**RESUME**

**Name: Mostafa Motallebi**

**Present position: Professor**

PhD in Molecular Genetics (UK)

Address: National Institute for Genetic Engineering and Biotechnology,(NIGEB), Tehran, Iran.

Tel: (98) 21- 44580363 Fax:(98) 21- 44580363

E-mail: motalebi@nigeb.ac.ir

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**Research Interests:**

1-Basic molecular biology

2- Molecular mechanism of fungal pathogenesis

3- Molecular mechanism of plant defenses

4- Industrial enzymes

**Papers in National & International Journals:**

1- **Motallebi M**., Rouch D.A., and C.M. Thomas. 1990. “A family of ATPases involved in active partitioning of diverse bacterial plasmids”. Molecular Microbiology 4: 1455-1463.

2- **Motallebi M**., D. Balzer, E. Lanka , G. Jagura-Burdzy, and C.M. Thomas . 1992. “Conjugative transfer functions of broad-host-range plasmid RK2 are coregulated with vegetative replication”. Molecular Microbiology 6: 907-920.

3- Williams D.R., **M. Motallebi**, and C.M. Thomas. 1993. “Multifunctional repressor KorB can block transcription by preventing isomerization of RNA polymerase-promoter”. Nucleic Acids Research 5: 1141-1148.

4- Zamani M.R., **M. Motallebi**, and A. Hosseinzadeh Colagar. 1998. “Virulence and polymorphic DNA relationships of *Ascochyta rabiei* to geographical regions”. Iranian Journal of Biology. 7:1-17.

5- **Motallebi M,** M.R. Zamani, and A. Andalib. 1999. “Plasmid-associated proteins correlate with pathogenisity of *Yersinia enterocolitica* isolates of Iran”. Iranian Journal of Science and Technology, 23: 101- 108.

6- **Motallebi M**, M.R. Zamani, and A. Andalib. 1999. “Correlation of virulence plasmid and serological tests of human *Yersinia enterocolitica* isolates”. Scientific Journal of Hamadan University of Medical Sciences & Health Services, 3: 11-18.

7- Zamani M.R., **M. Motallebi**, and M.A. Arefpour. 2000. “Comparative study of polygalacturonase activity from different Iranian isolates of *Fusarium oxysporum*”. Iranian Journal of Agricultural Science, 31: 293-302.

8- **Motallebi M**, M.R. Zamani, and B. Saffar. 2000. “Serological, calcium, and temperature

relatedness with virulence plasmid of *Yersinia enterocolitica*  isolates from chicken of Iran”. Eastern Mediterranean Health Journal. 6(283): 1-7.

9- **Motallebi M**, M.R. Zamani, and B. Saffar. 2001. “Identification of specific proteins associated with virulence plasmid of *Yersinia enterocolitica* isolated from chicken in Iran”. Iranian Journal of Science and Technology, 25 (1): 1-7.

10- Zamani M.R., **M. Motallebi,** and M.J. Harighi. 2001 “Pectic enzyme patterns of *Fusarium oxysporum* isolates from chickpea in Iran. Journal of Sciences, Islamic Republic of Iran. 12(1):17-21.

11- Farshadfar E., M.R. Zamani, **M. Motallebi** and A. Imamjomeh. 2001. “Selection for drought resistance in chickpea lines”. Iranian Journal of Agricultural Science. 32(1): 65-77.

12- **Motallebi M**., Zamani M.R., Jazayeri O.,and Harighi M.J. 2002. “Use of RAPD, enzyme activity staining, and colony size to differentiate phytopathogenic *Fusarium oxysporum*  isolates from Iran”. Brazilian Journal of Microbiology, 33:1-5.

13- **Motallebi M**., M.R. Zamani, and A. Hosseinzadeh Colagar. 2003. “Correlation of polygalacturonase activity and pathogenicity of Iranian isolates of *Ascochyta rabiei*”. Journal of science and technology of Agriculture and Natural Resources, 6(4): 159-169.

14- Alani B., **M. Motallebi.**, and M.R. Zamani. 2004. “Purification and partial characterization of polygalacturonase from highly virulent (HV) isolate of *Fusarium oxysporum* (F23).” Iranian Journal of Biology. 16(4) : 1-11.

15- Zamani MR., **M. Motallebi.**, and A. Rostamian. 2004. “Characterization of Iranian isolates of *Fusarium oxysporum*  on the basis of RAPD analysis, virulence, and vegetative compatibility”. Journal of Phytopathology. 152 (8-9): 499-503.

16- Alani B., M.R. Zamani, and **M. Motallebi.**. 2004. "Study of polygalacturonase from weakly virulent (WV) isolate of *Fusarium oxysporum* (F58)". Pajouhesh-va-Sazandegi. 63: 96-103.

17- Seyed Asli N., M.R. Zamani , **M. Motallebi.** and M.J. Harighi. 2004. “Study of chitinolytic enzyme production in Trichoderma isolates”. Iranian Journal of Biology. 17(3):227-246.

 18- Hosseinzadeh Colagar A.., M.R. Zamani, and **M. Motallebi.**. 2004. “PGIP-PG interaction, cloning and partial characterization of pgip gene from *Phaseolus vulgaris* cv. Derakhshan.” Iranian Journal of Biology. 17(2); 126-137.

19- Onsori H., **Motallebi** **M**., M.R. Zamani, and S. Zahri. 2004. “Optimization of enzyme production and amplification of β-Glucosidase gene from *Aspergillus* sp.” Iranian J. of Biology.17(1): 89-100.

20- Hosseinzadeh Colagar A., **M. Motallebi.** and M.R. Zamani. 2004. “Isolattion, Cloning, and Partial Characterization of the Gene Encoding the Polygalacturonase Inhibiting Protein of *Phaseolus vulgaris* cv. Naz”. Pakistan Journal of Biotechnology. 1(2): 1-9.

21- Alani B., Zamani M.R., **Motallebi M.**, Zarghami N., Jabbarzadeh S., Rahbani M., and Mashayekhi M.A. 2004. “Using random amplified polymorphism DNA (RAPD) technique for DNA polymorphism in isolated strain *Fusarium oxysporum*”. Medical Journal of Tabriz University of Medical Sciences (MJTUMS). 63: 65-70.

22- Zarghami N., Alani B., **Motallebi M.**, Zamani M.R., Khosrobeigi A., and Rahbani M. 2004. “Purification of polygalacturonase enzyme from strain F58 *Fusarium oxysporum*”. Medical Journal of Tabriz University of Medical Sciences (MJTUMS). 62: 40-46.

23- Onsori H., M.R. Zamani, **M. Motallebi.** and N. Zarghami. 2005. “Identification of over producer strain of endo- β-1,4-glucanase in *Aspergillus* species: characterization of crude carboxymetyl cellulose”. African Journal of Biotechnology. 4(1): 26-30.

24- Ghoujeghi F., **M. Motallebi.** and M.R. Zamani. 2005. “Enzyme production and amplification of cellobiohydrolase (CBH) gene from *Trichoderma* sp.”. Iranian Journal of Biology. 18(1): 15-23.

25- Zahri S., Zamani M.R., **Motallebi M.**, and Babaei A.. 2005. " Cloning, sequencing and characterization of gene and cDNA of β-1,4 endoglucanase from *Trichoderma reesei".* Iranian Journal of Biology. 18(2): 129-140.

26- Bahramsari N., M.R. Zamani and **M. Motallebi.**. 2005. “β-1,3-glucanase production in Trichoderma isolates”.Iranian Journal of Biology. 18(3): 261-271.

27- Zahri S., Zamani M.R., **Motallebi M.,** and Sadeghi M. 2005. “Cloning and characterization of *cbhII* gene from *Trichoderma parceramosum* and its expression in *Pichia* *pastoris”.* Iranian Journal of Biotechnology. 3(4): 204-215.

28- Harighi M.J., **Motallebi M.,** and Zamani M.R. 2006. “Purification of chitinase 42 from *Trichoderma atroviride* PTCC5220”. Iranian Journal of Biology. 19(2): 203- 214.

29- Harighi M.J., **Motallebi M.**, and Zamani M.R. 2006. “Antifungal activity of heterologous expressed chitinase 42 (Chit42) from *Trichoderma atroviride* PTCC5220”. Iranian Journal of Biotechnology. 4(2): 95-103.

30- Harighi M.J., Zamani M.R., and **Motallebi M.** 2007. “ Evaluation of antifungal activity of purified chitinase 42 from *Trichoderma atroviride* PTCC5220.” Biotechnology, 6(1): 28-33.

31- Fallahi H., **M. Motallebi.**, and M.R. Zamani. 2007. “Purification and partial characterization of polygalacturonase from virulent isolate of *Ascochyta rabiei* (IK06), causal agent of *Ascochyta* blight in checkpea”. Journal of Science and Technology of Agriculture and Natural Resources. 10(4B): 381-392.

32- Karimzadeh F., **M. Motallebi,** M.R. Zamani and Sh. Hamzeh. 2007. “Determination of culture condition for polygalacturonase production by *Rhizoctonia solani* AG2-2, causal agent of root rot in sugar beet.” Plant Pathology Journal. 6(2): 153-158.

33- Badri M., M.R. Zamani and **M. Motallebi**. 2007. “Effect of plant growth regulators on *in vitro*  biological control of *Fusarium oxysporum* by *Trichoderma harzianum* (T8)”. Pakistan Journal of Biological Sciences. 10(19): 2850-2855.

34- Hosseinzadeh Colagar A., M.R. Zamani, and **M. Motallebi**. 2006. “Study of polygalacturonase activity and genetic diversity of 42 Iranian isolates of *Ascochyta rabiei*.” Journal of Science, Teacher Training University. 6(1,2): 675-684.

35- Raoufzadeh Sarah, **Motallebi M**., and Zamani M.R.2007. “Cloning and characterization of beta-1,4 glucosidase 2 (*bgl*2) gene from a high producer cellulolytic enzyme *Trichoderma harzianum* (T7).” Word Apllied Sciences Journal. 2(4): 315-322.

36- Hosseinzadeh Colagar A., Mostafaie A., **Motallebi M.**, and Zamani M.R. 2007. “Bean polygalacturonase-inhibiting proteins inhibits polygalacturonase from *Fusarium oxysporum*  and *Ascochyta rabieii* of chickpea”.Journal of Science and Technology of Agriculture and Natural Resources. 41(B): 345-355.

37- **Motallebi M**., Afshari Azad H., and Zamani M.R. 2008. “Polygalacturonase production by *Sclerotinia sclerotiorum*, causal agent of canola stem rot: parameter optimization using Taguchi approach.” World Applied Sciences Journal. 3(1): 96-101.

38- Raoufzadeh S., **Motallebi M**., and Zamani M.R. 2008. “Isolation, cloning, and partial characterization of *bgn*13.1 gene of *Trichoderma virens-*10 a biocontrol agent.” American-Eurasian J. Agric. & Environ. Sci., 3(1): 42-49.

39- VatandoostJ., Zamani M.R., **Motallebi M**., and Sharifi M. 2008. “The status of the lesser mouse-eared bat (*Myotis blythii)* populations occurring in northern mesopotamian plain and mid-zagros mountains in western of iran based on mitochondrial sequences”. Iranian Journal of Biology. 20(4): 406-417.

40- Mohammadzadeh R., **Motallebi M**., Zamani M.R., and Bidmeshki A. 2008. “Identification, cloning and structure analysis of β-1,3 glucanase (*bgn1*) gene from *Trichoderma virens”.* Iranian Journal of Biology. 21(3): 483-492.

41- Matroudi S., Zamani M.R.and**Motallebi M**. 2008. “Molecular cloning of chitinase 33 (*chit*33) gene from *Trichoderma atroviride.”* Brazilian Journal of Microbiology. 39:433-437.

42-Ghoujeghi F., M.R. Zamani, **M. Motallebi.**, and S. Zahri. 2009. “Optimized conditions for production of β-glucosidase enzyme in *Trichoderma reesei* (PTCC5142)*”.*Pajouhesh-va-Sazandegi. 78(1): 141-148.

43-- Deilami Khiabani, Zamani M.R. and **Motallebi M**. 2008. “The comparison of inhibitory activity of Bean (*Phaseolus vulgaris*) PGIP on polygalacturonase enzyme from 20 different phytopathogenic fungi”. The Quarterly Journal of Biological Science. 3: 1-8.

44- Rezanezhad H., Zamani M.R., **Motallebi M**., and Harighi M.J. 2009. “Cloning of *chit*42 gene from *Trichoderma atroviride* PTCC5220 and its structure analysis”. Iranian Journal of Biology. 22(1): 53-62.

45- Jalali A., **Motallebi M**., and Zamani M.R. 2009. “Study of biocontrol activity of *Trichoderma atroviride* PTCC5220 against *Rhizoctonia* solani AG2, the causal agent of root rot in sugar beet”. Iranian Journal of Biology. 22(3): 452-461.

46- Matroudi S., Zamani M.R.and**Motallebi M**. 2009. “Antagonistic effects of three species of *Trichoderma* on *Sclerotinia sclerotiorum* causal agent of canola stem rot.” Egyptian Journal of Biology. 11: 37-44.

47- Rajabkhani Z., Zamani M.R, and **Motallebi M**. . 2010. “Optimized conditions for production of β-1,4 endoglucanase enzyme in *Aspergillus niger* (R4) and cloning of *egl*B gene.” Iranian Journal of Biology. 22:682-690.

48- Shokouhifar F., Zamani M.R., **Motallebi M**., Mosavi A. and Malbobi M. A. 2010. “Construction and functional analysis of a pathogen inducible synthetic promoter in response to some biotic and abiotic stresses in canola”. Iran. J. Plant Path. 45(3): 173-187.

49- Esfahani K., **Motallebi M**., Zamani M.R., Hashemi Sohi H., and Jourabchi E. 2010. “Transformation of potato (*Solanum tuberosum* cv. Savalan) by chitinase and β-1, 3 glucanase genes of mycoparasitic fungi towards improving resistance to *Rhizoctonia solani* AG-3.” Iranian Journal of Biotechnology. 8(2): 73-81.

50- ShokouhifarF., ZamaniM.R., **Motallebi M**. 2011. " Expression pattern of the synthetic pathogen-inducible promoter (SynP-FF) in the transgenic canola in response to *Sclerotinia sclerotiorum*". Iranian Journal of Biotechnology. 9(1): 1-10.

51- Moghaddassi Jahromi Z., Zamani M.R., **Motallebi M**., Akhgari A. 2011. “Antibody Production against the heterologous expressed PGIP1 to confirm the transgenic canola plants”. Iranian Journal of Biology. 24(1): 25-34.

52- Abedi A., **Motallebi M**., Zamani M.R. and Piri Kh.2011. "Transformation of canola (R line Hyola 308) by *pgip*1 gene from bean cv. Daneshjoo toward improving resistance to *Sclerotina sclerotiorum*". Iranian Journal of Agricultural Sciences. 42(1): 52-62.

53- Kalantari M., **Motallebi M**. and Zamani M.R.. 2011. “Bean polygalacturonase-inhibiting protein expressed in transgenic sugar beet inhibits polygalacturonase from *Rhizoctonia solani*”. Biosciences, Biotechnology Research Asia. 8(1): 19-28.

54- Shokouhifar F., Zamani M.R., **Motallebi M**., Mosavi A. and Malbobi M. A. 2011. "Construction and functional analysis of pathogen-inducible synthetic promoters in *Brassica napus* L.". Biologia Plantarum. 55(4): 689-695.

55- Esfahani K., Zamani M.R., and **Motallebi M**. 2011. " Review of different approaches to enhance resistance against fungal pathogens and transformation of the genes encoding hydrolytic enzymes from various sources to develop toleration of fungal diseases in transgenic plants". Journal of Biosafety. 2: 105-130.

56- ZamaniA., **Motallebi M**., Jonoubi P., Ghafarian-Nia N., and Zamani M.R. 2012. “Heterologous expression of the *Secale cereal* thaumatin-like protein in transgenic canola plants enhances resistance to stem rot disease”. Iranian Journal of Biotechnology. 10(2):87-95.

57- Akhgari AB., **Motallebi M**., and Zamani M.R. 2012. “Bean polygalacturonase-inhibiting protein expressed in transgenic *Brassica napus* inhibits polygalacturonase from its fungal pathogen, *Rhizoctonia solani”.* Plant Protection Science. 48(1): 1-9.

58- Goleyjani Moghaddaam R., **Motallebi M**., Zamani M. R. and Rezanejad H. 2012. “Optimization of regeneration and transformation of canola, Hyola 308 and RGS003 lines”. Journal of Plant Biology. 4(11):47-60.

 59- Esfahani K., **Motallebi M**. and Zamani M.R. 2012. “Construction of plant expression vectors harboring chitinase (*chit42*) and glucanase (*bgn13.1*) genes from *Trichoderma* species”. Iranian Journal of Biology. 24(6): 880-894.

60- Mohammadzadeh R., Zamani M.R., **Motallebi M**., Norouzi P., Jourabchi E., Benedetti M.and De Lorenzo G. 2012. “*Agrobacterium tumefaciens*-mediated introduction of polygalacturonase inhibiting protein 2 gene from *Phaseolus vulgaris* (*Pv*PGIP2) into sugar beet (*Beta vulgaris*L.)”. Australian Journal of Crop Science. 6(8); 1290-1297.

61- Matroodi S., Zamani M.R., **Motallebi M**., MoradyarM. 2013. “Designing a new chitinase with more chitin binding and antifungal activity”. World Journal of Microbiology and Biotechnology. 1-12. DOI 10.10077/s11274-013-1318-0.

63- Roohi L., Zamani M.R. and **Motallebi M**.2013. Transgenic canola plants harboring beta 1,3 glucanase(*bgn*I) gene from *Trichoderma virens* inhibit mycelial growth of *Sclerotinia sclerotiorum.”.* Iranian Journal of Biology. 26(1):28-40.

64- Matroodi S., **Motallebi M**., ZamaniM.R., MousaviA., DavoodiD., Moghaddassi-Jahromi Z. 2013. “Sugarcane (NCo310) transient transformation using *uidA* reporter gene”. Iranian Journal of Biotechnology, 11(2): 89-96.

65- Matroodi S., Zamani M.R., Haghbeen K., **Motallebi M**. and Aminzadeh S. 2013. “Physiochemichal study of a novel chimeric chitinase with enhanced binding ability”. ACTA Bioch Bioph Sin (ABBS). 1-12. Published online, DOI:10.1093/abbs/gmt089.

66- Akbarzadeh A., Ranaei Siadat O., Zamani M.R., **Motallebi M**., and Barshan Tashnizi. 2013. “Comparison of biochemical properties recombinant endoglucanaseII of *Trichoderma reesei* in methylotrophic yeast, *Pichia pastoris* and *Hansenula polymorpha*”. Progress in Biological Sciences. 3(1):108-117.

67-Kowsari M., Zamani M.R., **Motallebi M**., and Jourabchi E. 2013. “Transformation of *Trichoderma harzianum* T8 with *gfp* gene to facilitate its monitoring in soil and use of SEM to study interaction of *T. harzianum* with *Rhizoctonia solani* sclerotia”. Iran. J. Plant Path. 49(4)-425-437.

68- Kowsari M., **Motallebi M**., and Zamani M.R.. 2013. “Protein engineering of chit42 towards improvement of chitinase and antifungal activities”. Current Microbiology. Published online, DOI: 10.1007/s00284-013-0494-3.

69- Akbarzadeh A., Rannaei Siadat O., **Motallebi M**., Zamani M.R., Tashnizi M.B. and Moshtaghi S. 2013. “Characterization and high level of acidic endoglucanase in *Pichia pastoris*”. Applied Biochemistry and Biotechnology, Published online, DOI:10.1007/s12010-013-0672-6.

70- Kheiri H.R., **Motallebi M**., Zamani M.R. and Deljo A. 2014. “Beta glucanase (Bgn13.1) expressed in transgenic *Brassica napus* confers antifungal activity against *Sclerotinia sclerotiorum”.* Journal of Crop Protection. 3(1): 31-42.

71- ShokouhifarF., **Motallebi M**. and ZamaniM.R., 2014. “Construction of pGCGi, an expression vector varies intron containing GUS and analysis using micro-bombardment and agroinjection”. Iranian Journal of Plant Biology. 19 (1): 97-110.

72- Kowsari M., Zamani M.R., and **Motallebi M**.. 2014. “Enhancement of Trichoderma harzianum activity against *Sclerotinia sclerotiotum* by overexpression of Chit42”. Iran J. Biotech. Published online, DOI: 10.5812/ijb.13869.

73- Mohammadzadeh R., **Motallebi M**., and Zamani M.R. 2014. “Construction of plant expression cassette for production of chimeric protein containing PGIP1 and PGIP2”. Journal of Cellular and Molecular Researches. 26(4):550-561.

74- Kowsari M., **Motallebi M**. and Zamani M.R., 2014. “Construction of new GFP-tagged fusants for *Trichoderma harzianum* with enhanced biocontrol activity”. Journal of Plant Protection research, 54(2): 122-131.

75- Solgi T., Moradyar M., Zamani M..R, **Motallebi M**., 2015. “Transformation of Canola by *chit33* gene towards improving resistance to *Sclerotinia sclerotiorum*”. Plant Protection Sciences. 51(1): 1-5. Doi: 10.17221/83/2013-PPS

76-Yazdanpanah-Samani M., Zamani M.R., **Motallebi M**. and Moghaddassi-Jahromi Z. 2015. “Heterologous expression of Chit36 from *Trichoderma atroviride* in prokaryotic system”. Journal of Cellular and Molecular Researches. 28(3): 448-457.

77- Golijani Moghadam R., Yazdanpanah Samani M., Zamani M.R., and **Motallebi M**. 2015. “Heterologous expression of Chit36 from *Trichoderma atroviride* in canola reduces development of lesion caused by Sclerotinia sclerotiorum” Iranian Journal of Science and Technology. 39A3: 331-339.

78- Mohammadzadeh, R, **Motallebi M**., Zamani M.R., Moghaddassi-Jahromi Z., Norouzi P., Benedetti M., and DeLorenzo G. 2015. “Generation of transgenic sugar beet (*Beta vulgaris* L.) over-expressing the polygalacturonase inhibiting protein 1 of *Phaseolus vulgaris* (PvPGIP1) through *Agrobacterium*-mediated transformation”. Turkish Journal of Agriculture and Foresty. 39(4): 429-438.

79- Matroudi S., Zamani M.R., and **Motallebi M**. 2015. “Optimization of chimeric chitinase42 prokaryotic expression and comparison of its chitinase activity with Cht42”.Journal of Cellular and Molecular Researches, 28(2): 279-289.

80- Zebardast F., Zamani M.R., **Motallebi M**., and Moghaddassi-Jahromi Z. 2015. “Antifungal activity of recombinant rice LTP2 on some phytopathogenic fungi”. Progress In Biological Sciences. 5(1): 133-142.

81- Ziaei M., **Motallebi M**. Zamani M.R., Zarin panjeh N., and Moghaddassi Jahromi Z. 2015. “A comparative study of transgenic canola (*Brassica napus* L.) harboring either chimeric or native Chit42 genes against phytopathogenic fungi”. Journal of Plant Biochemistry and Biotechnology.

82- Hamzeh. Sh., **Motallebi M**. Zamani M.R., and Moghaddassi Jahromi Z. 2015. “Selectable marker gene removal and expression of transgene by inducible promoter containing FFDD cis-acting elements in transgenic plants”. Iranian Journal of Biotechnology. 13(3): 1- 9. DOI:10.15171/ijb.1099.

84- Javaheri Z., Aminzadeh S., Zamani M.R., and **Motallebi M**. 2016. “Optimization of culture condition of enterobacter ZS extra cellular cyanide degrading enzyme with Response Surface Methodology”. Journal of Cellular and Molecular Researches. 29(3): 265-272.

85- Kowsari M., Zamani M.R., and **Motallebi M**. 2016. “Overexpressed chimeric chitinase42 enhanced antifungal activity of *Trichoderma harzianum* against *Fusarium graminearum*”. Mycologia Iranica. 3(1):15-23

86- Etebari M., **Motallebi M**., Zamani M.R. Moghaddassi Jahromi Z, 2016. “Structural Analysis of *Def*2 Gene from *Trigonella foenum-graecum* by Characterization of Its Genomic and cDNA “. Agricultural Biotechnology journal. 15(1): 81-88

87- Zarin panjeh N, **Motallebi M**. Zamani M.R. and Ziaei M, Jourabchi E., 2016. “Overexpression of radish (*Raphanus sativus*) defensin gene (*Rs-AFP1*) in canola (*Brassica napus*) improves resistance to Sclerotinia stem rot disease”. Genetic Novin. 12(1): 49-59.

88- Aghazadeh R., Zamani M.R., **Motallebi M**., and Moradyar M. 2016. “*Agrobacterium*-mediated Transformation of the *Oryza sativa* Thaumatin-like protein to Canola (R line Hyola308) for Enhancing Resistance to *Sclerotinia sclerotiorum”.* Iranian Journal of Biotechnology. 15(3) 201-207.

89- Ziaei M., **Motallebi M**., Zamani M.R. and Zarinpanjeh N. 2016. “Co-expression of chimeric chitinase and polygalacturonase inhibiting protein in transgenic canola confers enhanced resistance to *Sclerotinia sclerotiorum*”. Biotechnology Letter. DOI:10.1007/s10529-016-2058-7.

90- Hamzeh Sh., **Motallebi M**., and Zamani M.R. 2016. “Efficient seed-specifically regulated auto-excision of marker gene *npt*II with inducible expression of interest gene in transgenic *Nicotiana tabaccum*”. Turkish Journal of Biology. 40: 1-11.

91- Moradyar M., Zamani M.R., **Motallebi** M., and Aghazadeh R. 2016. “Transformation of canola with a chimeric chitinase gene under control of the SP-FF synthetic pathogen-inducible promoter”Journal of Cellular and Molecular Researches. 28(4): 599-610.

92- Aghazadeh R., Zamani M.R., **Motallebi** M., Moradyar M, Moghaddassi Jahromi Z, 2016. “Co-transformation of canola by chimeric chitinase and *tlp* genes towards improving resistance to *Sclerotinia sclerotiorum*”. World Journal of Microbiology and Biotechnology. 32:144, DOI:10.1007/s11274-016-2104-6.

93- Ataei A., Zamani M.R., **Motallebi** M., Haghbeen K. Ziaei M. and Jourabchi E.. 2016. “Increased antifungal activity of Chit42 from *Trichoderma atroviride* by addition of a chitin binding domain”. Tropical Plant Pathology. (103): DOI: 10.1007/s40858-016-0103-7.

94- Zarin panjeh N., **Motallebi M**. Zamani M.R. and Ziaei M. 2016. “Enhanced resistance to *Sclerotinia sclerotiorum* in *Brassica napus* by co expression of defencin and chimeric chitinase genes.” Journal of Applied Genetics. 57(4): 417-425.

95- Moradyar M, **Motallebi M**., Zamani M.R. and Aghazadeh R. 2016. “Pathogen-induced expression of chimeric chitinase gene containg synthetic promoter confer antifungal resistance in transgenic canola”. *In viro* Cellular & Developmental Biology- Plant52(2): 119-129.

96- Mohammadzadeh R., Zamani M.R and **Motallebi M**. 2017. “Transient expression of pgip2 and chimeric sppgip2-aaa-pgip1 genes in *Nicotiana benthamiana”.* Journal of Agricultural Biotechnology. 9(1): 67-80.

97- Zarin panjeh N, **Motallebi M**. Zamani M.R. and Ziaei M, Jourabchi E., 2017. “Overexpression of radish (*Raphanus sativus*) defensin gene (*Rs-AFP1*) in canola (*Brassica napus*) improves resistance to Sclerotinia stem rot disease”. Genetic Novin. 12(1): 49-59.

98- Aghazadeh R., Zamani M.R., **Motallebi M**., and Moradyar M. 2017. “*Agrobacterium*-mediated Transformation of the *Oryza sativa* Thaumatin-like protein to Canola (R line Hyola308) for Enhancing Resistance to *Sclerotinia sclerotiorum”.* Iranian Journal of Biotechnology. 15(3): 201-207.

99- Zandvakili N., Zamani M.R., **Motallebi M**., and Moghaddassi Jahromi Z. 2017. “Cloning, Overexpression and *In Vitro* Antifungal Activity of *Zea Mays* PR10 Protein”. Iranian Journal of Biotechnology. 15(1): 42-49.

100- Javaheri Safa Z., Aminzadeh S., Zamani M.R., and **Motallebi M**. 2017. “Significant increase in cyanide degradation by *Bacillus* sp. M01 PTCC1908 with response surface methodology optimization”. AMB Express. 7:200. DOI 10.1186/s13568-017-0502-2.

101- Etebari M., **Motallebi M**., Zamani M.R., and Moghaddassi-Jahromi Z. 2019. “Isolation, identification and study of defensin gene structure (*Def*1) in *Raphanus sativus*”. Journal of Cellular and Molecular Researches. 32(1):136-145. (On line published)

102- Mahmoodian S., Zamani MR., Kowsari M., **Motallebi M**., and Joorabchi E. 2017. “Evaluation of bio-control and colonization potential of molecular improved *Trichoderma* strains against *Rhizoctonia* diseases of bean”. Agricultural Biotechnology journal. 17 (1): 1-10. DOI: 10.22084/ab.2018.12901.1336

103- Moradyar M, **Motallebi M**., Zamani M.R. and Aghazadeh R. 2017. “Study of the role of the synthetic fungal pathogen inducible SP-DDEE promoter for expression of resistant gene in *Brassica napus”.* Iran. J. Plant Path. 53(3): 231-245.

104- [Akbarzadeh A.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21) [Pourzardosht N.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729#!) [Dehnavi E.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729#!) [Ranaei Siadat O.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21) [Zamani MR.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21) **[Motallebi M](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21)**[.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21) [Nikzad Jamnani F.,](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21) [Aghaeepoor](https://www.sciencedirect.com/science/article/pii/S0141813018308729%22%20%5Cl%20%22%21) M., and [Barshan Tashnizi](https://www.sciencedirect.com/science/article/pii/S0141813018308729#!) M. 2018. “Disulfide bonds elimination of endoglucanase II from *Trichoderma reesei* by site-directed mutagenesis to improve enzyme activity and thermal stability: An experimental and theoretical approach”. International journal of Bioligical Macromolecules. 120(B):1572-1580.

105- Eslahi N., Kowsary M., **Motallebi M**., Zamani MR., and Akbari S. 2019. “Evalutaion of effect of improved Trichoderma inocula on flowering and cropproductivity of bean”. Plant Genetic Researches. 6(1):47-54.

106- Eslahi N., Kowsari M., **Motallebi M**., Zamania M.R., and Moghadasi Z. 2020. “Influence of recombinant *Trichoderma* strains on growth of bean (*Phaseolus vulgaris* L) by increased root colonization and induction of root growth related genes”. Scientia Horticulturae. 261: page: 108932. DOI: [10.1016/j.scienta.2019.108932](http://dx.doi.org/10.1016/j.scienta.2019.108932)

107- Partovi Nasr M., **Motallebi M**., Zamani MR. and Jourabchi E. 2020. “*In Silico* analysis and expression of osmotin-EAAAK-LTP fused protein”. J. Genet Resour. 6(1): 41-48.

108- Eslahi, N., Kowsari, M., Zamani, MR., and **Motallebi, M**. 2021. The profile change of defense pathways in *Phaseouls vulgaris* L. by biochemical and molecular interactions of *Trichoderma harzianum* transformants overexpressing a chimeric chitinase. Biological Control, 152: 1-15.

109- Eslahi, N., Kowsari, M., Zamani, MR., **Motallebi, M**. 2020, Correlation study between biochemical and molecular pathways of *Trichoderma harzianum* recombinant strains on plant growth and health. Journal of Plant growth regulation, DOI:10.1007/s00344-021-10396-1.

110- Ataei A., Zamani MR., **Motallebi M**., Ziaei M., Moghaddassi Jahromi Z. and Shirazi J. 2020. “The effect of a chitin binding domain on the chitinolytic activity of chitinase 42 over *Ephestia kuehniella* larval chitin”. “. Agricultural Biotechnology Journal. DOI:10.22084/ab.2020.18255.1401.

111- Fakhraei M.M., Motallebi Azar A., Salehi H., Mahna N, **Motallebi M**., 2021, “Effect of the type of inoculation medium on chimeric chitinase gene transfer to lisianthus (Eustoma grandiflorum [Raf.] Shinn) for resistance to the fungal disease Fusarium solani” Flower and Ornamental Plants, 6(2): 147-164

 112- Shiehbeiki Sh. **Motallebi M**., Zamani MR. and Jourabchi E. 2021. “Evalution of antifungal activity of Defensin (Tfgd2) using its heterologous expression in *E. coli*.” Jurnal of Genetic resources. 7(1): 116-124.

113- Javaheri Safa Z., Olya A., Zamani M.R., **Motallebi M**., Khalili R., Haghbeen K., and Aminzadeh S. 2021. “Biodegradation of cyanide to ammonia and carbon dioxide by an industrially valuable enzyme from the newly isolated Enterobacter ZS.” Journal of Environmental Science and Health, part A., 56(10): 1131-1137.

114- [Eslahi](https://link.springer.com/article/10.1007/s00344-021-10396-1#auth-Negin-Eslahi) N,   [Kowsari](https://link.springer.com/article/10.1007/s00344-021-10396-1#auth-Mojegan-Kowsari) M,  [Zamani](https://link.springer.com/article/10.1007/s00344-021-10396-1#auth-Mohammad_Reza-Zamani) M.R and [**Motallebi**](https://link.springer.com/article/10.1007/s00344-021-10396-1#auth-Mostafa-Motallebi) **M**. 2021. “Correlation Study Between Biochemical and Molecular Pathways of *Trichoderma harzianum* Recombinant Strains on Plant Growth and Health” [Journal of Plant Growth Regulation](https://link.springer.com/journal/344)., 41: 1561–1577. [Doi: 10.1007/s00344-021-10396-1](https://doi.org/10.1007/s00344-021-10396-1)

115- Eslahi, N., Kowsari, M., **Motallebi, M**., Zamani, MR. 2021. “The profile change of defense pathways in *Phaseouls vulgaris* L. by biochemical and molecular interactions of *Trichoderma harzianum* transformants overexpressing a chimeric chitinase.” Biological Control, 152, 1-15.

116- Mahmoodian S, Kowsari, M., **Motallebi**, **M**., Zamani, MR and Moghaddasi Jahromi, S. 2022. “Effect of Improved Trichoderma harzianum on Growth and Resistance Promotion in Bean Plant” Brazilian Archives of Biology and Technology. Vol.65 Doi.org/10.1590/1678-4324-2022210671.

117- Malmir N, Zamani M. R, **Motallebi M**., Allahyari Fard N. and L. Mekuto, 2022. “Cyanide Biodegradation by *Trichoderma harzianum* and Cyanide Hydratase Network Analysis” Molecules 27, 3336. <https://doi.org/10.3390/molecules27103336>

118- Moradyar M., Zamani M.R., **Motallebi M**. and Jourabchi E.. (2022**) Study of the effect of chimeric chitinase expressed by synthetic promoter in T2 generation of transgenic canola. Journal of Genetic Resources**. Accepted

**Full Papers in National & International Conferences:**

1-Motallebi M., M.R. Zamani, and A. Barzegar. 2001. “Analysis of DNA polymorphism and protein profile in different isolates of *Xanthomonase*  sp. In Sugar beet”. The Second National Biotechnology Congress, Karaj. 1478-1485.

2-**Motallebi M**., M.R. Zamani, A. Khoroshi, and M.J. Harighi. 2001. “Classification of *Fusarium oxysporum* isolates based on protein pattern and overlaying”. The 10th Iranian Biology conference, Shiraz, 34-38

3-Zamani M.R., M. Motallebi, and A. barzegar. 2001. “Polygalacturonase activity and pathogenicity of *Xanthomonas* sp. On Sugar beet”. The Second National Biotechnology Congress, Karaj. 1470-1477.

4-Zamani M.R., **M. Motallebi**, and D. Chobineh. 2001. “DNA polymorphism and protein pattern of *Puccinia striiformis*  in Wheat”. The 10th Iranian Biology conference, Shiraz, 29-33.

5-Zamani M.R., **M. Motallebi**, and A. Hosseinzadeh Colagar. 2001. “*In vitro* pathogenicity of *Ascochyta rabiei* on chickpea roots”. The 10th Iranian Biology conference, Shiraz, 43- 47.

6-**Motallebi M**., M.R. Zamani, and M. Rezaei. 2001. “Study of genetic diversity among *Ascochyta rabiei* isolates by RAPD”. The 10th Iranian Biology conference, Shiraz, 39-42.

7-Hosseinzadeh Colagar A., M. Motallebi, and M.R. Zamani. 2003. “Isolation of bean (*Phaseolus vulgaris*) pgip gene by PCR and Cloning of the bean pgip gene”. The 3rd National Biotechnology Congress, Ferdoosi Univ., Mashhad. 57-60.

8-Zahri S., M.R. Zamani, and M. Motallebi. 2003. “Molecular study of endoglucanase isozyme in *Trichoderma reseei*” . The 3rd National Biotechnology Congress, Ferdoosi Univ., Mashhad. 226-229

9-Yari R., M.R. Zamani, M. Motallebi and S. Zahri. 2003. “β-1-4 glucosidase production and detection amplified of a segment of its gene in *Cellulomonas* sp.”. The 3rd National Biotechnology Congress, Ferdoosi Univ., Mashhad. 229-231.

10- Madaeni S.S., B. Khodadadi, H. Mirmomeni, M.R. Zamani, and M. Motallebi. 2003. “Microfiltration of bacteriophage in the presence of host bacteria”. The Fifth International Membrane Science & Technology Conference, The University of New South Wales, Sydney, Australia.

11- Salehzadeh A.1, Motallebi M.2, and Zamani M.R. 2005. "Tomato polygalacturonase inhibiting protein(PGIP) is not induced by pathogen but increased with ageing." 15- 17 Aug., The 4th National Biotechnology Congress, Kerman (Mahan).

# 12- Jalali A., Zamani M.R., and Motallebi M.. 2005. "Isolation, cloning and sequencing of *chit 36* of *Trichoderma harzianum* 8." 15- 17 Aug., The 4th National Biotechnology Congress, Kerman (Mahan).

13- Zahri S., **Motallebi M**., and Zamani M.R. 2005. "Molecular study of cellobiohydrolaseII (*cbhII)* gene from *Trichoderma parceramosum".*15- 17 Aug.,The 4th National Biotechnology Congress, Kerman (Mahan).

14- Babaei A., Zamani M.R., Motallebi M.and Zahri S. 2005. "Isolation, cloning and sequencing of *eglV* gene from *Trichoderma reesei* PTCC5142." 15- 17 Aug., The 4th National Biotechnology Congress, Kerman (Mahan).

15- Hosseinzadeh Colagar, A., Motallebi M., and Zamani M.R. 2005. "Isolation, coloning and sequencing of polygalacturonase inhibiting protein (*pgip2)*." 15- 17 Aug., The 4th National Biotechnology Congress, Kerman (Mahan).

16- Harighi M.J., Zamani M.R., and **Motallebi M**. 2005. "Cloning and sequence analysis of *chit42* gene from *Trichoderma tansarum* for expression." 15- 17 Aug., The 4th National Biotechnology Congress, Kerman (Mahan).

17- Hossenzadeh Colagar A., **Motallebi M**., and Zamani M.R. 2005. "Characterization of Bean polygalacturonase-inhibiting protein genes by mismatch primers, multiplex PCR and cloning". 20 & 21 Nov., The first Iranian Pulse Symposium, Ferdowsi Univ., Mashhad, Iran. 621-624.

18- Mohammadzadeh R. Zamani M.R., **Motallebi M**., and Bidmeshkipour A. 2005. "Isolation, cloning, and sequencing of β- 1,3 glucanase of *Trichoderma virens*". 20 & 21 Nov., The first Iranian Pulse Symposium, Ferdowsi Univ., Mashhad, Iran. 615-617.

19- Fallahi F., Karimzadeh F. **Motallebi** **M**., and Zamani M.R. 2005. "Isolation and cloning of *pgip2* gene from two cultivars of*Phaseolus vulgaris*". 20 & 21 Nov., The first Iranian Pulse Symposium, Ferdowsi Univ., Mashhad, Iran. 618-420.

21- Moghadam.. R., Kheiri. H., Zamani. **M., Motalebi**. M., Moghaddassi Jahromi .Z and Deljou. A. 2007. “Transformation of canola by *chit*36 and *bgn*13.1 genes”. 24 - 26 Nov., The 5th National Biotechnology Congress, Tehran, I.R. of Iran.

22- Akhgari A.B., Abedi A., Zamani M.R., **Motallebi M**., Moghaddassi Jahromi Z., Piri Kh., and Naghavi M.R. 2007. “Transformation of Canola by *pgip*1 and *pgip*2 genes”. 24 - 26 Nov., The 5th National Biotechnology Congress, Tehran, I.R. of Iran.

23- Kalantari M., Taasob Shirazi F., **Motallebi M**., Zamani M.R., Hamze Sh., Jonobi P., and Moeini A. 2007. “Transformation of Sugar beet by *pgip*1 and *pgip*2 genes”. 24 - 26 Nov., The 5th National Biotechnology Congress, Tehran, I.R. of Iran.

24- Rezanejad H., Lotfi K., Zamani. M.R., **Motallebi M**., Moghaddassi Jahromi Z. and Deljou A. 2007. “Transformation of canola by *chit* 42 gene (cDNA and genomic DNA)”. 24 - 26 Nov., The 5th National Biotechnology Congress, Tehran, I.R. of Iran.

25- Akhgari A.B**., Motallebi M**., and Zamani M.R. 2008. “Cloning of *pgip*1 gene from *Phaseolus vulgaris* cv. Akhtar”. 29-30 Junuary, 2th national congress in Cellular & Molecular Biology, International Center for Science & high Technology and Environmental Sciences. Kerman, I. R. of Iran

26- Moghadam. R., Rezanejad H., **Motallebi M**., Zamani. M.R., and Hamze Sh. 2008. “Optimization of regeneration of Hyola 308 and RGS003 canola cultivars”. 29-30 Junuary, 2th national congress in Cellular & Molecular Biology, International Center for Science & high Technology and Environmental Sciences. Kerman, I. R. of Iran

27- Shokouhifar F., Zamani M.R., **Motallebi** **M**., Malbobi M.A., and Mosavi A. 2008. “Synthetic promoters to regulate transgenes expression”. 29-30 Junuary, 2th national congress in Cellular & Molecular Biology, International Center for Science & high Technology and Environmental Sciences. Kerman, I. R. of Iran

28- Soroor F., Zamani M.R., **Motallebi** **M**., and Zargari K.2010. “Transformation of *Brassica napus* (R line Hyola 308) by cDNA of *bgn13.1* gene”. 22-24 May, 11th Iranian Genetics Congress, Tehran, Iran.

29- Etebari M., **Motallebi** **M**. and Zamani M.R. 2010. “Isolation and cloning of genomic DNA and cDNA of *Rs*-AFP1 gene from *Raphanus sativus”.* 22-24 May, 11th Iranian Genetics Congress, Tehran, Iran.

30- Moradyar M., Zamani M.R., **Motallebi** **M**. , Zargari K. 2010. “Transformation of *Brassica napus* by chit33 gene”. 22-24 May, 11th Iranian Genetics Congress, Tehran, Iran.

31- Solgi T., Moradyar M., **Motallebi** **M**. , Zamani M. R. and KHosroshahli M.2010. “Modification of chitinase cDNA from *Trichoderma* *atroviridae* by SOEing PCR”. 22-24 May, 11th Iranian Genetics Congress, Tehran, Iran.

32- Esfahani K., Zamani M. R.and **Motallebi** **M**. 2010. “Analyses of the effect of different concentrations of kanamaycin on the development and growth of *in vitro* seedlings of five potato (*Solanum tuberosum*) cultivars”. 24-26 July, 11th Iranian Crop Science Congress, Environmental Sciences research Institute, Shahid Beheshti University, Tehra, Iran.

33- Roohi L, **Motallebi** **M**., Zamani M.R. and Khosroshahli M. 2010. “Transformation of *Brassica napus* by *bgn1* gene and molecular confirmation of transgenic plants”. 11th Iranian Crop Science Congress, Environmental Sciences research Institute, Shahid Beheshti University, Tehra, Iran.

34- Moradyar M., Solgi T. , Zamani M. R., **Motallebi** **M**. and Zargari K. 2010. “Modification of *chit33* gene from *Trichoderma* *atroviridae* by SOEing PCR”. 11th Iranian Crop Science Congress, Environmental Sciences research Institute, Shahid Beheshti University, Tehra, Iran.

35- Matroodi S., Zamani M.R. and **Motallebi** **M**. 2010. “Enhancement of antifungal activity of chitinase42 by protein engineering”. 11th Iranian Crop Science Congress, Environmental Sciences research Institute, Shahid Beheshti University, Tehra, Iran.

36- Shafei N., Zamani M.R., **Motallebi** **M**. and Moghadasi Z. 2011. “Peokaryotic expression of *Raphanus* *sativus* defensin gene”. The 7th National biotechnology Congress of I.R. of Iran. 12-14 Sep., Niroo Research Institiute, Tehran, Iran.

37- Zebardast F., **Motallebi** **M**., Zamani M.R. and Jourabchi E. 2011. “Isolation, cloning and prokaryotic expression of *ltp* gene from rice”. The 7th National biotechnology Congress of I.R. of Iran. 12-14 Sep., Niroo Research Institiute, Tehran, Iran.

38- Matroodi S., Zamani M.R., **Motallebi** **M**., Mousavi A. and Davoodi D. 2011. “Optimization of physical and biological parameters for transient expression of *Uid*A gene in embryonic callus of sugarcane (*Saccharum officinarum*)”. The 7th National biotechnology Congress of I.R. of Iran. 12-14 Sep., Niroo Research Institiute, Tehran, Iran.

39- Moradyar M., Zamani M.R., **Motallebi** **M**., Moghadasi Z. and Jourabchi E. 2011. “Assessment of antifungal activity of transgenic canola by using radial diffusion assay technique”. The 7th National biotechnology Congress of I.R. of Iran. 12-14 Sep., Niroo Research Institiute, Tehran, Iran.

40- Esfahani K. Raoufzadeh S., Jouranbchi E., Hashemi H., **Motallebi** **M**. and Zamani m.R. 2011. “Transformation of *bgn*13.1 cDNA from *Trichoderma* *virens* to different potato cultivar”. The 7th National biotechnology Congress of I.R. of Iran. 12-14 Sep., Niroo Research Institiute, Tehran, Iran.

41- Esfahani K. Raoufzadeh S. Moghadasi z., **Motallebi** **M**. and Zamani M.R. 2011. “Constrauction of a prokaryotic expression vector harbouring *bgn*13.1 cDNA from *Trichoderma virens* to express BGN13.1 recombinant protein in *E. coli* Bl21. The 7th National biotechnology Congress of I.R. of Iran. 12-14 Sep., Niroo Research Institiute, Tehran, Iran.

43- Shafei N., Zamani M.R., **Motallebi** **M**., Moghadasi Z., and Joorabchi E. 2012. “Antifungal activity of prokaryotic expressed defensin RS-AFP1 on some phytopathogenic and human pathogenic fungi”. 12th Iranian Genetics Congress. 21-23 may. Tehran, Iran.

44- Matroodi S., Zamani M.R., **Motallebi** **M**., Mousavi A., Davoodi D., and Joorabchi E. 2012. “Optimization of particle bombardment conditions by GUS reporter gene in embryonic callus of sugarcane (Nco310)”. 12th Iranian Genetics Congress. 21-23 may. Tehran, Iran.

45- Kowsari m., **Motallebi** **M**., Zamani M.R., and Moghadasi Z. 2012. “Engineering of chitinase for improving of biocontrol activity of *Trichoderma harzianum*”. 12th Iranian Genetics Congress. 21-23 may. Tehran, Iran.

46- Alizadeh-Tilaki A., **Motallebi** **M**., Zamani M.R., Moghadassi-Jahromi, and Jorabchi E. 2013. “Cloning of osmotin gene in expression vector and optimization of it’s expression in prokaryotic system”. 8th National Biotechnology Congrress of I.R. Iran and 4th National Biosafety Congress of Iran. 6-8 July, Faculty of physical Education, Tehran University, Tehran, I.R. of Iran.

47- Zandvakili N. Zamani M.R., **Motallebi** **M**., Moghadassi-Jahromi, and Jorabchi E. 2013. “Cloning and heterologous expression of PR10 cDNA prokaryotic system”. 8th National Biotechnology Congrress of I.R. Iran and 4th National Biosafety Congress of Iran. 6-8 July, Faculty of physical Education, Tehran University, Tehran, I.R. of Iran.

48- Ahanchian E., **Motallebi** **M**., Zamani M.R., Jorabchi E., and Moghadassi-Jahromi 2013. “Production of transgenic canola improve fungal resistance using *dabb*1 gene.” 8th National Biotechnology Congrress of I.R. Iran and 4th National Biosafety Congress of Iran. 6-8 July, Faculty of physical Education, Tehran University, Tehran, I.R. of Iran.

49- Zarinpanjeh N., Ziaei M., Zamani M.R., **Motallebi** **M**., Jourabchi E., and Moghadassi Jahromi Z. 2014. “Co-transformation of defensin and chimeric chitinase genes”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

50- Moradyar M., Zamani M.R., **Motallebi** **M**., Jourabchi E., and Moghadassi Jahromi Z. 2014. “Designing and constraction of plant expression vectors containing chimeric chitinase gene (ChBD + *chit*42) under the control of the synthetic pathogen inducible promoters”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

51- Aghazadeh R., Zamani M.R., **Motallebi** **M**., Moghadassi Jahromi Z., and Jourabchi E. 2014. “Design of recombinant plasmid pBTLP-CHIT42 (chimer) for resistance to *Sclerotinia* disease in canola”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

52- Ataei A., **Motallebi** **M**., Zamani M.R., Ziaei M., Moghadassi Jahromi Z., and Jourabchi E. 2014. “Cloning and expression of chimeric chitinase42 (chitinase 42+chitin binding domin) in *E. coli*”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

53- Alizadeh Tilaki, **Motallebi** **M**., Zamani M.R., Jourabchi E., and Moghadassi Jahromi Z. 2014. “Prokaryotic expression of tobacco recombinant osmotin gene and study of it’s antifungal activity against some plant pathogenic fungi”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

54- Ardestani N., **Motallebi** **M**., Zamani M.R., Moghadassi Jahromi Z., Jourabchi E., and Ziaei M. 2014. “Cloning and prokaryotic expression of *chitinase*42 containing *Rhizopus* ChBD in C-terminal”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

 55- Zandvakili N., Zamani M.R., **Motallebi** **M**., Moghadassi Jahromi Z., and Jourabchi E. 2014. “Prokaryotic expression of *Zea mays* recombinant PR10 protein and study of it’s antifungal activity against some plant pathogenic fungi”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

56- Shiebiki S., **Motallebi** **M**., Zamani M.R., Moghadassi Jahromi Z., and Jourabchi E., 2014. “Cloning and prokaryotic expression of *Trigonella foenum-graecum* defencine (Tfgd2)”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

57- Ziaei M., Zarinpanjeh N., **Motallebi** **M**., Zamani M.R., Moghadassi Jahromi Z., and Jourabchi E. 2014. “Construction of plant expression vector harboring *chit*42 and *pgip*2 genes”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

58- Hamzeh S. **Motallebi** **M**., Zamani M.R., Moghadassi Jahromi Z., and Jourabchi E. 2014. “Consruction of plant binary vector for marker-free transgenic plant production”. 1st International & 13th Iranian Genetics Congress, 24-26 May, Tehran, Iran.

59- Zarinpanjeh N., Ziaei M, Zamani M.R., **Motallebi** **M**., Jourabchi E. and Moghaddassi Jahromi Z. 2014. “Defensin Transformation to Canola for resistance against fungal pathogens”. 1th International, 13th Iranian Crop Science congress and 3th Iranian Seed Science and technology Conference, Karaj, Tehran, I.R. of Iran.

60- Hamzeh S., **Motallebi** **M**., Zamani M.R., Moghaddasi Jahromi Z. and Jourabchi E. 2014. “Generation of marker-free transgenic plant using conditional expression of recombinase in transgenic seeds”. 1th International, 13th Iranian Crop Science congress and 3th Iranian Seed Science and technology Conference, Karaj, Tehran, I.R. of Iran.

61- Ziaei M., Zarrinpanjeh N., **Motallebi** **M**., Zamani M.R., Moghaddassi Jahromi Z. and Jourabchi E. 2014. “Transgenic canola plants harboring *chimeric chitinase* 42 gene inhibit mycelia growth of *Alternaria solani”.* 1th International, 13th Iranian Crop Science congress and 3th Iranian Seed Science and technology Conference, Karaj, Tehran, I.R. of Iran.

62- Shiebeigi Sh, **Motallebi** **M**, Zamani M.R, Moghaddassi jahromi Z. Jourabchi E., 2015, “Expression and study of antifungal activity of expressed protein in prokaryotic system”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I.R. of IRAN

63- Moradyar M., Zamani M.R., **Motallebi** **M**., Aghazadeh R., Jourabchi E,.Moghaddassi Jahromi Z, 2015, “The effect of F cis acting element on induced expression of chimeric chitinase gene in transgenic canola”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I.R. of IRAN

64- Mirhoseini Motlagh S. N., **Motallebi** **M**, Zamani M.R, Moghaddassi Jahromi Z., Jourabchi E., 2015, “Cloning of chimeric *Chit*42 gene in an expression eukaryotic vector under the control of inducible synthetic promoter”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

65- Ghiasi Sis J., Mirhoseini Motlagh S. N., **Motallebi** **M**, Zamani M.R, Moghaddassi Jahromi Z., Jourabchi E., 2015, “Cloning of Chitinase 42 gene to an eukaryotic expression vector with a synthetic promoter”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

66- Ghiasi Sis J, **Motallebi** **M**, Zamani M.R, Moghaddassi Jahromi Z., Jourabchi E., 2015, “Cloning of chimeric Chitinase 42 gene to analysis the effect of ChBD in C-terminal end, in eukaryotic expression system”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

67- Ataei A., **Motallebi** **M**, Zamani M.R, ziaei M., moghaddassi Jahromi Z., Jourabchi E., 2015, “Antifungal study of heterologous expressed Chimeric chitinase42 against pathogenic Fungi”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

68- Ardestani N., **Motallebi** **M**, Zamani M.R, Ziaei M., Moghaddassi Jahromi Z., Jourabchi E., 2015, “Antifungal study of heterologous expressed Chimeric chitinase42 against pathogenic Fungi”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

69- Aghazadeh R, Zamani M.R, **Motallebi** **M**, Moradyar M, Moghaddassi Jahromi Z., Jorabchi E., 2015, “Co-transformation of *Brassica napus l*. by *chitinase* 42 and tlp genes towards improving resistance to *Sclerotinia sclerotiorum*”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

70- Matroodi S., Zamani M.R, **Motallebi** **M**, Mousavi A., Davoodi D., 2015, “Assessment of antifungal activity of transgenic sugarcane expressing a chimeric chitinase gene”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

71- Javaheri safa Z, Aminzadeh S, Zamani M.R, **Motallebi** **M**, 2015, “Isolation, screening and identification of cyanide degrading bacteria”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

72- Ataei A, Zamani MR, **Motallebi M**, Ziaei M, Moghaddassi Jahromi Z, Jourabchi Z, 2016, “Antifungal study of heterologous expressed chitinase42 against *Candida albicans* caused agent of human infection”. 2st International & 14th Iranian Genetics Congress, 21-23 May, Tehran, Iran.

73- Nasr Partovi M, **Motallebi M**, Zamani MR, Moghaddassi Jahromi Z, Jourabchi Z, 2016, “Fused of cloning and Construction *LTP* and *Osmotin* genes ”. 2st International & 14th Iranian Genetics Congress, 21-23 May, Tehran, Iran.

 74- Malmir N.‚ Zamani M.R., ‚ Aminzadeh S., **Motallebi M**.‚ Moghaddasi Jahromi Z.‚ Jourabchi E. 2017. “Identification fungi for cyanide degradation”. 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran. 29-31 Aug., Seed and Plant Improvement Institute. Karaj. I.R. of Iran.

75- NeamatiH., **Motallebi M**., Zamani M.R., Moghaddasi Jahromi Z., Jourabchi E. 2017. “Cloning and prokaryotic expression of lectin protein c-25”. 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran. 29-31 Aug., Seed and Plant Improvement Institute. Karaj. I.R. of Iran.

76- Partovi Nasr M., **Motallebi M**., Zamani M.R., Moghaddasi Jahromi Z., Jourabchi E.. 2017. “Prokaryotic expression of fused *Osmotin* and *LTP* genes”. 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran. 29-31 Aug., Seed and Plant Improvement Institute. Karaj. I.R. of Iran.

77-Soleimani F., Zamani M.R., **Motallebi M**., Jourabchi E., Moghaddassi Jahromi Z. 2017. “Use of his-tag sequence in order to ease of chimeric chitinase 42 enzyme purification expressed in plant system”. 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran. 29-31 Aug., Seed and Plant Improvement Institute. Karaj. I.R. of Iran.

78- Sharafi R. **Motallebi M**., Zamani M.R., Moghaddassi Jahromi Z, Jourabchi Z. 2017. “Cloning od chimeric chitinase 42 gene containing chBD in N-termianl in a plant expression system using His tag for purification”. 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran. 29-31 Aug., Seed and Plant Improvement Institute. Karaj. I.R. of Iran.

79- Mohamadpoor M., **Motallebi M**., Amini J., Farhadpour M., and Jourabchi E. 2022. “Evaluation of growth inhibitory effect of volatile metabolites of 3 selected bacterial isolates on Fusarium solani and identification of their structure by GC-MS”. 22nd National and 10th International Congress on Biology 31 Aug- 2 sep, Shahrekord University. I. R. of Iran.

80- Mohamadpoor M., **Motallebi M**., Amini J. and Jourabchi E. 2022. “Study of the effect of volatile organic compounds of selected entophytic bacteria on *Arabidopsis thaliana* and *Phaseolus vulgaris* growth promotion”. 22nd National and 10th International Congress on Biology 31 Aug- 2 sep, Shahrekord University. I. R. of Iran.

81- Mohamadpoor M., **Motallebi M**., Amini J. and moghaddassi Jahromi Z.2022 “Gene expression profile of *PRI* gene affected by volatiles of *Microbacterium fdiorum* BORCH”. 22nd National and 10th International Congress on Biology 31 Aug- 2 sep, Shahrekord University. I. R. of Iran.

**Abstracts in National & International Conferences:**

1- Ayoubi H.R., M.R. Zamani , and **M. Motallebi**. 1996. “*Yersinia enterocolitica*  incidence in relation to season, age, and sex”. The 5th  Iranian Biology Conference, 28-30 August, Tabriz University, Tabriz, Iran.

2- **Motallebi M**., M.R. Zamani, H.R. Ayoubi, and A. Andalib. 1997. “Classification of *Yersinia enterocolitica* by biochemistry reactions, bioassay tests, and protein patterns”. The 6th Iranian Biology Conference, 25-27 August, Shaheed Bahonar University of Kerman, Kerman, Iran.

3- **Motallebi M**., M.R. Zamani, H.R. Ayoubi, and A. Andalib. 1997. “Relationship of peritonal infectivity in mice to molecular characteristics of *Yersina enterocolitica* isolates of Iran”. First Iranain Congress of Zoology. 17-18 Sept. , University of Teacher Education, Tehran, Iran.

4- **Motallebi M**., M.R. Zamani, and B. Saffar. 1998. “Molecular study of pathogenic *Yersinia enterocolitica* isolates of human and chicken”. The 7th  Iranian Biology Conference. 22-24 August, University of Isfahan, Isfahan, Iran.

5- Zamani M.R., **M. Motallebi**, H. Younessi, and M.A. Arefpour. 1998. “Study of pathogenicity and cell wall degrading enzymes production in *Fusarium oxysporum*”. The 13th  Iranain Plant Protection Congress. 23-27 August, Karaj, Iran.

6- Hossein-zadeh A., Zamani M.R., and **Motallebi M**. 1999. “RAPD- PCR analysis of pathogenic isolates of *Ascochyta rabiei* from Iran”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

7- Hossein-zadeh A., Zamani M.R., and **Motallebi M**. 1999. “Study of pathogenisity and polygalacturonase activity of *Ascochyta rabiei* isolates of Iran”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

8- Arefpour M.A., Harighi M.J., Zamani M.R., **Motallebi M**., and Younessi H. 1999. “Polygalacturonase activity and overlaying of Iranian isolates of *Fusarium oxysporum*” . The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

9- Harighi M.J., Zamani M.R., and **Motallebi M**. 1999. “Zymogarm grouping of *Fusarium oxysporum* isolates from Iran”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

10- Younessi H., Okhovat M., Hedjaroude Gh., Zamani M.R., and **Motallebi M**. 1999. “Variability in virulence of *Ascochyta rabiei* on chickpeas in Kermanshah province”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

11- Saffar B., **Motallebi M**., and Zamani M.R. 1999. “Differentiation between virulence and avirulence *Yersinia enterocolitica*  isolates of chicken on the bases of plasmid curing”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

12- Rezaei A., **Motallebi M**., and Zamani M.R. 1999. “Comparison of restriction patterns of virulence plasmid of *Yersinia enterocolitica* isolates from human and chicken”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

13- Mazaheri M., Amiri F., **Motallebi M**., and zamani M.R. 1999. “Stimation of neonata mortality and its relation to birth weight”. The 8th Iranian Biology Conference, 31 Aug.- 2nd Sept., Razi University, Kermanshah, I.R. Iran.

14- Rezaei A., **M. Motallebi**, and M.R. Zamani. 2000. “Detection of pectolytic enzymes from *Yersinia enterocolitica*  isolates of human and chicken”. The 9th Iranian Biology conference, 15-17 Aug.

15- Rostamian A., M.R. Zamani, and **M. Motallebi**. 2000. “Study of polymorphism DNA in *Fusarium oxysporum* isolates”. The 9th Iranian Biology conference, 15-17 Aug.

16- Hisseinzadeh A., H. Younessi, M. Okhovat, **M. Motallebi** and M.R. Zamani. 2000. “Evaluation of aggressivenes of *Ascochyta rabiei* isolated from chickpea under laboratory and greenhouse condotions”. 14th Iranian Plant Protection Congress. 5-8 Sept. Isfahan University of Technology, Isfahan, I.R.Iran.

17- Imamjome A., E. Farshadfar, M.R. Zamani and **M. Motallebi**. 2000. “ Genetic distanse determination in Iranian chickpea using RAPD marker”. 6th Iranian Congress of Crop Protection and Plant Breeding. 3-6 Sept. University of Mazandaran, Babolsar, I.R.Iran.

18- Rezaie A., **M. Motallebi**, and M.R. Zamani. 2001. “The role of chromosome in polygalacturonase production in *Yersinia enterocolitica* isolates of human and chicken”. The 1st Iranian Congress on Applied Biology. 6-7 Feb., Biology Dept., Azad Univ., Mashhad, IR. Iran.

19- Rostamian A., M.R. Zamani, and **M. Motallebi**. 2001. “Classification of *Fusarium oxysporum*  isolates on the basis of vegetative compatibility”. The 1st Iranian Congress on Applied Biology. 6-7 Feb., Biology Dept., Azad Univ., Mashhad, IR. Iran.

20- Hosseinzadeh- Colagar A., M.R. Zamani, and **M. Motallebi**. 2001. “Classification of *Ascochyta rabiei*  isolates of west- provinces of Iran by polygalacturonase activity and RAPD”. The 1st Iranian Congress on Applied Biology. 6-7 Feb., Biology Dept., Azad Univ., Mashhad, IR. Iran.

21- Barzegar A., **M. Motallebi** and M.R. Zamani. 2001. “Comparison of pathogenisity and protein pattern of *Xanthomonas* sp. isolates, causal agent of canker in sugarbeet”. The 1st Iranian Congress on Applied Biology. 6-7 Feb., Biology Dept., Azad Univ., Mashhad, IR. Iran.

22- Fallahi H., M.R. Zamani, and **M. Motallebi**. 2002. “Purification and characterization of polygalacturanase enzyme from *Ascochyta rabiei* isolates”. 15th Iranian Plant Protection Congress. 7-11 Sept., Razi University, Kermanshah, IR. Iran.

23- Hosseinzadeh A., M.R. Zamani, **M. Motallebi**, and H. Fallahi. 2002. “Study of DNA polymorphism among highly (HV) and weakly virulent (WV) isolates of *Ascochyta rabiei* using RAPD”. 15th Iranian Plant Protection Congress. 7-11 Sept., Razi University, Kermanshah, IR. Iran.

24- Jazayeri O., **M. Motallebi**, M.R. Zamani, and M.J Harighi. 2002. “Use of RAPD,enzyme activity staining, and colony zise to differentiate phytopathogenic *Fusarium oxysporum”.* 15th Iranian Plant Protection Congress. 7-11 Sept., Razi University, Kermanshah, IR. Iran.

25- Alani B., **M. Motallebi**, M.R. Zamani, and O. Jazayeri. 2002. “Purification and characterization of pectic enzymes from *Fusarium oxysporum”.* 15th Iranian Plant Protection Congress. 7-11 Sept., Razi University, Kermanshah, IR. Iran.

26- Barzegar A., M.R. Zamani, **M. Motallebi**, and H. Rahimian. 2002. “Characterization of isolates of *Xanthomonas* sp. in Sugarbeet by SDS-PAGE and RAPD”. 15th Iranian Plant Protection Congress. 7-11 Sept., Razi University, Kermanshah, IR. Iran.

27- Rostamian A., **M. Motallebi**, and M.R. Zamani. 2002. “Study of Iranian isolates of *Fusarium oxysporum* by vegetative compatibility”. 15th Iranian Plant Protection Congress. 7-11 Sept., Razi University, Kermanshah, IR. Iran.

28- Habibollahy H., **M. Motallebi**, M.R. Zamani, and A. Hossainzadeh. 2003. “Study of interaction of Bean PGIP and *Fusarium oxysporum* polygalacturonase”. First National Congress of Molecular Cell Biology. 25-26 Feb., Chamran University of Ahvas, IR. Iran.

29- Bahramsari N., M.R. Zamani, **M. Motallebi**, **M. Motallebi.**, Seyed Asli N., and M.J. Harighi. 2003 “Study of Glucanase activity in different *Trichoderma* isolates***”.*** First National Congress of Molecular Cell Biology. 25-26 Feb., Chamran University of Ahvas, IR. Iran.

30- Badeezadegan S., M.R.Zamani, **M. Motallebi**, Hossainzadeh A., and Habibollahi H. 2003. “Partial characterization of (PGIP), the inhibitor protein of PG from *Ascochyta rabiei”.* First National Congress of Molecular Cell Biology. 25-26 Feb., Chamran University of Ahvas, IR. Iran.

31- Seyed Asli N., **M. Motallebi**, M.R. Zamani, Bahramsari N., and M.J. Harighi. 2003. “Identification of chitinase producing isolate of *Trichoderma* sp”. First National Congress of Molecular Cell Biology. 25-26 Feb., Chamran University of Ahvas, IR. Iran.

32- Ghoujeghi F., **M. Motallebi**, M.R. Zamani, and S. Zahri. 2003. “Preliminary molecular study of β-glucosidase”. 8th Iranian Genetic Congress. 20-22 May, Tehran, IR. Iran.

33- Seyed Asli N., M.R. Zamani, **M. Motallebi**, N. Bahramsari, and M.J. Harighi. 2003. “Molecular characterization of chitinase enzymes in *Trichoderma harzianum*.” 8th Iranian Genetic Congress. 20-22 May, Tehran, IR. Iran.

34- Badri, M., M.R. Zamani, **M. Mottalebi**, and M.J. Harighi. 2003. “ Antagonistic effect of Trichoderma on two phytopathogenic fungi and detection of Chitinase gene in *Trichoderma sp*.”. The 11th Iranian Biology conference, 23-25 Aug. Urmia University, Urmia, I.R. Iran.

35-Yari R., **Motallebi M**., M.R. Zamani, and S. Zahri. 2003. “Assessment of optimized producing conditions of Endo β-1,4-glucanase enzyme and detection of its gene in *Cellulomonas sp.”.* The 11th Iranian Biology conference, 23-25 Aug. Urmia University, Urmia, I.R. Iran.

36-Onsori H., **Motallebi M**., M.R. Zamani, and S. Zahri. 2003. “Detection of β-1,4-Glucosidase gene and its product in *Aspergillus sp.”*. The 11th Iranian Biology conference, 23-25 Aug. Urmia University, Urmia, I.R. Iran.

37-Salehzadeh A., M.R. Zamani, **M. Mottalebi**, and A. Hosseinzadeh. 2003. “pgip gene amplification and PGIP-PG interaction in tomato (*lycopersicon esculentum*)”. The 11th Iranian Biology Conference, 23-25 Aug. Urmia University, Urmia, I.R. Iran.

38-Samadi, L., B.S. Behboodi, and **M. Motallebi**. 2003. “Detection of apoptotic features in fusaric acid-treated root meristem cells of Crocus sativus L.”.The 1st Iranian Conference for Cell and Developmental Biology, 13-14 Sep. Tehran, I.R.Iran.

39- Samadi, B. Behboodi, and **M. Motallebi**. 2003. “Detection of apoptotic bodies and DNA ladder in root meristem cells of Crocus sativus L. after fusaric acid cell death induction” ELSO Conference, 20-24 Sep. Dresden, Germany.

40- Zamani, M.R., **Motallebi M.** , N. Seyed-Asli, N. Bahramsari, and M. Badri. 2004. “Enzyme activity and PCR detection of chitinase and glucanase genes of *Trichoderma* isolates and their antagonistic effect on two phytopathogenic fungi”. 2nd international Symposium on Biotechnology. 19-21 Jan., University of Sindh, Jamshoro, Pakistan.

41-**Motallebi M**., M.R. Zamani, H. Habibollahy, A. Hossainzadeh. 2004.  “Cloning and characterization of *Phaseolus vulgaris* polygalacturonase-inhibiting protein (PGIP) gene and study of PGIP with fungal polygalacturonase”. 2nd International Symposium on Biotechnology. 19-21 Jan., University of Sindh, Jamshoro, Pakistan.

42- Badri M., M.R. Zamani , **M. Motallebi** and M.R. Harighi. 2004. “Comparison of the effect of *Trichoderma harzianum* 8 and growth regulators on *Fusarium oxysporum* polygalacturonase activity.” The 12th Iranian Biology Conference, 31 Aug.- 2 Sep. Bu Ali Sina University, Hamadan, I.R. Iran.

43- Badri M., M.R. Zamani , **M. Motallebi** , M.J. Harighi and N. Asli .  2004. “Mycoparasitism of *Rhizoctonia solani* by *Trichoderma harzianum* 8.” The 12th Iranian Biology Conference, 31 Aug.- 2 Sep. Bu Ali Sina University, Hamadan, I.R. Iran.

44- Daylami Z., **M. Motallebi**, M.R. Zamani, and A. Hossainzadeh.  2004. “Inhibition effect of bean (*Phaseolus vulgaris* cv*.Naz)* PGIP on PG activity of different fungal isolates.” The 12th Iranian Biology Conference, 31 Aug.- 2 Sep. Bu Ali Sina University, Hamadan, I.R. Iran.

45- Onsori H, **M. Motallebi**, M.R. Zamani, and S. Zahri. 2004. “Study of Cellobiohydrolase activity in Aspergillus isolates.” The 12th Iranian Biology Conference, 31 Aug.- 2 Sep. Bu Ali Sina University, Hamadan, I.R. Iran.

46- Badizadegan. S. **Motallebi. M**., Zamani M.R., Hosseinzadeh Colagar. A. and Habibollahi. H. 2004. “Interaction of *Ascochyta rabiei* PG with bean PGIP and analysis of *P. vulgaris* cv. Khomain pgip gene sequence.” 16th Iranian Plant Protection Congress. 28 Aug.- 1 Sept., Tabriz University, Tabriz, IR. Iran.

47- Habibollahi. H, Zamani M.R., **Motallebi. M**. and Hosseinzadeh Colagar A.. 2004. “Inhibiting effect of bean PGIP on *F. oxysparum* PG activity and study of *P. vulgaris* cv. Talash pgip gene sequence.” 16th Iranian Plant Protection Congress. 28 Aug.- 1 Sept., Tabriz University, Tabriz, IR. Iran.

48- Harighi M.J., **Motallebi. M**., Zamani M.R.. 2004. Purification of chitinase from *Trichoderma harizianum 8.*” 16th Iranian Plant Protection Congress. 28 Aug.- 1 Sept., Tabriz University, Tabriz, IR. Iran.

49- Hosseinzadeh A., **Motallebi M**., and Zamani M.R.. 2004. “Preliminary analysis indicates a single amino acid change in LRR 6 of *Phaseolus vulgaris* PGIP affect the PGIP-PG interaction.” 16th Iranian Plant Protection Congress. 28 Aug.- 1 Sept., Tabriz University, Tabriz, IR. Iran.

50- Falahi F., **Motallebi M**., and Zamani M.R. 2005. "Inhibition of polygalacturonase activity of *Scelerotinia sclerotiorum* by PGIP of two bean cultivars (jules and Daneshjo)." 13th Iranian Biology Conference and the First International Conference of Biology. 23-25 Aug. Guilan University, Rasht. I.R. Iran.

51- Matrodi S., Zamani M.R. and **Motallebi M**. 2005. "Antagonist effect of *Trichoderma* sp. on *Sclerotinia sclerotiorum* and isolation of *chit33* gene from *T. tansarum*." 13th Iranian Biology Conference and the First International Conference of Biology. 23-25 Aug. Guilan University, Rasht. I.R. Iran.

52- Babaei A., Zamani M.R. and **Motallebi M**. 2005 "Glucose enrichment of natural substrates by cellulose enzymes from *Trichoderma reesei."* 13th Iranian Biology Conference and the First International Conference of Biology. 23-25 Aug. Guilan University, Rasht. I.R. Iran.

53- Rajabkhani Z., Zamani M.R., and **Motallebi M**.2005. "Cellulase production in mixed cultivation of *Trichoderma reesei* and *Aspergillus niger* and isolation of *eglB* gene from *A. niger."* 13th Iranian Biology Conference and the First International Conference of Biology. 23-25 Aug. Guilan University, Rasht. I.R. Iran.

54- Karimzadeh F., **Motallebi M**., and Zamani M.R. 2005. "Inhibition effect of bean PGIP on PG activity of *Rhizoctonia solani* (AG-2) causing root rot in sugar beet." 13th Iranian Biology Conference and the First International Conference of Biology. 23-25 Aug. Guilan University, Rasht. I.R. Iran.

55- Zahri S., **Motallebi M**., and Zamani M.R. 2005. "Expression of cellobiohydrolyase II from *Trichoderma paceramosum* in *Pichia pastoris."* 13th Iranian Biology Conference and the First International Conference of Biology. 23-25 Aug. Guilan University, Rasht. I.R. Iran.

56- Zahri S., **Motallebi M**., Zamani M.R. and sadeghi M. 2005. " Molecular study of eglI gene from *Trichoderma reesei*" . 8th Iranian Congress of Biochemistry and first International congress of Biochemistry & Molecular Biology. 11-15 Sept., Tarbiat Modarres University, Tehran, I.R. of Iran.

57- Hosseinzadeh, A., Mostafaie, A., Zamani, M.R. and **Motallebi, M**. 2005. "Purification of *Phaseolus vulgaris* PGIP using ion exchange and affinity chromatography and study of their inhibition effects on Fungal polygalacturonase activity". 8th Iranian Congress of Biochemistry and first International congress of Biochemistry & Molecular Biology. 11-15 Sept., Tarbiat Modarres University, Tehran, I.R. of Iran.

58- Harighi M.J., Zamani M.R. and **Motallebi** M. 2005. "Cloning of chitinase42 gene from *Trichoderma atroviride* and its expression in *E. coli:.* 3th international symposium on biotechnology. 15-18 December. University of Sindh, Jamshoro, Pakistan.

59- Hossaenzadeh Colagar A., **Motallebi** M., and Zamani M.R. 2005. "Differentiation of cloned *pgip1* and *pgip2* genes from bean cultivars using mismatch primers". 3th international symposium on biotechnology. 15-18 December. University of Sindh, Jamshoro, Pakistan.

60- Harighi M.J, Zamani M.R. and **Motallebi** M.. 2006. " Study of chit42 gene and chitinase 42 enzyme purification from *Trichoderma atriviride".* 9th Iranian Genetic Congress. 20-22 May. Milad Hospital Halls Center, Tehran, Iran.

61- Yazdanpanah M., **Motallebi** M. and Zamani M.R.. 2006. "Amplification, cloning and sequencing of Chit36 from a high producer chitinase fungal isolate". 9th Iranian Genetic Congress. 20-22 May. Milad Hospital Halls Center, Tehran, Iran.

62- Vatandoost J., ZamaniM.R., **Motallebi** M. and Sharifi M.2006. “Mitochondrial DNA sequences confirm morphological differences found in populations of the Lesser Mouse-eared bat Myotis blythii occurring in northern Mesopotamian plain and mid-Zagros mountains in western Iran”. 14th Iranian Biology Conference and the Second International Conference of Biology. 29-31 Aug. Tarbiat Modares University, Tehran, I.R. of Iran.

63- Hamzeh Sh., **Motallebi** M., and Zamani M.R. 2006. “Cloning and sequencing of *pgip1* and  *pgip2* from Emerson74 bean cultivar”. 14th Iranian Biology Conference and the Second International Conference of Biology. 29-31 Aug. Tarbiat Modares University, Tehran, I.R. of Iran.

64- Matrodi S., Zamani M.R. and **Motallebi** M. 2006. “cDNA synthesis and study of chit33 gene structure from *Trichoderma atroviride”.* 14th Iranian Biology Conference and the Second International Conference of Biology. 29-31 Aug. Tarbiat Modares University, Tehran, I.R. of Iran.

65- Mohammadzadeh R., **Motallebi** M., and Zamani M.R. 2006. “Expression of β-1,3 glucanase gene from *Trichoderma virens* in BY-2 cell suspension”. 14th Iranian Biology Conference and the Second International Conference of Biology. 29-31 Aug. Tarbiat Modares University, Tehran, I.R. of Iran.

66- Raoufzadeh S., Zamani M.R. and **Motallebi** M. 2006. “Amplification, cloning and sequencing of Beta-1,3-glucanase gene (*bgn*13.1) from *Trichoderma virens”.* 14th Iranian Biology Conference and the Second International Conference of Biology. 29-31 Aug. Tarbiat Modares University, Tehran, I.R. of Iran.

67- Raoufzadeh S., **Motallebi** M. and Zamani M.R. 2006. “Amplification ,cloning and sequencing of cDNA and genomic DNA of β-glucosidase gene (*bgl*2) from *Trichoderma* sp(T7)isolate”. 14th Iranian Biology Conference and the Second International Conference of Biology. 29-31 Aug. Tarbiat Modares University, Tehran, I.R. of Iran.

#### 68- Shokouhifar F., Motallebi M., Zamani M.R., Malboobi M.A., and Mousavi A. 2007. Design and construction of synthetic plant pathogen inducible promoters. **4th International Biotechnology Symposium (IBS) and 1st Pakistan-China–Iran International Conference on Biotechnology, Bioengineering and Biophysical Chemistry  (ICBBB’07).**November 4-8,. Institute of Biotechnology and Genetic Engineering, University of Sindh, Pakistan.

69- Shokohifar F., Zamani M.R, **Motallebi M**., Malbobi M.A., and Mosavi A. 2008. “Evaluation of various factors effects on transient expression of GUS using agro-injection approach for analysis of inducible plant promoters”. 10th Congress Iranian Genetic Society, 21-23 May. Razi Conferences Hall, Tehran, Iran.

70- Esfahani K., Zamani M.R, **Motallebi M**., Rezanejad H., and Hashemi H. 2008. “Designing of expression constructs containing one or two antifungal genes from fungal sources. 10th Congress Iranian Genetic Society, 21-23 May. Razi Conferences Hall, Tehran, Iran.

71- Matrodi S., Kowsari M., **Motallebi M**., Zamani M.R. and Minuchehr. 2008. “ Comparison of 3D structure prediction of chit33 and chit42 of *Trichoderma atroviride*”. 15th Naional & 3rd International Conference of Biology, 19-21 August. University of Tehran, Tehran, Iran.

72- Moghadasi Jahromi Z., Zamani M.R., Motallebi M. and Akhgari A. 2008. “ Study of PGIP expression in transgenic canola using specific antibody”. 15th Naional & 3rd International Conference of Biology, 19-21 August. University of Tehran, Tehran, Iran.

73- Akhgari A., **Motallebi** **M.**, Zamani M.R. and Hamze Sh. 2008. “Polygalacturonase inhibition of PGIP of transgenic *Brassica napus* on PG activity from its fungal pathogen, *Rhizoctonia solani*”. 15th Naional & 3rd International Conference of Biology, 19-21 August. University of Tehran, Tehran, Iran.

74- Kowsari M., **Motallebi** **M**. and Zamani M.R. 2010. “An efficient transformation system for strong biocontrol agent, *Trichoderma harzianum*”. 22-24 May, 11th Iranian Genetics Congress, Tehran, Iran.

75- Solgi T., **Motallebi** **M**. , Zamani M. R., KHosroshahli Mand Jourabchi E. 2010. “Transformation of canola by *Chit*33 (cDNA) and partial characterization of transgenic plants”. 19th Iranian Plant Protection Congress. 30 May- 2 June., Iranian Research Institute of Plant Protection (IRIPP), Tehran, IR. Iran.

76- Etebari M., Zamani M.R. , **Motallebi** **M**. And Moghaddassi-Jahromi Z. 2010. Structural analysis of *tf*gd2 gene from *Trigonella foenum-graecum”.* 19th Iranian Plant Protection Congress. 30 May- 2 June., Iranian Research Institute of Plant Protection (IRIPP), Tehran, IR. Iran.

77- Ghaffaryan N., Zamani M.R., **Motallebi** M. and Moghaddassi-Jahromi Z. 2010. Structural analysis of Thaumatin like protein *(tlp)* gene from *oryza sativa*“”.19th Iranian Plant Protection Congress. 30 May- 2 June., Iranian Research Institute of Plant Protection (IRIPP), Tehran, IR. Iran.

78- Mohammadzadeh R, Zamani M.R., **Motallebi** **M**, Norouzi P. and Jourabchi E. 2010. “Transformation of Sugar beet by *pgip*1 gene towards improving resistance to fungal pathogens”. 19th Iranian Plant Protection Congress. 30 May- 2 June., Iranian Research Institute of Plant Protection (IRIPP), Tehran, IR. Iran.

79- Roohi L., **Motallebi** **M**., Zamani M.R., Khosroshahli M. 2010. “Isolation and cloning of *bgn1* gene from *Trichderma virens”* 14-16 Sep. The 16th National and 4th International Conference of Biology, Ferdowsi University of Mashhad, IR. of Iran.

80- Ghaffarian N., Zamani M.R., **Motallebi** **M**. and Moghaddasi Z. 2010. “Cloning and heterologous expression of Thaumatin like protein (*tlp*) gene from *Secale* *cereal*, and study of its fungal growth inhibition”. 14-16 Sep. The 16th National and 4th International Conference of Biology, Ferdowsi University of Mashhad, IR. of Iran.

81- Zamani A., **Motallebi** **M**., Zamani M. R. and Jonubi P., Ayerian S., Moghadasi Jahromi Z. 2010. "Transformation of canola by *tlp* towards improving resistance to fungal pathogen”. 14-16 Sep. The 16th National and 4th International Conference of Biology, Ferdowsi University of Mashhad, IR. of Iran.

82- Mohammadzadeh R., Zamani M.R., **Motallebi** **M**., Norouzi P. and Jourabchi S. 2010. “Production of transgenetic sugar beet to improve fungal resistance using *pgip*2 gene”. 14-16 Sep. The 16th National and 4th International Conference of Biology, Ferdowsi University of Mashhad, IR. of Iran.

83- Shokouhifar F., Zamani MR., **Motallebi** **M**., Mousavi A.., Malboobi MA. and Moghadasi-Jahromi Z. 2010. “Study of the *cis*-acting elements in pathogen inducible promoters in response to phytopathogenes”. 14-16 Sep. The 16th National and 4th International Conference of Biology, Ferdowsi University of Mashhad, IR. of Iran.

84- Esfahani K., Zamani M.R., and **Motallebi** **M**. 2011. “ ”. 13-15 June. Islamic Azad University, Science & Research Branch, Tehran, IR. of Iran.

85- Matroodi S., Moradyar M., Zamani M.R., **Motallebi** **M**., Moghaddassi Jahromi Z. 2012.“Optimization of expression of chitinase 42 and hybrid chitinase using Tagochi methods”. 4-6 Sep. The 17th National and 5th International Conference of Biology, Bahonar Univ., Kerman, IR. of Iran.

86- Matroodi S., **Motallebi** **M**., Zamani M.R. and Jourabchi E. 2012. “Purification of chitinase 42 and chimer chitinase and study of their antifungal activity”. 4-6 Sep. The 17th National and 5th International Conference of Biology, Bahonar Univ., Kerman, IR. of Iran.

88- MatroodiS., ZamaniM.R., **Motallebi****M**., Mousavi A., Davoodi D., Moghaddassi-JahromiZ., and Jourabchi E.. 2012. “Broad-spectrum disease resistance to fungal pathogens in transgenic sugarcane expressing an engineered chitinasegene”. 23-26 Sep., Stanbul, Turky.

89- MatroodiS., Zamani M.R., Haghbeen K., **Motallebi** **M**., and Moradyar M.. “A Novel Engineered Chitinase Carrying Chitin-binding Domain Shows Improved Physiochemical Properties”. 2-6 Sep., Hamburg, Germany.

90- Ahannchian E., **Motallebi** **M**., Zamani M.R., Jourabchi E., and Mogaddassi-Jahromi. 2013. “Isolation, cloning and sequencing of dabb1 gene from *Arabidobsis thaliana*”. 6-8th May, Allameh-Amini hall, University of Tehran. I.R. of Iran.

91- Zand-Vakilli N., Zamani M.R., **Motallebi** **M**., Mogaddassi-Jahromi Z., and Jourabchi E. 2013. “cDNA sysnthsis and cloning of PR10 gene from *Zea mays*”. 6-8th May, Allameh-Amini hall, University of Tehran. I.R. of Iran.

92- Alizadeh-Tilaki A., **Motallebi** **M**., Zamani M.R., Jourabchi E., and Mogaddassi-Jahromi. 2013. “Isolation and cloning of osmotin gene from tobacco (Nicotiana tabacum)”.6-8th May, Allameh-Amini hall, University of Tehran. I.R. of Iran.

93- Kowsari M., Zamani M. R., and **Motallebi** **M**., 2013. “Introduce a genetically marked Trichoderma fusant that can be used as a biocontrol and biomonitor”. The 11th international symposium on biocontrol and biotechnology, Alexandria – Egypt.

94- Kowsari M., Zamani M. R., and **Motallebi** **M**., 2013. “Developing a new Chitinase Chit42 by hybrid conversion process and genetic engineering”. V International Conference on Environmental, Industrial and Applied Microbiology - BioMicroWorld2013, Madrid (Spain),

95- Kowsari M., Zamani M.R. and **Motallebi** **M**. 2013. “Introduce a genetically marked *Trichoderma* fusant that can be used as a biocontrol and biomonitor”. 1-4 Oct. The 11th international symposium on biochontrol and biotechnology, Alexndria , Egypt.

96- Akbarzadeh A., Ranaei-Siadat O., **Motallebi** **M**., Zamani M.R. 2012. “Increasing of thermal stability of recombinant endoglucanase II by C393H mutation in *Pichia pastoris*”. 4-6 June, Eighth International Conference on renewable Resources and Biorefineries, Toulouse, France.

97- Akbarzadeh A., Ranaei Siadat O., **Motallebi** **M**., Zamani M.R., Pourzardosht N., Barshan Tashnizi M., Moshtaghi S., Niknam K.. 2011. “Increasing of thermal stability in recombinant endoglucanase II expressed in Pichia pastoris”. 10-14 Oct, 19th International Symposium on Alcohol Fuels, Verona, Italy.

98- Kowsari M., **Motallebi M**. and Zamani M. R., 2015, “Expression and characterization of NOVEL Chitinase in *Trichoderma harzianum*”. May 24-26, Shahid Beheshti University, First International and 9th National Biotechnology Congress of I. R. of IRAN

99- Mahmoodian S, Zamani M.R, **Motallebi M**, Kowsari M, Moghaddassi-Jahromi Z, Jourabchi E, 2015, “Verifying the presence and stability of chimeric chitinase gene in *Trichoderma harzianum*". 2nd Iranian Mycological Congress, 23-25 August, University of Tehran, Karaj, Iran.

 100- Kowsari M., Zamani M.R. and **Motallebi M**. 2015, “Towards improved biocontrol activity in Trichoderma by protein engineering”. 2nd Iranian Mycological Congress, 23-25 August, University of Tehran, Karaj, Iran.

101- Amirzadeh Sh, aminzadeh S, Zamani M.R, **Motallebi M**. 2016, “Theoretical prediction properties ofPeptidase T Coh03367.n from Thermophile bacteria *Cohnella sp* *A.01*”. 1th Conference of Chemical Biotechnology, 7-9 March, National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

102-Taghavi Z, Aminzadeh S, Minochehr Z, Zamani M.R, **Motallebi M**. 2016, “The bioinformatic study of thermostable protease”. 1th Conference of Chemical Biotechnology, 7-9 March, National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

103- Hajhadia M, Aminzadehb S, Zamani M.R, **Motallebi M**. 2016, “Theoretical prediction properties of carboxypeptidase G2 Coh01302.n from Thermophile bacteria *Cohnella sp A.01*”. 1th Conference of Chemical Biotechnology, 7-9 March, National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

104- Eskandaria M, Aminzadeh S, Zamani M.R, **Motallebi M**. 2016, “Theoretical prediction properties of Zinc metalloprotease Coh02397.n from Thermophile bacteria *Cohnella sp A.01*”. 1th Conference of Chemical Biotechnology, 7-9 March, National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

 105- Miladia F, Aminzadeh S, Zamani M.R, **Motallebi M**. 2016, “Theoretical prediction properties of Putative carboxypeptidase yodJ Coh02594.n from Thermophile bacteria *Cohnella sp A.01*”. 1th  Conference of Chemical Biotechnology, 7-9 March, National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

106- Evazzadeh N, Aminzadeh S, Minochehr Z, Zamani M.R, **Motallebi M**. 2016 “Bioinformatic analysis of *Cohnella* A01 glutamin amidotransferase”. 1th Conference of Chemical Biotechnology, 7-9 March, National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

117- Kowsari M., Mahmoodian S., **Motallebi M**., and Zamani M.R. 2017. “Molecular improved Trichoderma showed better biocontrol activity in lab and greenhouse”. 12th International Congress on Microbial Interaction and applications of Beneficial Microbes”. 17-18 July. Munich, Germany.

118- Eslahi N., **Mottalebi M**., Kowsari M., Zamani M.R., Mahmodian S. 2017. “Study of key Genes Expression of Resistance and Growth Pathways in Multiple Reactions of Trichoderma (molecular engineering), Plant (bean) and Pathogen (*Rhizoctonia*)”. *8th National Conference on Biological Control in Agriculture and Natural Resources*, October, Gilan, Rashtm, I.R. of Iran.

119--Soleimani F., Zamani M.R., **Motallebi M**., Jourabchi E., Moghaddassi Jahromi Z. 2018. “Use of his-tag sequence in order to ease of Expression chimeric chitinase 42 enzyme containing CHBD in its C-terminal in tobacco”. 3st International & 15th Iranian Genetics Congress, 21-23 May, Tehran, I.R. of Iran.

120- Sharafi R. **Motallebi M**., Zamani M.R., Moghaddassi Jahromi Z, Jourabchi E. 2018. “Molecular Analysis of transgenic tobacco (hairy root and leave) containing chimeric chitinase 42 with chBD in N-termianl”. 3st International & 15th Iranian Genetics Congress, 21-23 May, Tehran, I.R.of Iran.

121- Moosavizade A.S., **Mottalebi M**., Zamani M.R., Moghaddassi Jahromi Z, Jourabchi E. 2019. “Cloning and Expression of Nitrilase in *E. coli*”. 4st International Student Biotechnology Congress, 25-27 Feb, University of Tehran, I.R. of Iran.

122- Eslahi N., Kowsari M., **Mottalebi M**., Zamani M.R., Jourabchi E. 2019. “The *qid74* gene high Expression in Trichoderma *harzianum* Recombinant Isolated has a Role in Plant Growth Promotion”. 4st International Student Biotechnology Congress, 25-27 Feb, University of Tehran, I.R.of Iran.

123- Eslahi, N., Kowsari, M., Zamani, MR., **Motallebi, M** & Moghadasi, Z. Interaction effect of *Trichoderma harzianum* wild type and recombinant strains genotypes on induction of plant resistance in presence of *Rhizoctonia solani*. 2019. *8th* *National Conference on Biological Control in Agriculture and Natural Resources*, June , Bu-ali University, Hamadan, I.R. of Iran.

**Books:**

Underestanding Genetic Engineering, (Translation jointly with colleague), 1993.

Biochemistry of signal transduction and regulation, 2nd Edition (Translation jointly with colleague), 2006.

Molecular Biology-Weaver, 5th Edition (Translation jointly with colleagues), 2013.

**Courses Taught:**

**BSc.** Genetics

 Molecular Genetics

**MSc.** Advanced Genetic Engineering

 Genetics of Prokaryotes

 Transcription and Translation

 Molecular Genetics

**PhD**. Advanced Molecular Genetics

 Advanced Prokaryotic cell Biology

 Advanced Eukaryotic cell Biology

 Advanced Genetic Engineering

**Memberships:**

Iranian Biotechnology Society

Iranian Genetic Society

Iranian Biology Society

Editorial Board of Iranian Journal of Biotechnology

Editorial Board of Journal of Agricultural Biotechnology

Editorial Board of Iranian Journal of Genetics and Plant breeding

**Awards:**

Distinguished Lecturer of Razi University, 1996

Distinguished Researcher of Razi University, 2000

Distinguished Researcher of Razi University, 2001

Distinguished Researcher of NIGEB 2012

**PhD Thesis**

**Supervised Student Thesis:**

1. Hosseinzzadeh- Colagar, A. Aug./2005. " Isolation and Cloning of *pgip1* and *pgip2* Genes, Purification and Partial Characterization of PGIP Protein from Naz and Derakhshan Bean (*Phaseolus vulgaris*) Cultivars." Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.
2. Zahri S. March/2006. " Molecular study of cellobiohydrolase II (CBHII) from *Trichoderma Parceramosum* and endoglucanase I (EGI) in *T. reesi* PTCC5142". Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

3- Harighi M.J. July/2006. " Purification, characterization, and gene cloning of 42 kDa chitinase (*chit*42) from *Trichoderma* *atroviride*(PTCC5220) and its expression in *Escherichia* *coli*". Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

4- Shokouhifar F. Feb/2010. “Construction of Pathogen-Inducible Synthetic Plant Promoter”. Plant Biotechnology Dept., National Institute for Genetic Engineering and Biotechnology, Tehran, Iran.

5- Esfahani K., Nov./2010. “Co-transformation of fungal chitinase (*chit*42) and glucanase (*bgn*13.1)genes to potato ”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

6- Mohammadzadeh R., Nov./2012. “Transformation of sugar beet by *pgip*1 and *pgip*2 (single and in combination) genes”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

7- Matroodi S., May 2013. “Modification of *chit42* Gene Toward Increasing Chitinase Activity”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

8- Akbarzadeh A., Dec./2013. “Cloning and expression of a recombinant fungal endoglucanase in yeast and improvement of it’s biochemical properties using protein engineering methods”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

9- Kowsari M., 2014. “Molecular improvement of *Chit 42* gene to increase antifungal and chitinase activity of the biocontrol agent *Trichoderma* *harzianum”.* Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

10-Hamzeh Sh., Sep./2014. “Removal of selectable marker gene with inducible Cre/loxP recombination system in transgenic plants”. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

 11- Ziaei M. March, 2016. “Study of antifungal activity of *pgip*2 and *chit*42 in combination against *Sclerotinia* *sclerotiorum* in canola”. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

 12- Moradyar M. March, 2016. “Study of disease resistance and inducibility of canola using *chit42* gene under control of synthetic pathogen inducible promoters”.Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

13- Zarrin panjeh N. July, 2016. “Co-transformation of fungal chitinase (*chit*42) and plant defensin (*Rs-AFP1*) genes to canola”.Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

14- Aghazadeh Gholaki R. Oct 2016."Co- transformation of *Brassica napus l*. by *chitinase* 42 and tlp genes towards improving resistance to *Sclerotinia sclerotiorum*". Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

15- Eslahi N. June, 2020. “The effect of improved Trichoderma harzianum isolates on the molecular and biochemical pathways of bean plant (Phaseolus vulgaris L.) growth and defense”. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

 **PhD Thesis Advisor:**

Fakhraei M.M. 2022. “Chitinase gene transfer to lisianthus (Eustoma grandiflorum Griseb.) for

resistance to fungal disease Fusarium solani” Department of Horticultural Sciences., Faculty of Agriculture, Tabriz, Iran.

 **Supervised Student Thesis:**

**MSc Thesis**

1- Andalib, A. March/1998. “Molecular, biochemical, and serological study for classification of *Yersinai enterocolitica* of Iran.” Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

2- Arefpour, M.A. Dec./1998. “Grouping of *Fusarium oxysporum* by pathogenicity test and polygalacturonase production”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

3- Saffar, B. Dec./1998. “Molecular study and plasmid-curing of *Yersinia enterocolitica* isolates in chicken”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

4- Emamjomeh, A.A. Jan./2000. “Determination of genetic distances by RAPD-PCR, evalution of drought tolerance criteria analysis of adaptation in chickpea”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

5- Harighi, M.J. Jan./2000. “Classification of *Fusarium oxysporum* isolates by zimogram grouping, overlaying and pectinolytic analysis.” Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

6- Hosseinzzadeh- Colagar, A. July/2000. “Study of pathogenicity, polygalacturonase activity and DNA polymorphism in *Ascochyta rabiei* isolates of Iran”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

7- Rezaei, A. Oct./2000. “Comparison of plasmid and study of pectolytic enzymes of *Yersinia enterocolitica* isolates from human and chicken”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

8- Rostamian, A. Nov./2000. “Study of Iranian isolates of *Fusarium oxysporium* by vegetative compatibility and RAPD”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

9- Barzegar, A. Mar./2001. “Molecular study of *Xanthomonas* sp. Isolates causal agent of canker in the leaves of sugarbeet”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran

10- Chobineh, D. Aug./2001. “DNA polymorphism and protein patterns of *Puccinia striiformis* isolates.” Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

11- Rezaei, M. Aug./2001. “Pectin lyase activity and DNA polymorphism of *Ascochyta rabiei*  isolates.” Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

12- Fallah, H. July/2002. “Purification and partial characterization of polygalacturonase and study of DNA polymorphism in *Ascochyta rabiei.”* Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

13- Khoroshi, A.A. Jan./2002. “Molecular study of *Fusarium oxysporum* isolates by protein pattern and DNA polymorphism.” Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

14- Jazayeri, O. Sept./2002. “DNA polymorphism and purification of polygalacturonase enzyme in *Fusarium oxysporum.”* Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

15- Alani, B. Nov./2002. “Study of DNA polymorphism and purification of PG in *Fusarium oxysporum.”* Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

16- Seyed Asli N. Aug./ 2003. “Study of chitinolytic activity and partial amplification of chitinase genes in *Trichoderma* isolates ”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

17- Bahramsari N. Sep./2003. “Study of glucanase activity and partial amplification of chitinase genes in *Trichoderma* isolates”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

18- Onsory H., Sep./2003. “Study of cellulase enzymes and detection of their coding genes by PCR method in *Aspergillus* sp.”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

19- Habibollahi H., Oct./2003. “Study of PGIP-PG interaction and detection of Soybean *pgip* gene”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

20- Badiezadegan, S., Jan./2004. “Study of PGIP-PG interaction from Bean and *Ascochyta rabiei* and Bean *pgip* gene detection”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

21- Khandan, A., Jan./2004. “Study of endo β 1-4 glucanases and their genes in *Trichoderma* sp.”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

22- Yari, R., May/2004. “cellulose enzymes production and detection of endo β-1,4 glucanase and β-1,4 glucosidase genes in *Cellulomonas* sp.”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

23- Badri M., May/2004. “Antagonistic effects of *Trichoderma harzianum* 8 (T8) on some phytopathogenic fungi in sugar beet and detection of chitinase gene”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

24- Salehzadeh, A. Jun/2004. “study of Tomato PGIP interaction with *Fusarium oxysporum* and *Ascochyta rabiei* polygalacturonase and detection of tomato pgip gene”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

25- Deilami Z. Aug./2004. “Comparison of inhibitory activity of bean PGIP on polygalacturonase from different phytopathogenic fungi”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

26- Ghoujeghi F. Aug/2004. “study of enzyme production and detection of cellobiohydrolase and β- glucosidase genes in fungal isolates of Trichoderma”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

27- Babaei A. May/2005. “The effect of cellulose enzymes produced by different isolates of *Trichoderma* sp. on natural substrates, isolation, cloning and sequencing of *egl5* in *Trichoderma reesei*." Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

28- Jalali A. May/2005. “Antagonistic effects of *Trichoderma* on *Rhizoctonia solani* in sugar beet and amplification and sequencing of chitinase 36 gene in *Trichoderma harzianum* (T8)." Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

29- Vatandost J. Jan/2006. "Geographyic variation in the lesser mouse-eared bat (*Myotis blythii*) along western Zagros Mts. based on morphological characters and molecular markers”. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

30- Rajabkhani Z. Jan/2006. “Study of cellulose enzyme activity in mixed cultivation of *Trichoderma reesei* & *Aspergillus niger*, cloning of *egl*B and *bgl*I genes from *A. niger".* Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

31- Mohammadzadeh R. July/2006. "Isolation, cloning and expression of β-1,3 glucanase (*bgn*I) from *Trichoderma virens* in BY-2 cell suspension". Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

32- Matroodi S. July/2006. " Antagonistic effects of three species of *Trichoderma* on *Sclerotinia sclerotiorum* and cloning of *chit*33 gene and cDNA from *T. atroviride.* Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

33- Fallahi F. July/2006. "Inhibitory activity of PGIP on polygalacturonase of S. *sclerotiorum* , isolation and cloning of *pgip*1 and *pgip*2 genes from Juls and Daneshjoo bean cultivars. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

34- Karimzadeh F. July/2006. " Study of inhibitory effect of PGIP on polygalacturonase of *Rhizoctonia solani*, isolation and cloning of *pgip*1 and *pgip*2 genes from Dehghan and Daneshkadeh bean cultivars. Biology Dept., Faculty of Science, Razi Univ., Kermanshah, Iran.

35- Yazdanpanah M. Feb./2007. "Amplification, Cloning, Expression & Characterization of chit36 Gene from*T. atroviride(PTCC5220)*". Microbiology Dept., Islamic Azad University Jahrom branch, Jahrom, Iran.

36- Raoufzadeh Sara. Feb./2007. "Amplification and cloning of DNA and cDNA of beta-glucosidase (*bgl2*) gene from *Trichoderma* *harzianum* (T7). Microbiology Dept., Islamic Azad University Jahrom branch, Jahrom, Iran.

37- Raoufzadeh Somayeh. Feb./2007. "Amplification and cloning of DNA and cDNA of beta-1,3 glucanase (*bgn*13.1) gene from *Trichoderma* *virens* (10). Microbiology Dept., Islamic Azad University Jahrom branch, Jahrom, Iran.

38- Akhgari A. Sep./2007. “Cloning and comparison of nucleotide sequences of *pgip1*and *pgip2* (polygalacturonase - inhibiting protein) genes in three *Phaseolus vulgaris* cultivars and transformation of Canola (*Brassica napus L*) by *pgip2* gene and confirmation of the gene expression in transgenic plant by molecular techniques”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

39- Kheiri H.R. March/2008. “Transformation of *bgn*13.1 gene to canola (*Brassica napus* L.) and partial characterization of transgenic plants by molecular techniques”. Dept of Agricultural Biotechnology, Agricultural Faculty, Bu Ali Sina Univ, Hamadan, Iran.

40- Abedi A. March/2008. “Transformation of *pgip*1 gene to canola (*Brassica napus* L.) and partial characterization of transgenic plants by molecular techniques”. Dept of Agricultural Biotechnology, Agricultural Faculty, Bu Ali Sina Univ, Hamadan, Iran.

41- Lotfi K. Sept./2008. “Transformation of *chit*42 gene to canola (*Brassica napus* L.) and partial characterization of transgenic plants by molecular techniques”. Dept of Agricultural Biotechnology, Agricultural Faculty, Bu Ali Sina Univ, Hamadan, Iran.

42- Kalantari M. Nov./2008. “Transformation of *pgip*2 gene from *Phaseolus vulgaris* cv Emerson to sugar beet (Line 9597-P26) and partial characterization of transgenic plants using molecular approaches”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

43- Golijani Moghadam R. Dec/ 2008. “Transformation of chitinase 36 gene (genomic DNA) to canola and partial characterization of transgenic plants”. Biology Dept., Azarbayjan Univ. of Tarbyatmoallem. Tabriz, Iran.

44- Rezanejad H. Dec/2008. “Transformation of chitinase 42 gene (cDNA) to canola and partial characterization of transgenic plants”. Biology Dept., Azarbayjan Univ. of Tarbyatmoallem. Tabriz, Iran.

45- Shirazi F.T., Feb/2009. “Transformation of *pgip*1 gene from *Phaseolus vulgaris* cv Daneshjoo to sugar beet (Line 9597-P26) and partial characterization of transgenic plants using molecular approaches”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

46- Etebari Mar/2010. “Isolation and cloning of genomic and cDNA of plant defensin gene.” Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

47- Ghafarian Aug/2010. “Isolation and cloning of *tlp* gene and its expression in prokaryotic system”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

48- Soroor F., Aug/2010. “Transformation of canola by *bgn*13.1 (cDNA) and partial characterization of transgenic plants”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

49- Moradyar M., Sep./2010. “Transformation of canola by *chit*33 (genomic DNA) and partial characterization of transgenic plants”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

50- Solgi T., Sep./2010. “Transformation of canola by *chit*33 (cDNA) and partial characterization of transgenic plants”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

51- Roohi L., Sep./2010. “Transformation of canola by *bgn*13.1 (genomic DNA) and partial characterization of transgenic plants”. Biotechnology Dept., Islamic Azad University. Tehran, Iran.

52- Zamani A.Dec./2010. “Transformation of canola (*Brassica napus*) by tlp gene and structure banalysis of transgenic plant against *Sclerotinia sclerotiorum*”. Biology Dept., Tarbiat Moalem University, Tehran, iran.

53- Shafeei N. Sep./2011. “Antifungal activity of prokaryotic expressed defensin on some phytopathogenic fungi”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

54- Zebardast F. Feb./2012."Isolation, amplification and cloning of rice (*Oriza sativa*) *ltp* study of prokaryotic expression of LTP on some phytopathogenic fungi ". Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

55- Ahanchian Oct./2013. “Amplification, cloning and transformation of *dabb* 1 gene (genomic DNA) to canola and partial characterization of transgenic plants”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

56- Alizadeh A. March/2014. “Isolation, amplification and cloning of tobacco osmotin gene and study of its prokaryotic expression on some phytopathogenic fungi”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

57- Zandvakily N. March/2014. “Isolation, characterization and cloning of *Zea mays PR10* gene, the Prokaryotic expression of recombinant PR10 protein and the study of its antifungal activity against some plant pathogenic fungi”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

58- Shieh-Beigi Sh. March/2015. “Cloning and prokaryotic expression of Defensin (*Tfgd2*) and Study of its antifungal activity”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

59- Ataei A. March/2015. “Study of the effect of chbd from *Trichoderma atroviride* in the N-terminal end of Chimer CHIT42 gene and antifungal activity of prokaryotic expressed Chimer CHIT42”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

60- Ardestani N. March/2015. “Cloning and Characterization of Chimer CHIT42 gene from *Trichoderma atroviride* containing Rhizopus chbd in its carboxylic end and study of its antifungal activity of prokaryotic expressed Chimer CHIT42”. Plant Biotechnology Dept., National Institute of Genetic Engineering and Biotechnology, Tehran, Iran.

61- Ghiasi J. April, 2016. “The evaluation of transient expression of chimeric chit42 containing ChBD in C-terminal under the control of SP-DDEE synthetic inducible promoter” Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran

62- Mir Hossaini N. AMarch, 2016. “The evaluation of transient expression of chimeric chit42 containing ChBD in N-terminal under the control of SP-DDEE synthetic inducible promoter” Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

63- Mahmoudian S. March, 2016. “Study of biocontrol activity and growth promotion of genetically engineered *T. harzianum* isolates on *Rhizoctonia solani* in *Phasaeolus vulgaris*” Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

64- Nemati H., Sep., 2017. “Cloning and prokaryotic expression of lectin protein c-25 and study of its antifungal activity”. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

65- Partovi Nasr M., Sep., 2017. “Cloning of fused LTP and Osmotin genes and study of their prokaryotic expression on growth of some fungal pathogens”. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

66- Malmir N. Jan. 2018. “Screening and isolation of cyanide resistant and cyanide degrading fungi and cloning of cyanide degrading gene. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

67- Sharafi R., Oct.2018. “Expression of chimeric chitinase 42 containing chitin-binding domain in N-terminal in a plant expression system using His tag for purification”. Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.

68- Soleimani F., Oct.2018. “Expression of chimeric chitinase 42 containing chitin-binding domain in C-terminal in a plant expression system using His-tag, for purification**”.** Plant Molecular Biotechnology Dept., Agricultural Biotechnology Institute, NIGEB, Tehran, Iran.