CURRICULUM VITAE



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Academic qualifications:

Ph.D. in Agricultural Entomology, [Dissertation title: "Study on the effect of semi-artificial and natural diets on demographic parameters of the sugarcane stem borers, *Sesamia* spp., the host of parasitoid wasp, *Telenomus busseolae*"].

MSc. in Agricultural Entomology, [Thesis title: "An in vitro mortality evaluation of important Lepidopteran pests on transgenic sugar beet lines containing *Bacillus thuringiensis* Berliner *cry1Ab* gene"].

BSc. in Plant Protection.

Research interests:

- Biological control
- Population Ecology
- Integrated Pest Management (IPM)

Research projects:

1. Evaluation of fall armyworm larval stage parasitism (*Spodoptera frugiperda*), by native populations of *Bracon hebetor* in the laboratory conditions and corn fields. Project number: 018-16-16-074-0003-03016-030712.

2. Evaluation of the efficiency of native Bt strains and available commercial products in the control of fall armyworms, *Spodoptera frugiperda* (Lep.: Noctuidae). Project number: 0138-16-1605-047-0003-03016-030424.

3. Control of alfalfa weevil, *Hypera postica* (Gyllenhal.) using native *Bacillus thuringiensis* var. *tenebrionis* in combination with other insecticides in laboratory and field conditions. Project number: 03-16-1605-040-010435.

4. Evaluation of the efficacy of NPV strains in the control of fall armyworm (*Spodoptera frugiperda*) under laboratory and field conditions. Project number: 018-16-16-009-0003-03016 -050213.

Journal papers:

1. **Sedighi, L.,** Rezapanah, M, Norouzi, P. and Vafaei-Shoushtari, R. 2010. Efficiency evaluation of Bt-transgenic lines of sugar beet against *Agrotis segetum* Schiff. (Lep., Noctuidae). Journal of Entomological Research, 2(1): 21-29.

2. **Sedighi, L.,** Rezapanah, M. and Ranjbar Aghdam, H. 2011. Efficacy of Bt transgenic sugar beet lines expressing cry1Ab gene against *Spodoptera littoralis* Boisd. (Lepidoptera: Noctuidae). Journal of the Entomological Research Society, 13(1):61-68.

3. **Sedighi, L.,** Ranjbar Aghdam, H., Imani, S. and Shojaei, M. 2016. Comparative demography of *Sesamia cretica* Lederer (Lepidoptera: Noctuidae) on its two the most important natural hosts, maize and sugarcane. Journal of Agricultural Science and Technology (JAST), 18:1807-1818.

4. **Sedighi, L.,** Ranjbar Aghdam, H., Imani, S. and Shojaei, M. 2016. Study on the effect of natural and artificial diets on pupal stage of corn stem borer, *Sesamia cretica* Lederer and *Sesamia nonagrioides* Lefèbvre in comparison with wild population. Journal of Entomological Research, 8(1): 47-57.

5. **Sedighi, L.,** Ranjbar Aghdam, H., Imani, S. and Shojaei, M. 2017.Age-stage two-sex life table analysis of *Sesamia nonagrioides* (Lep.: Noctuidae) reared on different host plants. Archives of Phytopathology and Plant Protection, 50(9-10): 438-453.

6. **Sedighi, L.,** Ranjbar Aghdam, H., Imani. 2022. Comparison demographic parameters of *Sesamia cretica* (Lepidoptera: Noctuidae) on semi-artificial diet and maize. Biocontrol in Plant Protection, 9(2): 45-58.

7. Ranjbar Aghdam, H., Yousefi Porshokouh, A. and **Sedighi, L.** 2015. Temperature-dependent life table parameters of *Galleria mellonella* (L.) (Lepidoptera: Pyralidae). Journal of Crop Protection, 4(Supplementary): 727-738.

8. Mohasesian, E., Ranjbar Aghdam, H. and **Sedighi, L.** 2016. Temperature-dependent mutual interference of adult mealybug destroyer, *Cryptolaemus montrouzieri*, feeding on citrus mealybug, *Planococcus citri*. Biological Control of Pests and Plant Diseases, 5(1): 59-66.

9. Ranjbar Aghdam, H., Gharali, B., Kamangar, S. and **Sedighi, L.** 2022. Providing forecasting model of grape berry moth, *Lobesia botrana* based on temperature-dependent phenology. Applied Entomology and Phytopathology, 90(1): 115-130.

10. Ranjbar Aghdam, H., Marzban, R., Mafi-Pashakolaei, S. and **Sedighi, L.** 2023. Study on the possibility control of box tree moth, *Cydalima perspetalis* (Lepidoptera: Crambidae) using microbial, organic and low risk insecticides. Journal of Entomological Society of Iran, 43(1): 35-41.

11. **Sedighi, L.** and Ranjbar Aghdam, H. 2026. A review of practical strategies for Integrated Pest Management of *Sesamia* spp. with emphasis on biological control programs in sugarcane farms in Khuzestan province. Biocontrol in Plant Protection, 13(1).

Full papers published in conference proceedings:

1. **Sedighi, L.** Rezapanah, M. and Norouzi, P. 2009. Efficiency evaluation of 21 lines Bt transgenic sugar beet on *Spodoptera littoralis* Bois (Noctuidae, Lepidoptera). The 6th National Biotechnology Congress of Iran. 13-14 August, Tehran, Iran.

2. Ranjbar Aghdam, H. and **Sedighi, L.** 2014. Reduction of pesticides spraying by determination of accurate spraying time to control of codling moth (*Cydia pomonella*) using a degree-hour forcasting model in apple orchards. The 3rd National Symposium on Agriculture and Sustainable Development Opportunities and Future Challenges. 4-5 March, Shiraz, Iran.

3. Ranjbar Aghdam, H., Yousefi Porshokouh, A. and **Sedighi, L.** 2014. Estimation of lower temperature threshold and thermal requirement for developmental stages of *Galleria mellonella* using the linear degree-day model. The 3rd National Symposium on Agriculture and Sustainable Development Opportunities and Future Challenges. 4-5 March, Shiraz, Iran.

Abstracts published in conference proceedings:

1. **Sedighi, L.** Rezapanah, M., Norouzi, P. and Vafaei-Shoushtari, R. 2009. Evaluation of 16 Bt transgenic sugar beet lines against *Agrotis segetum* (Noctuidae: Lep). 5th International

Symposium on Biotechnology (ISB09). 4-7 October, Jamshoro, Pakistan.

2. **Sedighi, L.** Rezapanah, M. and Norouzi, P. 2010. Evaluation of 2nd generation of *Bt*-transgenic sugar beet lines *vs*. their three Lepidoptera pests. Society for Invertebrate Pathology (SIP), 43thAnnual Meeting. 11-15 July, Trabzon, Turkey.

3. **Sedighi, L.** Rezapanah, M. and Vafaei-Shoushtari, R. 2010. Efficiency evalualuation of Bt transgenic lines of sugar beet against *Spodoptera exigua* Hb. (Lepidoptera: Noctuidae). 19th Iranian Plant Protection Congress. 31 July-3 August, Tehran, Iran.

4. **Sedighi, L.,** Ranjbar Aghdam, H., Imani, S. and Shojaei, M. 2015. Study on the effect of natural and artificial diets on pupal stage of corn stem borer, *Sesamia cretica* Lederer in comparison with wild population. 1st Iranian International Congress of Entomology. 29-31 August, Tehran, Iran.

5. **Sedighi, L.,** Ranjbar Aghdam, H., Imani, S. and Shojaei, M. 2015. Estimation of the life table parameters of maize and sugarcane stem borer, *Sesamia cretica* Lederer by using two sex life table analysis procedure. 1st Iranian International Congress of Entomology. 29-31 August, Tehran, Iran.

6. **Sedighi, L.,** Ranjbar Aghdam, H., Imani, S. and Shojaei, M. 2016. Studying the effect of host plants on life table parameters of *Sesamia nonagrioides* Lefebvre (Lep.: Noctuidae). 22nd Iranian Plant Protection Congress. 27-30 August, Karaj, Iran.

7. **Sedighi, L.,** Ranjbar Aghdam, H. and Imani, S. 2018. Successful rearing of the corn and sugarcane stem borers, *Sesamia* spp. By using semi-artificial diet for mass production of the egg parasitoid wasp, *Telenomus busseolae*. 23rd Iranian Plant Protection Congress. 27-30 August, Gorgan, Iran.

8. Ranjbar Aghdam, H. and **Sedighi, L.** 2014. Efficacy of two types of pheromone traps for the codling moth, *Cydia pomonella* (Lepidoptera: Tortricidae) population monitoring. 3rd Integrated Pest Management Conferences (IPMC). 21-22 January, Kerman, Iran.

9. Ranjbar Aghdam, H., **Sedighi, L.,** and Ardestani Rostami, H. 2014. The effect of different host plants on functional response of the acarophagous ladybird beetle, *Stethorus gilvifrons* (Coleoptera: Coccinellidae). 3rd Integrated Pest Management Conferences (IPMC). 21-22 January, Kerman, Iran.

10. Ranjbar Aghdam, H., Mortazavi, S. A. and **Sedighi, L.** 2016. Study on temperature-dependent development of *Cryptolaemus montrouzieri* using non-linear models. 22nd Iranian Plant Protection Congress. 27-30 August, Karaj, Iran.

Scientific reports:

1. **Sedighi, L.** 2026. An analytical report on the status of fall armyworm *Spodoptera frugiperda* (J. E. Smith) (Lepidoptera: Noctuidae) in Iran: biological features, challenges and pest management strategies. Approved No.69035.

Training courses and workshops:

1. Training workshop on "Selection and maintenance of parental colonies of *Trichogramma* and *Bracon* parasitoid wasps", organized by Iranian Research of Plant Protection (IRIPP), Tehran, Iran, **2013**.

2. Skills training course on "Production of Macro Biological Control Agents", organized by Agricultural and Natural Resources Engineering Organization, Tehran, Iran, **2015**.

3. Training course on "Integrated Pest Management", organized by Agricultural and Natural Resources Engineering Organization, Qazvin, Iran, **2019**.

4. Training course on "Plant Protection Pharmacy", organized by Agricultural and Natural Resources Engineering Organization, Qazvin, Iran, **2020**.

5. Training course on "Technical Managers of Plant protection units", organized by Agricultural and Natural Resources Engineering Organization, Tehran, Iran, **2022**.

6. National conference on "Research Achievements in Biological Control of Plant Pests", held at Iranian Research Institute of Plant Protection (IRIPP), Tehran, Iran, **2013**.

Memberships:

1. Member of Iranian Entomological Society (Code Detection: 1489).
2. Member of Young Researchers and Elite Club (Code Detection: 9616123004).
3. Member of Agriculture and Natural Resources Engineering Organization
   (ID Number: 0708423602).
4. Member of Entomological Society of America (ESA ID Number:70124).

Journal Reviewer:

1. Journal of Biocontrol in Plant Protection.
2. Journal of Forest and Range Protection Research.
3. Journal of Entomological Society of Iran.