CURRICULUM VITAE

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Academic qualifications

PhD: China Agricultural University (CAU) –Beijing, China
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Research interests

- ✓ Biological control
- ✓ Microbial Pest control
- ✓ Bacterial & Viral Insects Diseases

Selected research projects

1. Investigation on Preparation microencapsulated formulation of *Bacillus thuringiensis*.
2. Investigation on preparation of Suspension Concentrate formulation of *Bacillus thuringiensis*.
3. An investigation on a native product of *Bacillus thuringiensis* effectiveness on grape berry moth, *Lobesia botrana* (Lep.: Tortricidae**)**.
4. An investigation on an Iranian Product of *Bacillus thuringiensis* Effective on Chickpea Pod Borer.
5. Investigation of efficiency of Bt bait on *Agrotis segetum*.

6. Recovery of spore and crystal of *Bacillus thuringiensis* as a biopesticide from fermented sludge by membrane separation process.
7. An Investigation on the Impacts of Bt Rice on *Trichogramma brassicae* and *Andrallus spinidens*.
8. Detection of ß- exotoxin from an Iranian product of *Bacillus thuringiensis* subsp. *aizawai*
9. Isolation of *Bacillus thuringiensis* from the agricultural soils of Iran and comparing them in bioassay.
10. European corn stem borer integrated management.

Selected publications

Journals papers:

1. Magholifard Z., Hesami SH., Marzban R., Salehi jouzani GH. 2020. Individual and combined biological effects of *Bacillus thuringiensis* and Multicapsid Nucleopolyhedrovirus on the biological stages of Egyptian cotton leaf worm, *Spodoptera littoralis* (B.) (Lep.:*Noctuidae* Journal of Agricultural Science and Technology, 22: in press.
2. Kalantari M., Magollifard Z., Marzban R. 2019. Virulence Determination Nuclear Polyhedrosis Virus on Cotton Bollworm *Helicoverpa armigera* and Diamond Back Moth *Plutella xylostella*. Applied researches in plant protection, 7(4): 37-47.
3. Jalali E., Maghsoudi Sh. and Marzban R. 2018. Effect of Geraphene oxide nanosheets on efficiency of *Bacillus thuringiensis* biological pesticide. Biologic. Contr. Pest. Plant Dise. 7(1): 85-92.
4. Marzban R., Shaikhi Garjan A., Mirzay M., Mohammadipoor A., Gilasian E., Eslamizadeh R. and Khabaz H. 2018. Evaluation of the efficacy of *Bacillus thuringiensis* in the biological control of fly pests

of mushroom in the laboratory and the farm. BioCont. Plant Protec. 5 (2): 55-63.

5. Magholifard Z., Hesami SH., Marzban R. and Salehi Jouzani GH. 2018. Pathogenic effects of three Nucleopolyhedrovirus, *Spodoptera littoralis* NPV, *Helicoverpa armigera* NPV, *Spodoptera litura* NPV on life stages of Egyptian cotton leafworm *Spodoptera littoralis*. Applied Entomology and Phytopathology, 85 (2): 203-218.
6. Khorramvatan S., Marzban R., Ardjmand M., Seifkordi A., Askary H. 2017. Optimizing microencapsulated formulation stability of *Bacillus thuringiensis* subsp. *kurstaki* (Bt-KD2) against ultraviolet condition using response surface methodology. Arch. Phytopath. Plant Protec. 50 (5-6): 275-285.
7. Marzban R., Saberi F., Shirazi M.M. 2016. Microfiltration and Ultrafiltration of *Bacillus thuringiensis* Fermentation broth: Membrane performance and spore-crystal recovery approaches. Braz. J. Chem. Eng. 33 (4): 783-791.
8. Naseri Rad S., Shirazi M.M.A., Kargari A.,, Marzban R. 2016.Application of Membrane Separation Technology in Downstream Processing of *Bacillus thuringiensis* Biopesticide: A Review. J. Membr. Sci. Res. 2: 66-77.
9. Gifani A., Marzban R., Seifkordi A., Ardjmand M., Dezianian A. 2016. Evaluation some polymers combinations in improvement of HaNPV stability against ultraviolet radiation. BioCont. Plant Protec. 3 (1): 1-8.
10. Saberi F., Marzban R. and Ardjmand M. 2014. Optimization of *Bacillus thuringiensis* production process in lab *Fermenter*. Biologic. Contr. Pest. Plant Dise. 3(2): 165-172.
11. Gifani A., Marzban R., Seifkordi A., Ardjmand M., Dezianian A. 2015. Ultraviolet protection of nucleopolyhedrovirus through

microencapsulation with different polymers. Biocon. Sci. Tech. 25 (7): 814-827.

12. Marzban R., Saberi F., Shirazi M.M. 2014. Separation of *Bacillus thuringiensis* from fermentation broth using microfiltration: Optimization approach. Research J. Biotechnol., 9 (9): 33-37.
13. Magholi Z., Abbasipour H., Marzban R. 2014. Effects of *Helicoverpa armigera* Nucleopolyhedrosis virus (HaNPV) on the larvae of the diamondback moth, Plutella xylostella (L.) (Lepidoptera: Plutellidae). Plant Protect. Sci., 50(4): 184–189.
14. Khorramvatan S., Marzban R., Ardjmand M., Seifkordi A., Askary H. 2014. Preparation concentrated suspension of microencapsulated formulation of *Bacillus thuringiensis* subsp. *kurstaki*. BioCont. Plant Protec., 2 (1): 81-89.
15. Naraghi L., Heydari A., Askari H., Pourrahim R., Marzban R. 2014. Biological control of *Polymyxa betae*, fungal vector of rhizomania disease of sugar beets in greenhouse conditions. J. Plant Protec. Resear., 54 (2): 109-114.
16. Roshandel S., Talaei-Hassanlouei R., Askary H., Allahyari H., Marzban R. 2013. Effect of Culture Substrates on Virulence of *Metarhizium anisopliae* Conidia and Blastospores against Sunn Pest, *Eurygaster integriceps*. Iranian, J. Plant Protection Science. 44(2): 225-234.
17. Kalantari M., Marzban R., Magollifard Z., Abbasipour H. 2013. Study of virulence and molecular characteristics of some *Bacillus thuringiensis* isolates on cotton bollworm and diamondback moth. BioCont. Plant Protec. 2 (2): 17-26.
18. Khorramvatan S., Marzban R., Ardjmand M., Seifkordi A., Askary H. 2013. The effect of polymers on the stability of microencapsulated formulations of *Bacillus thuringiensis* subsp. *kurstaki* (Bt-KD2) after exposure to Ultra Violet Radiation**.** Biocon. Sci. Tech. 24 (4): 462–472.

19. Magholli Z., Marzban R., Abbasipour H., Shikhi A., Karimi J. 2013. Interaction effects of *Bacillus thuringiensis* subsp. *kurstaki* and single nuclear polyhedrosis virus on *Plutella xylostella*. J. Plant Dise. Protec. 120 (4): 173-178.
20. Kalantari M., Marzban R., Imani S., Askari H. 2013. Effects of *Bacillus thuringiensis* isolates and Single Nuclear Polyhedrosis Virus in combination and alone on *Helicoverpa armigera*. . Arch. Phytopath. Plant Protec. http://dx.doi.org/10.1080/03235408.2013.802460.
21. Marzban R., He Q., Zhang Q.W., Liu X.X. 2013. Histopathology of Cotton bollworm midgut infected with *Helicoverpa armigera* Cytoplasmic polyhedrosis virus. Brazili. J. Microbiol. 44(4): 1231-1236.
22. Marzban R. 2012. Investigation on the suitable isolate and medium for production of *Bacillus thuringiensis*. J. Biopesti. 5: 144-147.
23. Marzban R. 2012. Midgut pH profile and energy differences in lipid, protein and glycogen metabolism of *Bacillus thuringiensis* Cry1Ac toxin and Cypovirus-infected *Helicoverpa armigera* (Hübner) (Lepidoptera: Noctuidae). J. Entomol. Res. Soc. 14: 45-53.
24. Marzban R. 2012. Effects of Bt transgenic rice line on stripe stem borer, *Chilo suppressalis* and its consequences on egg parasitoid, *Trichogramma brassicae* Bezdenko in the laboratory. Arch. Phytopath. Plant Protec. 45, 391-397.
25. Marzban R., He Q., Liu X.X., Zhang Q.W. 2009. Effects of *Bacillus thuringiensis* toxin Cry1Ac and cytoplasmic polyhedrosis virus of *Helicoverpa armigera* (Hübner) (HaCPV) on cotton bollworm (Lepidoptera: Noctuidae). J. Inverteb. Pathol. 101: 71-76.
26. Marzban R. and Salehi J.G. 2006. Distribution of *Bacillus thuringiensis* in the Agricultural soils of Iran. Biotechnology, Agriculture and the

Food Industry (ISBN: 1-60021-040-6), Nova Science Publishers, Inc. (New York) USA, pp. 95-100.

27. Salehi J.G., Pourjan Abad A., Seifinejad A., Marzban R., Kariman K., and Maleki B. 2007. Distribution and diversity of Dipteran-species *cry* and *cyt* genes in native *Bacillus thuringiensis* strains obtained from different ecosystems of Iran. J. Ind. Microbiol. Biotechnol. 35: 83-94.
28. Marzban, R. and Tajbakhsh, M. 2004. Comparison of several methods for detection and quantification of β-exotoxin in commercial *Bacillus thuringiensis* products. Applied Entomology and Phytopathology. Appl. Entomol. Phytopathol. 71, 141-149.
29. Marzban, R. 2002. Comparative bioassay of some native isolates of *Bacillus thuringiensis* and serotype of *kurstaki* on Indian meal moth (*Plodia interpunctella* Hb.). Applied Entomology and Phytopathology. 70: 29-36.
30. Marzban, R., Bayat Asadi, H. and Mir Moayedi, A. 2001. Comparative assessment of some biological characteristics of Indian meal moth (*Plodia interpunctella* Hb.) on Pistachio, Walnut and Almond in laboratory. J. Entomology Society of Iran. 20: 71-79.
31. Ranjy, H., Marzban, R. and Homaionifar, M. 2005. Comparative efficacy of chemical and biological insecticides for control of Colorado potato beetle, *Leptinotarsa decemlineata* (Say), in potato fields. J. Agricultural Sciences. 3: 143-150.
32. Marzban, R. and Baniameri, V. 2004. An investigation on the effectiveness of some chemical and biological insecticides on Diamondback moth, *Plutella xylostella* L. (Lep.: Plutellidae). J. New Agricul.Scie. 1: 14-20.
33. Marzban, R. 2000. Insect resistance to *Bacillus thuringiensis* and its resistance management. Magazine of Zeitun, special issue on pesticides

use reduction and optimum utilization of chemical fertilizers in agriculture. 9: 46-49 (Collected and translated to Persian).

34. Marzban R., Salehi J.G. 2006, Isolation of native *Bacillus thuringiensis* Berliner isolates from the agricultural soils of Iran. J. New Agricul.Scie. 1(2): 47-54.
35. Marzban, R. 2004. Biopesticides (microbial pesticides) registration and quality control. Magazine of Zeitun, special issue on pesticides use reduction and optimum utilization of chemical fertilizers in agriculture. 162: 16-22.

Conference papers:

1. Marzban R. 2015. Bt Biopesticide: Where we stand?. 1st international and 9th national biotechnology congress of Islamic republic of Iran. May 24-26 2015, Shahid Beheshti University. Tehran. Iran.
2. Khorramvatan S., Marzban R., Ardjmand M., Seifkordi A., Askary H. and Gifani A. 2013. Suspension microencapsulated formulation of *Bacillus thuringiensis*. Conference of Biological Control in agriculture and natural resources, 27-28 Aug. 2013, Karaj, Iran.
3. Sabery F., Marzban R., and Rahimzade H. 2013. A mini review on formulation of *Bacillus thuringiensis* as a Biopesticide. First National Conference on strategies for achieving sustainable development, In agriculture, natural resources and environment, march 2013, Tehran, Iran.
4. Khoramvatan S., Marzban R., and Gifani A. 2013. A mini review on methods for microbial pesticides microcapsule formulation. First National Conference on strategies for achieving sustainable development, In agriculture, natural resources and environment, march 2013, Tehran, Iran.

5. Marzban R., Sabery F. 2013. Biological control is the basis for sustainable agriculture and food safety. First National Conference on strategies for achieving sustainable development, In agriculture, natural resources and environment, march 2013, Tehran, Iran.
6. Marzban R., Sabery F. 2013. Optimization of Fermentation process for production bacterium *Bacillus thuringiensis*. 2013. First National Conference on strategies for achieving sustainable development, In agriculture, natural resources and environment, march 2013, Tehran, Iran.
7. Marzban R., Tohidi M.T., Khanizad A., and Ranjbar H. 2012. Biological Control of Chickpea Pod Borer. 4th National Cereal Congress of IRAN, Arak, Iran.
8. Farrokhi Sh., Zerehgar Kh., Haidari H., and Marzban R. 2011. *Tuta absoluta* (Lep., Gelechiidae): A serious threat to tomato farming in Iran. International Symposium on management on *Tuta absoluta* (Tomato borer), Agadir, Morocco.
9. Marzban R., Ghareyazie B., and Nadjafi-Navai I., 2007. An investigation on the impacts of *Bt*-rice (Cry1Ab) on *Andralus spinidens*. 5th National Biotechnology Congress of IRAN.
10. Marzban R., Ghareyazie B., and Nadjafi-Navai I., 2007. An investigation on the impacts of *Bt*-rice (Cry1Ab) on *Trichogramma brassicae*. 5th National Biotechnology Congress of IRAN.
11. Ranjbar A.H. and Marzban R. 2011. A Review on the Process of Microbial Pesticides Registration in Iran and Some of the Other Countries. Biological Control Development Congress in Iran, 27-28 July 2011, Tehran, Iran.
12. Soroush M.J., Haidari Sh., Jalalinia M. and Marzban R. 2011. Permit the use of biological control agents in Iran. Biological Control Development Congress in Iran, 27-28 July 2011, Tehran, Iran.

13. Marzban R. and Askari H. 2010. Microbial Pest Control Achievements, Challenges and Vision. Congress on half a century of the pesticide usage in Iran. P. 9.
14. Marzban R., Salehi J.G. 2005. Distribution of *Bacillus thuringiensis* in the agricultural soils of IRAN. Third Moscow International Congress Biotechnology.
15. Marzban, R. and Tajbakhsh, M. 2004. Detection of β-exotoxin in a biopesticide based of *Bacillus thuringiensis* subsp. *aizawai*. Proceeding of the 16th Iranian Plant Protection Congress. pp. 42.
16. Marzban, R. and Baniameri, V. 2004. An investigation on effectiveness of chemical and biological insecticides on Diamondback moth, *Plutella xylostella* L. (Lep.: Plutellidae). Proceeding of the 16th Iranian Plant Protection Congress. pp. 188.
17. Ranjy, H., Marzban, R., Shahrokhi K.S. and Homaionifar, M. 2004. Investigation on the comparative effect of some chemical and non-chemical compounds on Colorado potato beetle, *Leptinotarsa decemlineata* (Col.: Chrysomelidae), in potato fields. Proceeding of the 16th Iranian Plant Protection Congress. pp 183.
18. Marzban, R. and Salehi J.G. 2004. Distribution of *Bacillus thuringiensis* in the agricultural soils of Iran. Proceeding of the 16th Iranian Plant Protection Congress. pp 75.
19. Marzban, R., Bayat A.H. and Mir Moayedi, A. 1998. *Bacillus thuringiensis* used as a control agent for Indian meal moth (*Plodia interpunctella* Hb.) in stored Pistachio. Proceeding of the 13th Iranian Plant Protection Congress. pp. 240.
20. Marzban, R., Bayat A. H. and Mir Moayedi, A. 1998. A survey on the distribution of *Bacillus thuringiensis* in soils of Kermanshah province of Iran. Proceeding of the 13th Iranian Plant Protection Congress, P. 239.

21. Marzban, R. and Mir Moayedi, A. 1998. Effectiveness of three dried fruit, pistachio, walnut, and almond on the larval and pupa life duration and the adult fertility in Indian meal moth (*Plodia interpunctella* Hb.). Proceeding of the sixth Iranian Biology Congress. pp. 77.

Thesis supervised

Student	Degree	University	Dissertation / Thesis title
S. Khoramvatan	Ph.D.	Science and Research Branch, Islamic Azad University	Preparation concentrated suspension of microencapsulated formulation of *Bacillus thuringiensis*
Z. Magholli	M.Sc.	University of Shahed	Integrated application of some native *Bacillus thuringiensis* and *Nucleopolyhedrovirus* on the diamondback moth, *plute xylostella* (L.) (Lep.: Plutellidae)
V. Dastpak	M.Sc.	Science and Research Branch, Islamic Azad University	Optimization of *Bacillus thuringiensis* Biopesticide Product Using Agricultural By-products as Nutrient Sources in Lab.
F. Saberi	M.Sc.	Science and Research Branch, Islamic Azad University	Optimization of *Bacillus thuringiensis* Production in laborat fermentor
M. Kalantari	M.Sc.	Science and Research Branch, Islamic Azad University	Study of interaction effects between of *Bacillus thuringiens* NPV on *Helicoverpa armigera*
A. Gifani	Ph.D.	Science and Research Branch, Islamic Azad University	Preparation of microcapsule formulation biopesticide of NP virus
M. Ghafelpoor	M.Sc.	Islamic Azad University, Arak Branch,	Efficacy of some *Bacillus thuringiensis* commercial produc tomato leaf miner, *Tuta absoluta* (Meyrick) (Lepidoptera: Gelechiidae)
S. Naghavi	M.Sc.	Science and Research Branch, Islamic Azad University	Stability of Bt and NPV Microencapsulate Formulations in Sunlight

Z. Magholli	Ph.D.	Islamic Azad University, Arak Branch	Evalution of the biological characteristics of some native *Ba thuringiensis* strains and their efficiency combined with Nucleopolyhedrosis viruses on Spodoptera littoralis
F. Saberi	M.Sc.	Science and Research Branch, Islamic Azad University	Optimization of growth conditions for *Bacillus thuringiensi* biological pesticide for controlling Coleoptera
Elham Jalali	M.Sc.	Shaheid bahonar University (Kerman)	The effect of nanoparticles on the performance of *Bacillus thuringiensis* as a biological pesticide.
Khadija Afzali	Ph.D.	Science and Research Branch, Islamic Azad University	Increasing commercial production efficiency of *Bacillus thuringiensis* subsp. *kurstaki* by liquid fermentation method the use of agricultural by-products in optimizing the culture improving growth conditions
Anissa Sadeghi Moghaddam	M.Sc.	University of Applied Sciences Mazandaran	Evaluation of the efficacy of several different formulations *Bacillus thuringiensis* in biological control of rice stem bore