi A.A. & Mehrabadi, M. *Wolbachia* infection suppresses inbreeding-avoidance in *Habrobracon hebetor* to increase the likelihood of female offspring and its transmission to the next generation. 2nd Iranian International Congress of Entomology. 2-4 September 2017, Karaj, Iran.

Karamipour, N., Fathipour, Y., & Mehrabadi, M. *Gammaproteobacteria* are crypt-dwelling primary bacterial symbionts of the shield bug *Graphosoma lineatum*. 2nd Iranian International Congress of Entomology. 2-4 September 2017, Karaj, Iran.

Baradaran, E., Moharramipour, S. & Mehrabadi M. Bacterial infection induce RNA interference (RNAi) pathway in the cotton bollworm *Helicoverpa armigera*. 2nd Iranian International Congress of Entomology. 2-4 September 2017, Karaj, Iran.

Rahimpour H. & Mehrabadi M. MicroRNA core machinery genes in the cotton bollworm *Helicoverpa armigera*. 2nd Iranian International Congress of Entomology. 2-4 September 2017, Karaj, Iran.

Ayoubi A., et al., *Hamiltonella defensa* imposes parasitoid resistance in the green peach aphid *Myzus persicae*. Insect Physiology Biochemistry and Molecular Biology. 2017, China.

Hemmati S.A., et al., Directed design of peptide inhibitor based on zymogen structure of trypsin to assess of inhibitory and insecticidal effects on *Plodia interpunctella*. 2nd International Iranian Peptide Conference. 2017, Tehran-Iran.

Ayoubi A., et al., Population control and fecundity decline of *Aphis gossypii* (Hemiptera Aphididae) by elimination of obligatory symbiont *Buchnra aphidicola*. 3rd National Meeting on Biocontrol in Agriculture and Natural Resources of Iran. 2015, Mashhad, Iran.

Riahi E., et al., How different pollens affect the life table parameters of *Typhlodromus bagdasarjani* (Acari: Phytoseiidae) XVIII. International Plant Protection Congress. 2015, Berlin, Germany.

Riahi E., et al., Effect of different diets on development of *Amblyseius swirskii* (Acari: Phytoseiidae) XVIII. International Plant Protection Congress. 2015, Berlin, Germany.

Kashkouli M., et al., Phylogenetic and coevolutionary analysis of the pistachio green stink bug, *Brachynema germari* (Hem.: Pentatomidae) and its bacterial symbiont. 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Kashkouli M., et al., Contribution of gut symbionts: to population growth and fecundity of the pistachio green stink bug, *Brachynema germari* (Hem.: Pentatomidae) 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Karamipour N., et al., Host-symbiont co-spedation and molecular characterization of gut symbiotic bacteria in Striped Shield Bug, *Graphosoma lineatum* (Hemiptera: Pentatomidae) 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Karamipour N., et al., Impaired biological fitness in striped-bug, *Graphosoma lineatum* caused by decreasing of bacterial symbiont density (Hemiptera: Pentatomidae) 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Ayoubi A., et al., Detection and identification of some bacterial endosymbionts in *Aphis gossypii*, *Myzus persicae*, and *Brevicoryne brassicae* (Hem. Aphididae) 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Doryanzadeh et al., Population growth parameters of *Aphis gossypii* on eight Cucumis genotypes 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Riahi E., et al., Comparison of biological parameters of *Typhlodromus bagdasarjani* (Acari Phytoseiidae) feeding on different pollens. 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran.

Khanamani E., et al., Life table parameters of *Neoseiulus californicus* (Acari Phytoseiidae) feeding on two-spotted spider mite in the presence or absence of pollen as a supplementary food source. 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran

Abbasi E., et al., First record of *Petalonium fimbriisetum* (Acari Neopygmephoridae) associated with ants *Lasius* sp. (Hym. Formicidae) from Iran. 1nd Iranian International Congress of Entomology. 2015, Tehran, Iran

Kashkouli M., et al., Contribution of gut symbionts to population growth and fecundity of the pistachio green stink bug *Brachynema germari* (Hem. Pentatomidae) 1<sup>st</sup> Biological Sciences Congress. December 2014, Tehran-Iran.

Kashkouli M., Fathipour Y., Mehrabadi M. Wolbachia-virus interactions and its role in antiviral protection in insects. 1<sup>st</sup> Biological Sciences Congress. December 2014, Tehran-Iran.

Kashkouli M., Fathipour Y., Mehrabadi M. Molecular insect host-symbiont interaction and its effects on fitness of Heteroptran insects: implications for new controlling strategies. 2<sup>nd</sup> National conference on Sustainable Agriculture and Natural Resources. October 2014, Tehran-Iran.

Kashkouli M., Fathipour Y., Mehrabadi M. Some biological characteristics and life cycle of *Brachynema germari* Kolenati (Hemiptera: Pentatomidae) in the laboratory condition. 1<sup>st</sup> Biological Sciences Congress. December 2014, Tehran-Iran. December 2014, Tehran-Iran.

Mehrabadi M., Bandani A.R., Talaei-Hassanloui R., Asgari S. Functional analysis of a cellular microRNA in baculovirus-insect host (Sf9 cells) interactions. 1<sup>st</sup> Conference of Biological Control in Agriculture and Natural Resources, 27-28 Aug. 2013, University of Tehran, Karaj-Iran.

Mohammadi tabar, H., Talaei, R., Mehrabadi M., Allahyari, H. Influence of host plant species on Diamondback moth, *Plutella xylostella* susceptibility to *Beauveria bassiana* and *Metarrhizium anisopliae* and on its fertility life table parameters. 10th International Colloquium on Invertebrate Pathology and Microbial Control. 1 -15 July 2010 -Karadeniz Technical University, Trabzon-Turkey.

Mehrabadi M., Bandani A.R. Perimicrovillar membrane (PMM) from the Sunn pest, *Eurygaster integriceps* Put. (Hem.: Scutelleridae): Origin, structure, formation, and function. 19th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute., 24-27 august 2010.

Mehrabadi M., Bandani A.R. Digestion in different nymphal stages of the Sunn pest, *Eurygaster integriceps* Put. (Hem.: Scutelleridae): Stage-specific digestion. 19th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute., 24-27 august 2010.

Mehrabadi M., Bandani A.R. Inhibition of the Sunn pest digestive α- amylases by *Triticale* α-amylase inhibitors. 19th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute., 24-27 august 2010.

Saadati, F., Mehrabadi M., Bandani A.R. Biochemical characterization of digestive lipase of the Sunn pest *Eurygaster integriceps* (Hemiptera: Scutelleridea) 19th Iranian Plant Protection Congress, Iranian Plant Protection Research Institute., 24-27 august 2010.

Saadati, F., Bandani A.R., Mehrabadi M., Rahimi, V., Naghdi, M. Isolation and characterization of esterases from different tissues of the Sunn pest (Hemiptera: Scutelleridea) *Eurygaster integriceps*. 19<sup>th</sup> Iranian Plant Protection Congress, Iranian Plant Protection Research Institute., 24-27 august 2010.

Mehrabadi M. Bandani A.R. Biology of Wolbachia and its interaction with insects, XXIII International Congress of Entomology, Durban, South Africa, 6-12 july 2008.

Mehrabadi M. Bandani A.R. Assay of  $\alpha$ -amylase in gut and salivary glands of *Eurygaster maura* (Scutelleridae: Hemiptera), XXIII International Congress of Entomology, Durban, South Africa, 6-12 july 2008.

Mehrabadi M. Bandani A.R. Determination of gut and salivary pH and comparing of  $\alpha$ -amylase activity in various nymphal stages and adults of *Eurygaster maura* (Scutelleridae: Hemiptera), XXIII International Congress of Entomology, Durban, South Africa, 6-12 july 2008.

Zibaee A., Bandani A.R., Mehrabadi M., Ramzi S. A study on  $\alpha$ - and  $\alpha$ -glucosidase characteristics in *chilo suppressalis* Walker (Lepidoptera: Pyralidea), rice stem borer, XXIII International Congress of Entomology, Durban, South Africa, 6-12 july 2008.

Mehrabadi M., Bandani A.R. Belbasi M., Ahmadi M.R. Determination of biochemical characteristics of midgut  $\alpha$ -amylase in wheat bug *Eurygaster maura*, 18th Iranian Plant Protection Congress, Bualisina Un., 24-27 august 2008.

Naghdi M., Bandani A.R., Mehrabadi M.; The effect of GNA lectin on  $\alpha$ -amylase activity of beet army worm, 18th Iranian Plant Protection Congress, Bualisina Un., 24-27 august 2008.

Hashemi S.M., Mehrabadi M., Rasoulian G.R. Assessing cabage growers' awareness and knowledge potential to adopt IPM in aghtapeh town, Karaj, 18th Iranian Plant Protection Congress, Bualisina Un., 24- 27 august 2008.