CURRICULUM VITAE

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Date of Birth: 23th August 1969
Iranian Research Institute of Plant Protection (IRIPP)
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Academic qualifications

PhD: (Agricultural Entomology), Tarbiat Modarres University, Iran
MSc.: (Agricultural Entomology), Tarbiat Modarres University, Iran
BSc.: (Plant protection), Shiraz University, Iran

Research interests

Insecticide and Acaricide Bioassay
Pest Resistance to Insecticide
Pesticide Spraying Technology

Experiences and Posts:

1) Plan Protection Expert (1992-1994)
2) Deputy of Pesticides Research Department (2004- 2007), IRIPP
3) Head of Pesticides Research Department (Since 2007), IRIPP.

4) Head of Science and Industry Coordination Center- Pesticides (2010-2013).
5) Co-chair of Iranian National Codex Committee on Pesticide Residues (Since 2008)
6) Head of Bioassay and spraying techniques research Laboratory (Since 2005)
7) Member of the Plant Pests Scientific Committee (Since 2006)
8) Member of the Iranian National Codex Committee on Pesticide Residues (since 2007).
9) Member of Pesticide Supervision Board, Plant Protection Organization (2011-2017)
10) Deputy of General Management of Iranian Research Institute of Plant Protection (2020-2025)

Selected research projects

- An investigation on diversity of pesticides application by crops producers and its effective factors (case study of Rice, Wheat and Potato).
- An investigation on the efficiency of different spraying techniques of *Bacillus thuringiensis* for controlling Diamondback moth
- Comparing efficiency of different oil spraying techniques in controlling of *Aonidiella orientalis* in jiroft
- Comparing efficiency of different spraying techniques in controlling olive fruit fly, *Bactrocera oleae* Gmelin.
- Efficiency of sulfur with formulations (WP, WG, D) in control of common *pistachio psylla* (Agonoscena pistaciae) and evaluation of its possible effects on the physiology of pistachio trees.
- Estimation of the insecticidal effects of Deltamethrin on short horn grasshoppers.
- Evaluation of the efficacy of the EC (Emulsion Concentrated) formulation of azadirchtin prepared in Iranian research institute of plan protection comparison with some insecticides to control some insect pests.
- Investigation of the efficiency of two method of spraying (Electrostatic and Microner) for the control of rice blast (With causal agent: Pyricularia oryzae).
- Investigation on chemical control of Asian Citrus Psyllid (*Diaphorina citri*), a vector of citrus Huanglongbing disease in southern Iran.
- Investigation on the efficiency of Cream Clean® on reduction of frost damage on Apricot.

- Pesticide Production of powder nanoencasulated formulations containing plant essential oils and biodegradable polymers for rice weevil control.
- Pesticide research strategic plan.
- Studding the efficacy of lambda-cyhalothrin (ULV 4%) on short horn grasshoppers.
- Study on efficiency of different spraying methods against potato yellow broad mite.
- Study on efficiency of different spraying methods against two-spotted spider (*Tetranychus urticae*) on common bean in khomein region.
- Study on the effect of Break-Thru® Sc40 as a adjuvant compound in the efficacy of insecticides on mellon aphid.
- Study on the efficiency of systemic insecticides (Imidacloprid, Thiametoxam, Acetamiprid) through soil application on *Agonoscena pistaciae*.
- Synthetic study of (*E*,*Z*,*Z*)-3,8,11-Tetradecatrienyl acetate as an attractant pheromone of *Tuta absoluta* (Meyrick).
- To investigate the effect of different sprayer nozzles and rate of herbicide on control of field corn weeds.
- To investigate the effects of water quality on some of quality control index of pesticide formulations.
- To investigate the efficacy of aerial spraying on Dubas bug *Ommatissus binotatus.*
- To investigate the efficacy of Bordovolk® for controlling of leaf curl and mulberry scale on peach trees.
- To investigate the efficacy of Kanemite SC 15% acaricide for controlling of two spotted spider mite (Tetranychus urticae) in different reagan in Iran on cucumber.
- To investigate the efficacy of malathion (EC 57%) from companies applied to re-registration against melon aleurod (Homoptera: Aleyrodidae).
- To investigate the efficacy of thiacloprid (Biscaya OD 240) and aspirotetramat (Movento SC 10) insecticides on control of Asian citrus psyllid.
- To investigate the efficiency and the possibility of improving of the spraying techniques for controlling the over wintered adult sunn pest (*Eurygaster integriceps*) under field conditions in wheat farm.

Selected publications

Full papers:

Abroon P., Bigham, Z., **heidari, A.** Kishani Farahani, H. 2015. An Investigation on the Effects of Dioctyl Sodium Sulfosuccinate on Efficiency Increment of hexythiazox (EC 10%) to Control Spider Mite, *Tetranychus urticae* Koch, in Cucumber. Pesticides in Plan Protection Sciences, 2 (2): 133-142.

Ahmadi, E., Gholamzadeh Chitgar, M., Mojib Hagh Ghadam, Z., **Heidari, A.** 2020. Efficacy of the EC formulations of Neem (1.28%) and Neemarin® (1%) on slug Agriolimax agrestis in laboratory and greenhouse conditions. Plant Pest Research. 10 (3): 61-76.

Ahmadi, E., Gholamzadeh Chitgar, M., Mojib Hagh Ghadam, Z., **Heidari, A.** 2021. Effectiveness of metaldehyde Lumakidin® against snails and slugs in the greenhouse of Spathiphyllum and lettuce field and its comparison with the efficiency of Ferricol® and Sabzarang® in ornamental flower greenhouse. Plant Protection (Scientific Journal of Agriculture). 44(4), 107-123.

Alipour, H., **Heidari, A**., Alizadeh, N. 2018. Investigating the Factors influencing the Correct Selection of Pesticides by Greenhouse Cucumber and Tomato Producers. Pesticides in Plant Protection Sciences. 7 (1): 55-68.

Amini, M. M., Mirzaei, S., **Heidari, A.** 2023. A growing threat: Investigating the high incidence of benzimidazole fungicides resistance in Iranian Botrytis cinerea isolates. PLOS ONE, https://doi.org/10.1371/journal.pone.0294530.

Ardeshir, F. Namvar, P., Askari Yazdi, GH., **Heidari, A.** Mahdavi, V. 2021. Evaluation of Abamectin (Agrimec Gold® SC 8.4%) in control of two-spotted spider mite Tetranychus urticae Koch and its preharvest interval in greenhouse cucumber. Applied Plant Protection. 10 (1): 1-7.

Ardeshir, F., **Heidari, A.,** Namvar, P. Mahdavi, V., Sheikhi Gorjan, A. 2021. Efficiency and residue levels of a new acaricide, cyflumetofen (Danisaraba® SC, 20%) for control of Tetranychus urticae on greenhouse cucumber. Journal of Applied Research in Plant Protection 10(2): 71-78.

Ardeshir, F., Namvar, p., Bagheri, M. R., Mahdavi, V., **Heidari, A.** 2022. Efficiency and residue levels of a new acaricide, Oberon Speed® (SC, 24%) for control of Tetranychus urticae (Koch) (Acari: Prostigmata) on greenhouse cucumber. Applied Plant Protection, 11 (1): 11-18.

Arjmandi, R. **Heidari, A.** Moharamnejad, N. Nouri, J. and Koushiar, G. 2012. Comprehensive survey of the present status of environmental management of pesticides consumption in rice paddies. J. Pestic. Sci. 37 (1), 69-75.

Askari Saryazdi, GH., Jafari Nodooshan, A., **Heidari, A**., Amizadeh, M. 2022. Efficacy of abamectin (Vertimec 1.8 EC) and emamectin benzoate + lufenuron (Proclaim-fit 50 WG) on pistachio fruit moth, Recurvaria pistaciicola. Journal of Applied Research in Plant Protection 11(2): 27-36.

Fallahi, M., **Heidari, A.,** Moharramipour, S., Imani, S., Marouf, A. 2013. **Fumigant toxicity** effects of hexane extract of three species of eucalyptus hexane extract (*Eucalyptus microtheca*, *E. globules* & *E. camaldulensis*) on *Oryzaephilus surinamensis* L. (Coleoptera: Silvanidae). Journal of Novel Research on Plant Protection Journal. 5: 45-55.

Gerami, Sh. and **Heidari, A.** 2013. Susceptibility of cotton aphid, *Aphis gossypii* Glover (Hemiptera:Aphididae) to imidacloprid and thiametoxam based on different methods of exposure. International Journal of AgriScience, Vol. 3(11): 871-880.

Gerami, Sh., **Heidari, A.** 2013. Effect of Different Bioassay Methods on Enzymatic Characteristics of Cotton Aphid, Aphis gossypii Glover (Hemiptera:Aphididae). Journal of Agricultural Science and Technology A 3: 819-824.

Gerami, Sh., **Heidari, A.** 2014. Energy Intensity and Fitness Cost of Cotton aphid Exposure to Neonicotinoids. Journal of Life Sciences. 8(2): 164-170.

Gerami, Sh., **Heidari, A.** 2014. Energy Metabolism Pattern in Cotton Aphid, *Aphis gossypii* Glover (Hem.: Aphididae) Exposure to Neonicotinoids. Journal of Agricultural Science and Technology A 4: 736-742.

Gerami, Sh., Talebi Gahromi, Kh., **Heidari, A.,** Ashori, A., Rasoulian, Gh. 2007. Sublethal effects of imidacloprid on the life-table parameters of Aphis gossypii (Hom: Aphididae). Applied Entomology and Phytopathology. 75 (1): 67- 79.

Gholamzadeh-Chitgar, M., **Heidari., A.,** Pormoradi, S. 2018. Effect of mineral oils, insecticidal soap (Palizin®) and chlorpyrifos on Unaspis euonymi Comstock (Hem.: Diaspididae) underfield conditions. Plant Pest Research. 8 (2): 41-51.

Heidari Alizadeh, B., **Heidari, A.,** Modarres najafabadi, S. S. 2017. Preparation of emulsifiable concentrate (EC 1.28%) formulation based on neem seed extract, (Azadirachta indica) and investigating its efficacy on green peach aphid (Myzus persicae). Applied Entomology and Phytopathology. 84 (2): 279-290.

Heidari, A. 2013. A Review on the Position of the Carcinogenic Hazards of Pesticides Registered in Iran. Plant Protection Journal. 6 (1): 1-16.

Heidari, A. Nazerian, E. Parsa, H. Gerami, K. 2013. Investigation on the efficiency of two kind sprayers based on electrostatic charge and spinning-disc in comparison with Hydraulic motorized sprayer on trolley for the control of rice blast. Journal of Iranian Plant Protection Science. 44. 1:163-171.

Heidari, A. Ranjbar, S. 2014. Evaluation of the Efficiency of Three Application Methods of Various Insecticides in the Control of Asian Citrus Psyllid (*Diaphorina citri* Kuwayama). Pesticides in Plant Protection Sciences. 1 (1): 19-29

Heidari, A., Alford, L., Kishani, H. 2016. Effects of three insecticides on adult bionomics of the parasitoid *Encarsia Formosa*. Archives of Phytopathology and Plant Protection, To link to this article: http://dx.doi.org/10.1080/03235408.2016.1142926.

Heidari, A., Kishani, H., Fathipour, Y. 2015. Effects of Buprofezin, Pyriproxyfen and Fenpropathrin on some foraging behaviors of *Encarsia Formosa*. Applied Entomology and Phytopathology. 83 (2): 97-109.

Heidari, A., Moharramipour, S. Poormirza, A. A., Talebi, A. A. 2007. Effects of buprofezin, pyriproxyfen and fenpropathrin on the reproductive parameters of *Encarsia formosa* (Hymenoptera: Aphelinidae). Journal of Entomological Society of Iran. 25 (2): 17-34.

Heidari, A., Moharramipour, S. Poormirza, A. A., Talebi, A. A. 2005. Effects of Pyriproxyfen, Buprofezin and Fenpropathrin on the Growth Population Parameters in *Trialeurodes vaporariorum* Westwood (Hom.: Aleyrodidae). Iranian. J. Agric. Sci. Vol. 36, No. 2, 353-361.

Hoseininia, A., Javadi Khederi, S., Khanjani, M., **Heidari, A.,** Ramezani, M. K., Mosalanejad, 2019. H. Comparison of Different Methods for Control of Gladiolus Bulb Mite *Rhizoglyphus echinopus* (Fumouze & Robin) (Astigmata: Acaridae) under Greenhouse Conditions. Journal of Plant Protection. Vol. 32, No. 4: 509-519.

Jafari Nadooshan, A. Khani, A. **Heidari, A.** Mirshekar, A. 2024. Effect of recommended doses of sulfur on life table parameters of green lacewing Chrysoperla carnea (Stephens), predator of pistachio psyllid. Plant Protection (Scientific Journal of Agriculture). 47(3): 23-40.

Khosravi, M., **Heidari, H.** 2022. Evaluation of the efficacy of some insecticides against Arboridia kermanshah in Yaghooti grape in the Sistan region. Journal of Applied Research in Plant Protection 11(3): 33-39.

Mahdavi, V. **Heidari, A**. 2021. Simultaneous determination of chlorpyrifos and its major impurities sulfotep and 3,5,6-

trichloropyridinol in the technicals of different companies by liquid chromatograph. Applies Entomology and Phytopathology. 89 (1): 27-36.

Mahdavi, V. **Heidaria, A.** Khaneghahb, A. M. 2023. Probabilistic risk assessment of endocrine disrupting pesticides in Iran. International Journal of Environmental Health Research. https://doi.org/10.1080/09603123.2023.2199193.

Mahdavi, V., Gordan, H., **Heidari, A.** 2023. Human health risk assessment of spiropidion and the main metabolites SYN547305 (spiropidion-enol), SYN 547435, and SYN 548430 in pistachio with UHPLC-MS/MS. Journal of Food Composition and Analysis. https://doi.org/10.1016/j.jfca.2023.105353.

Marzban, R., **Heidari, A.,** Sheikhi Gorjan, A., Kalantari, M., Parsa, H. 2019. Efficiency of different spraying techniques for microbial pesticide, Bacillus thuringiensis in controlling Diamondback Moth. Pesticides in Plant Protection Sciences. 8(1): 38-46.

Najafabadi, M., **Heidari, A.** 2015. Investigation on the Efficiency of Electrostatic Charge and Spinning-disc Sprayers in Comparison with Common Sprayers Using Two Concentrations of hexythiazox (EC10%) against Two-spotted Spider Mite, *Tetranychus urticae* Koch., on Common Bean. Pesticides in Plant Protection Sciences. 2 (1): 60-72.

Mobasher Amini, M., Mirzaei, S., **Heidari, A.** 2023. A growing threat: Investigating the high incidence of benzimidazole fungicides resistance in Iranian Botrytis cinerea isolates. PLOS ONE 18(11): e0294530. https://doi.org/10.1371/journal. pone.0294530.

Najafi, M., **Heidari. A.,** Tajbakhsh. M. R., Noori, H. 2020. Investigation on the effects of water quality on chlorpyriphos (EC 40.8%) and imidacloprid (SC 35%) stability indexes. Iranian Journal of Plant Protection Science. 50 (2): 177-185.

Namvar, P., **Heidari, A.** 2014. Efficiency Study of Different Spraying Techniques in the Control of Potato Yellow Broad Mite (*Polyphagotarsonemus latus* Banks). Pesticides in Plant Protection Sciences. 1 (2): 137- 147.

Nazari Tabak, S., **Heidari, A.**, Morabbi Heravi, H., Hasanimoghaddam, M. 2019. Developing strategies to replace hazardous chemical pesticides with pheromones using the integrated pest management (IPM) approach in rice fields. Environmental Management and Sustainable Development. 3 (10): 1-6.

Ramezani, M. K., **Heidari, A.** 2014. Risk assessment of current-use insecticides and acaricides in Iran. Applied Entomology and Phytopathology. 82 (2): 115-126.

Ranjbar, S., Allahyari, H., Talebi Jahromi, Kh., **Heidari, A.** 2021. The influence of water hardness and pH on the toxicity of insecticides on Bemisia tabaci. Applied Entomology and Phytopathology. 89 (1): 103-115.

Ranjbar, S., Allahyari, H., Talebi Jahromi, Kh., **Heidari, A.** 2021. The effect of different pH levels of deionized and standard water on the efficacy of three insecticides on Bemisia tabaci. Iranian Journal of Plant Protection Science. 52 (1): 69-80.

Ranjbar, S., Allahyari, H., Talebi Jahromi, Kh., **Heidari, A.** 2022. Susceptibility of Bemisia tabaci (Gennadius) (Hemiptera: Aleyrodidae) to Different Insecticides under Water Hardness Condition and Additives. J. Agr. Sci. Tech. 24 (6): 1385 -1395.

Ranjbar, S., **Heidari, A.**, Ziaei Madbouni, M. A. 2018. Evaluation of the Efficacy of the Volk Oil and chlorpyrifos (EC 40.8%) on Aonidiella orientalis and Chilocorus bipustulatus. Pesticides in Plan Protection Sciences, 5(1): 9-21.

Rezaeian, N., **Heidari, A.,** Moharramipour, S., Imani, S. 2015. Contact toxicity of botanical insecticide, Dayabon based on plant essential oils thyme (*Thymus vulgaris*) on *Brevicoryne brassicae* (Hem: Aphididae). Indian Journal of Fundamental and Applied Life Sciences. Vol. 5 (S2), pp. 3225-3228.

Shahinfar, E, **Heidari, A.** Heidari Alizadeh, B. 2015. To Investigate the Degradation Status of Expired Pesticides Based on the Formulation and Quality Control Prameters. Journal of Environment Science, 2, 57-65.

Shahinfar, E. **Heidari, A.** Imani, S. Ahadiyat. A. Negahban, N. 2021. Fumigant toxicity of prepared new formulations from Artemisia sieberi (Asteraceae) essential Oil on Sitophilus oryzae (Col.: Curculionidae). Agricultural Science and Technology. 23 (2): 349-360.

Shahinfar, E., **Heidari, A.** Damavandian, M. R. HeidariAlizadeh, B. 2015. To Investigate the Effective Factors on the Degradation Rate of Pesticides after production. Natural Environment, Iran Natural Resource. 69 (2): 421-438.

Shahinfar, E., **Heidari, A.** Damavandian, M. R. Heidarializadeh, B. 2016. Investigation of the Factors Affecting the Degradation of Expired Herbicides Stockpiles of Agricultural Supportive Services Company. J. Env. Sci. Tech., 18 (2): 599- 614.

Shahinfar, E., **Heidari, A.,** Imani, S., Ahadiyat, A., Negahban, M. 2021. The effect of repellency of powder formulations from Artemisia sieberi (Asteraceae) essential oil on Sitophilus oryzae (Col.: Curculionidae). Journal of Entomological Research. 13 (2): 23-33.

Shakarami, S., **Heidari, A.,** Arbabi, M. 2014. Efficacy of the EC 1.28% formulation of Neem, *Azadirachta indica*, on two-spotted spider mite, *Tetranychus urticae* (Acari: Tetranychidae), in laboratory and field conditions. Journal of Entomological Society of Iran. 34 (1): 85-93.

Torkamand, M. **Heidari, A.** Ghajarieh, H. and Faravardeh, L. 2013. Comparison of Susceptibility of Melon Aphid, *Aphis gossypii* Glover (Hemiptera: Aphididae), to Pirimicarb and Malathion in Seven Regions in Iran. J. Crop Prot. 2 (2): 183192.

Conference papers:

Shahinfar, E. **Heidari, A.** Damavandian, M. R. and Heidarializadeh, B. 2013. To investigate on obsolete pesticide in Iran with management approach. 3th International Conference on Planning and Management. Tehran Uni. 26, November.

Heidari, A., Parsa, H., Noori, H. and Torkamand, M. 2011. Comparing Efficiency of Different Spraying Technique in Controlling Olive Fruit Fly. Proceeding of Global Conference on Entomology.

Heidari, A. Torkamand, M. 2010. Insect Resistance to Insecticide. Proceeding on Half a Century of the Pesticide Usage in Iran. 2-3 March, Tehran.

Heidari, A. Parsa, H. 2010. A Review on Pesticide Application in Iran. Proceeding on Half a Century of the Pesticide Usage in Iran. 2-3 March, Tehran.

Heidari, A., Nahafi, M. Tajbakhsh, M. R. 2019. To investigate the effects of water hardness and pH on some of quality control index of tribeneronmethyl (DF 75%). 8th Iranian Weed Science Congress.

Nazeri, S. **Heidari, A.**, Hasanimoghadam, M. Tabrizian, M. 2018. Economic analysis of pest control of two rice paddies under integrated pest management (IPM) and conventional pest. 18th Iranian Rice Science Congress. Gorgan.

Heidari, A. Najafi, M., Tajbakhsh, M. R. 2019. To investigate the effects of water hardness and pH on some of quality control index of tribeneronmethyl. 8th Iranian Weed Science congress. Mashhad.

Books:

Heidari, A., 2010. Research Strategic Plan for Pesticides, IRIPP press. 271 pp.

Heidari, A., Zand, E. 2014. Management and Optimization of Pesticide Use in Iran. Iranian Research Institute of Plant Protection press. 210 pp.

Morowati, M. Mahdavi, V., **Heidari, A.** Noorbakhsh, R., Faravardeh, L., Alizadeh, B. (2019. Pesticides Residue in Agricultural Produces (Hazards, Regulations and Residue Limits). Iranian Research Institute of Plant Protection press. 258 pp.

Zand, S., Moosavi, S. K. and **Heidari, A.** 2008. Herbicide and Application Methods. Mashhad University press. 568pp.

Selected Thesis supervised:

Thesis title: Comparative study on EC (Emulsion Concentrated) Formulation of Azadirchtin of National Products with Acaricides to Control of *Tetranychus urticae*.

Thesis title: Evaluation of susceptibility of greenhouse population of Aphis gossypii Glover in different area to primicarb and malathion.

Thesis title: A study on effect of Eucalyptus extract, *Evacalyptus camaldulenis, E. globule*, *E. microtera* on *Oryzaephilus surinamensis.*

Thesis title: To investigate the important factors on destructive of expired pesticide.

Thesis title: In vitro susceptibility evaluation of Sunn pest to deltamethrin microcapsule formulation prepared by Iranian research institute of plant protection.

Thesis title: To investigate the water quality on pesticide quality control index.

Thesis title: Environmental Modelling for suitable management of pesticides usage in paddy fields of Iran (case study: Mazandaran Province).

Thesis title: Comparison between two rice paddies under integrated pest management (IPM) and conventional past control based on environmental index.