

Curriculum Vitae

Mohsen Yassaie, PhD

Seed and Plant Improvement Research Dept., Research and Education Center for Agriculture and Natural Resources of Fars Province

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Education

- PhD; Plant Pathology (Virology), Shiraz University (۲۰۱۰) "**Induction of resistance to Barley yellow dwarf virus (PAV) in bread wheat using posttranscriptional gene silencing (PTGS) and virus induced gene silencing (VIGS)**" • M.Sc.; Plant Pathology (Virology), Shiraz University (۱۹۹۹). "**Characterization of citrus ring spot virus in Fars province**"
- B.Sc.; Plant protection Shiraz University (۱۹۹۲) (top ranked student)

Research

- **Position:**
- Assist. Prof., Patho-breeder, Seed and Plant Improvement Research Dept., Research and Education Center for Agriculture and Natural Resources of Fars Province. ۱۹۹۹- Now.
- Head of Seed and Plant Improvement Research Dept., Research and Education Center for Agriculture and Natural Resources of Fars Province. ۲۰۱۵- Now.
- **Research Interests:**
- Investigations on resistance against the most important cereal viral diseases (Barley yellow dwarf and wheat streak mosaic) via traditional (classic breeding, screening for R genes in native and commercial gene pools) and molecular (using PTGS and VIGS).
- Research on resistance sources against cereal rusts.
- Cereal tissue culture and transformation.
- **Membership:**
- Iranian plant pathology society
- **Honors:**
- Top B.Sc. student in Plant Protection Dept., Shiraz University, ۱۹۹۲.
- **Awards:**
- PhD Scholarship, Ministry of Jihad-e-Agriculture
- Six months sabbatical as visiting scientist, Aarhus University, Denmark, awarded by Iranian Ministry of Science, Research and Technology.

Participation in Cereal Verities Release

- ۱) **Parsi** wheat variety, ۲۰۰۹
- ۲) **Sivand** wheat variety, ۲۰۰۹
- ۳) **Ghaboos** wheat variety, ۲۰۱۴
- ۴) **Aftaab** wheat variety, ۲۰۱۴
- ۵) **Hashtrood** wheat variety, ۲۰۱۵
- ۶) **Aseman** wheat variety, ۲۰۱۷
- ۷) **Perov** wheat variety, ۲۰۱۷
- ۸) **Khalil** wheat variety, ۲۰۱۷
- ۹) **Torabi** wheat variety, ۲۰۱۹
- ۱۰) **Setareh** wheat variety, ۲۰۱۹
- ۱۱) **Kalateh** wheat variety, ۲۰۱۹
- ۱۲) **Golshan** barley variety, ۲۰۱۹
- ۱۳) **Meraj** wheat variety, ۲۰۱۹
- ۱۴) **Rahmat** wheat variety, ۲۰۱۹
- ۱۵) **Shalan** wheat variety, ۲۰۱۹
- ۱۶) **Kamal** wheat variety, ۲۰۱۹
- ۱۷) **Varan** wheat variety, ۲۰۱۹
- ۱۸) **Zahab** wheat variety, ۲۰۱۹
- ۱۹) **Saverz** wheat variety, ۲۰۱۹
- ۲۰) **Amin** wheat variety, ۲۰۲۰
- ۲۱) **Farin** wheat variety, ۲۰۲۰
- ۲۲) **Sahar** wheat variety, ۲۰۲۰
- ۲۳) **Taban** wheat variety, ۲۰۲۰
- ۲۴) **Sana** wheat variety, ۲۰۲۰
- ۲۵) **Nobahar** barley variety, ۲۰۲۰
- ۲۶) **Heyran** wheat variety, ۲۰۲۰
- ۲۷) **Paya** wheat variety, ۲۰۲۰
- ۲۸) **Jaam** wheat variety, ۲۰۲۰
- ۲۹) **Mehr** wheat variety, ۲۰۲۰

Presentations

Yassaie, M. and Izadpanah, K. ۲۰۰۰. Electrophoresis profiles of protein and nucleic acid, attempts for mechanical transmission of Fars isolate of citrus ring spot virus and it's comparison with certain foreign isolates. p.: ۱۳۴. In: Proc. ۱st Iranian Plant Protect. Cong. Isfahan Technical University. Iran.

- Yassaie, M.** and Izadpanah, K. ۲۰۰۰. Purification, serology and electron microscopy of citrus ring spot virus in Fars province. p : ۱۳۵. In: Proc. ۱۴th Iranian Plant Protect. Cong. Isfahan Technical University. Iran.
- Yassaie, M.**, Massumi, M., Amin, H. and Izadpanah, K. ۲۰۰۲. Evaluation of Wheat streak mosaic virus response in commercial and native wheat and wheat ancestors. p : ۳۲. In: Proc. ۱۵th Iranian Plant Protect. Cong. Razi University of Kermanshah, Kermanshah, Iran.
- Yassaie, M.**, Afsharifar, A., Masumi, M., Heydarnejad, J., Sadeghi, M. S. and Izadpanah, K. ۲۰۰۴. Occurrence of viral diseases in rice fields in Fars province. p : ۹۱. In: Proc ۱۶th Iranian Plant Protect. Cong., Tabriz, Iran.
- Masumi, M., **Yassaie, M.**, Zare, A. and Izadpanah, K. ۲۰۰۳. Philology of some isolates of wheat streak mosaic virus in Iran. p: ۴۶۷-۴۶۹ . In: Proc. ۳rd National Congress of Biotechnology of Iran, Mashhad, Iran.
- Afsharifar, A. R., Sadeghi, M. S., **Yassaie, M.**, Esmaealzadeh Hosseini and Izadpanah, K. ۲۰۰۴. The status of Barley yellow dwarf and Cereal yellow dwarf viruses in Iran. p : ۷۶. In: Proc ۱۶th Iranian Plant Protect. Cong., Tabriz, Iran.
- Rastgou, M., Khatabi, B., **Yassaie, M.**, Afsharifar, A.R., Masumi, M. and Izadpanah, K. ۲۰۰۴. Distribution and new hosts of viruses causing yellow dwarf in cereal. p : ۶۱. In: Proc ۱۶th Iranian Plant Protect. Cong., Tabriz, Iran.
- Masumi, M., **Yassaie, M.**, Zare, A. and Izadpanah, K. ۲۰۰۵. Fertile Crescent is the Epicenter of wheat streak mosaic virus. p: ۵۰. In: Proc Xth Conference on Viral Diseases of Gramineae in Europe, Louvain-la-Neuve, Belgium.
- Yassaie, M.**, Afsharifar, A. R., Sadeghi, M. S., Masoumi, M., Davoodi, A. and Izadpanah, K. ۲۰۰۶. Evaluation of resistance in some wheat and barley genotypes to barley and cereal yellow dwarf viruses in Kelardasht. p: ۴۴. In: Proc. ۱۷th Iranian Plant Protect. Cong., Karaj, Iran.
- Yassaie, M.**, Masoumi, M., Amini, A. and Izadpanah, K. ۲۰۰۶. Reaction of some Iranian native wheat lines to Wheat streak mosaic virus under greenhouse conditions. p: ۴۵. In: Proc ۱۷th Iranian Plant Protect. Cong., Karaj, Iran.
- Shahragard, N., Masumi, M., **Yassaie, M.** and Izadpanah, K. ۲۰۰۶. Evaluation of resistance in some advanced lines of soft wheat and some cultivars of barley

to virus diseases in Shahrekord. P: ٤١. In: Proc ١٧th Iranian Plant Protect. Cong., Karaj, Iran.

Yassaie, M., Izadpanah, K., Afsharifar, A. and Niazi, A. ٢٠١٠. Construction of an intron-hairpin loop gene silencing vector against Barley yellow dwarf virus PAV. P: ٧٧٦. In: Proc ١٩th Iranian Plant Protect. Cong., Tehran, Iran.

Yassaie, M., Izadpanah, K., Afsharifar, A., Niazi, A. and Albrechtsen, M. ٢٠١٠. Sequence of Barley yellow dwarf virus (BYDV-PAV) triggers silencing in barley. P: ٧٧٥. In: Proc ١٩th Iranian Plant Protect. Cong., Tehran, Iran.

Yassaie, M., Masoumi, M., Amini, A. and Izadpanah, K. ٢٠١٠. Response of some Iranian native wheat lines to three different wheat streak mosaic virus isolates. P: ٧٤٠. In: Proc ١٩th Iranian Plant Protect. Cong., Tehran, Iran.

M. Yassaie, S. F. Rouhani and A.R. Nikzad. ٢٠١٤. Reaction of some triticales genotypes against Wheat streak mosaic virus. P: ٣٧٣. In: Proc ٢١th Iranian Plant Protect. Cong., Uromia, Iran.

Zakeri, A., **Yassaie, M.**, Afshari, A., Nikzad, R., and Rejaei, S. ٢٠١٤. *Puccinia striiformis* f. sp. *tritici* virulence and reactions of some commercial wheat cultivars in Fars province, Iran, over the past decade. Proceedings of the Second International Wheat Stripe Rust Symposium. Ezmir, Turkey. P ٨٣.

Zakeri, A., Khodarahmi, M., Ebrahimnejad, S., **Yassaie, M.**, Nikzad, A.R. and Rejaei, S. ٢٠١٤. Genetic analysis of resistance to stripe rust in Iranian wheat cultivars and elite lines. Proceedings of the Second International Wheat Stripe Rust Symposium. Ezmir, Turkey. P ٨٤.

Rouhani, S. F., **Yassaie, M.** and Sharzei, A. ٢٠١٤. Effect of dual infections of Barley yellow dwarf virus (BYDV-PA V) and Wheat streak mosaic virus (WSMV) on titer and symptom of WSMV. P: ٣٧٠. In: Proc ٢١th Iranian Plant Protect. Cong., Uromia, Iran.

Afshari, F., Zakeri, A., Esmaeilzadeh, M., Yazdansepe, A., Nejafian, G., Vahabzadeh, M., **Yassaie, M.**, Hasanbayat, Z. and Kabiri, A. ٢٠١٥. Inheritance of resistance to stripe rust in some Iranian wheat genotypes. International Wheat Conf. Australia, Sydney. p ١٢٨.

Yassaie, M., Sharzei, A., Shamoradi, M. and Rezaienia, F. ۲۰۱۵. The Iranian wheat landraces comprise tolerant and resistant sources against viral diseases. XVIII International Plant Protection Congress. Germany, Berlin.

Publications

Yassaie, M. ۱۹۹۹, Characterization of citrus ring spot virus in Fars province. M.Sc. Thesis, Shiraz University. ۱۲۶ pp.

Masumi, M., **Yassaie, M.**, Zare, A. and Izadpanah, K. ۲۰۰۵. Fertile Crescent is the Epicenter of wheat streak mosaic virus. *Parasitica* ۶۱: ۷۳-۷۸.

Masumi, M., **Yassaie, M.**, Zare, M., Afsharifar, A. and Izadpanah, K. ۲۰۰۶. Analysis of ۳'-region of the genome of Wheat streak mosaic virus isolates in Iran. *Iranian Journal of Plant Pathology*. ۴۲: ۶۵-۸۱.

Ale-Osfour, M., Izadpanah, K., Mosadegh, S., Sadeghi, M.S., Afsharifar, A.R., Masoumi, M., **Yassaie, M.**, Jokar, L. and Hayati, J. ۲۰۰۷. Efficiency of seven clones of *Rhopalosiphum padi* in transmission of four barley yellow dwarf virus-PAV isolates in Iran. ۴۳: ۱۸۴-۱۹۹.

Najafian, G., Amin, H.,..., **Yassaie, M.**,, ۲۰۱۰. Sivand, A new bread wheat cultivar, resistant to stem rust (Race Ug⁹⁹) with good bread making quality for cultivation under irrigated conditions of temperate regions of Iran, *Seed and Plant Improvement Journal*. ۲۶: ۲۸۵-۲۸۸.

Najafian, G., Amin, H.,..., **Yassaie, M.**,, ۲۰۱۰. Parsi, A new bread wheat cultivar, resistant to stem rust (Race Ug⁹⁹) with good bread making quality for cultivation under irrigated conditions of temperate regions of Iran. ۲۶: ۲۸۹-۲۹۲.

Darabi, S., **Yassaie, M.** and Izadpanah, K. ۲۰۱۰. Purification and antiserum production of Iranian isolate of *Beet Necrotic Yellow Vein Virus* (BNYVV), the causal agent of sugar beet rhizomania disease. ۲۶: ۵۳-۶۶.

Yassaie, M. ۲۰۱۰. Induction of resistance to Barley yellow dwarf virus (PAV) in bread wheat using post-transcriptional gene silencing (PTGS) and virus induced gene silencing, PhD thesis, pp ۱۸۶. Shiraz University, Shiraz, Iran.

- Yassaie, M.**, Afsharifar, A. R., Niazi, A., Salehzadeh, S. and Izadpanah, K. ۲۰۱۱. Induction of resistance to Barley yellow dwarf virus (PAV) in bread wheat using post-transcriptional gene silencing (PTGS). Iran. J. Plant Path. ۴۷: ۶۷-۸۲ (in Farsi with English abstract).
- Kavousipour, S, Niazi, A., Izadpanah, K., Afsharifar, A. R. and **Yassaie, M.**, ۲۰۱۲. Induction of resistance to cucumber mosaic virus (CMV) by transformation of ۳b gene hairpin construct. Iran. J. Plant Path. ۴۸: ۲۰۹-۲۱۹ (in Farsi with English abstract).
- Zakeri, A., Afshari, A., Rejaei, S., **Yassaie, M.**, Nikzad, R. and Hassain, F. ۲۰۱۴. Inheritance of resistance in selected elite wheat genotypes and several commercial wheat cultivars of Fars province to stripe rust. Iran. J. Plant Path. ۵۰: ۷۳-۷۶ (in Farsi with English abstract).
- Rouhani, S. F., **Yassaie, M.** and Sharzei, A. ۲۰۱۵. Effects of dual infections of Barley yellow dwarf virus (BYDV-PAV) and Wheat streak mosaic virus (WSMV) on WSMV titer, symptom severity and some yield components of wheat. Iran. J. Plant Path. ۵۱: ۱۴۱-۱۶۱ (in Farsi with English abstract).
- Zakeri, A., **Yassaie, M.**, Afshari, A., Rejaei, S. and Nikzad. ۲۰۱۶. Surveying virulence of the causal agent of wheat stripe rust (*Puccinia striiformis* f. sp. *tritici*) and determining reaction of commercial wheat cultivars over the past decade in Fars, Iran. Iranian Journal of Plant Pathology. ۵۲: ۲۹۷-۳۱۶ (in Farsi with English abstract).
- Zakeri, A., Afshari, F., **Yassaie, M.**, Nikzad, A. R. and Rejaei, S. ۲۰۱۶. Genetic analysis of resistance to stripe rust in several Iranian wheat cultivars and elite lines. Crop Breeding Journal. ۴, ۵ and ۶: ۱-۸.
- Zakeri, A., Afshari, F., **Yassaie, M.**, Ghazvini, H., Hassani, F., Safavi, S. A. and Minno, M. J. ۲۰۱۸. Race identification and response of Iranian barley genotypes to barley yellow rust at seedling and adult plant stages in Fars province in Iran. Crop Breeding Journal. ۸: ۳۱-۴۷. (In Farsi).
- Najafian, G., Khodarahmi, M., Bakhtiar, F., ..., **Yassaie, M.**, ۲۰۱۸. Rakhshan, New bread wheat cultivar, with high grain yield potential, resistance to wheat rusts and good bread making quality and suitable for irrigated conditions in temperate agro-climatic zone of Iran. Research Achievements for Field and Horticulture Crops. ۱: ۳۱-۴۷.

- Hosseini, M., Ghorbani, R., Rashed Mohassel, M.H. and **Yassaie, M.** ۲۰۱۹. Correlation of environmental factors and phenotypic diversity of Iranian wild barley (*Hordeum Spontaneum* Koch) populations. *Acta Ecologica*. ۹۰: ۱۹-۲۵.
- Esmailzadeh Moghaddam, M., Khodarahmi, M. Mahmoudi, K., Akbari Moghaddam, H., Sayahfar, M., Tahmasebi, S., Lotfalie Aeineh, G. A., Naderi, A., Amir Bakhtiar, N., Farhadi Sadr, M., Afshari, F., Dalvand, M., Zakeri, A. K., Tabatabaei, N., **Yassaie, M.**, Roohparvar, R. and Kia, S. ۲۰۱۹. Barat, A New Bread Wheat Cultivar, Suitable for Irrigated Areas in Southern Warm and Dry Zone of Iran. *Research Achievements for Field and Horticulture Crops*. ۲: ۱۳۹-۱۴۷.
- Farahbakhsh, F., Hamzehzarghani, H., Massah, A., Tortosa, M., **Yassaie, M.** and Rodriguez, M. ۲۰۱۹. Comparative metabolomics of temperature sensitive resistance to wheat streak mosaic virus (WSMV) in resistant and susceptible wheat cultivars. *Journal of Plant Physiology*. ۲۳۷: ۳۰-۴۲.
- Aghnoum, R., **Yassaie, M.**, Dalvand, M. and N. Tabatabaei Fard. ۲۰۱۹ Virulence analysis and effectiveness of new sources of resistance to barley powdery mildew (*Blumeria graminis f. sp. hordei*) in southwestern regions of Iran. *Crop Breeding Journal*. ۹: ۲۳-۳۱.
- Patpour, M., Justesen, A., Tecle, A. W., Yazdani, M., **Yassaie, M.** and Hovmøller, M.S. ۲۰۲۰. First Report of Race TTRTF of Wheat Stem Rust (*Puccinia graminis f. sp. tritici*) in Eritrea. *Plant Disease*. ۱۰۴: ۹۷۳.
- Pouralibaba, H.R., Mohammadi, N., Afshari, F., Safavi, S., **Yassaie, M.** and Atahoseini, M. ۲۰۲۱. GLM-PCA, a method to detect informative environments and phenotypic stable resistant sources of wheat to yellow rust in multi-environmental trials. *Indian Phytopathology*. ۷۴: ۱۴۵-۱۵۵.
- H. Zare, H., Zamanifar, A. and **Yassaie, M.** ۲۰۲۱. Effect of fig mosaic disease on carbohydrates metabolism and pigments content of fig leaves. DOI: ۱۰.۱۷۶۶۰/ActaHortic.۲۰۲۱,۱۳۱۵,۶۵.
- Mojtaba Hosseini, M., Ghorbani, R., Rashed mohassel, M.H. and **Yassaie, M.** ۲۰۲۱. Wild Barely (*Hordeum spontaneum koch*) populations response to sulfosulfuron herbicide. *Iranian journal of weed science*. ۱۷-۱-۱۶.
- Hosseini, M., **Yassaie, M.**, Ghorbani, R., Rashed Mohassel, M.H. and Niazi A. ۲۰۲۱. Genetic diversity of Iranian wild barley (*Hordeum spontaneum* Koch.) populations. *Journal of Crop Science and Biotechnology*. DOI: <https://doi.org/۱۰.۱۰۰۷/s۱۲۸۹۲-۰۲۱-۰۰۱۳۲-۲>

Hand Books and Extension Publications

- ۱- Nikzad, A.R., Dastfal, M., Yassaie, M. and Paydar, S. ۲۰۱۵. History and Evolution of Triticale. ۲۸pp. (In Farsi).
- ۲- Yassaie, M. and Zakeri, A., ۲۰۱۵. Barley and cereal yellow dwarf viruses. (In Farsi).
- ۳- Zakeri, A. and Yassaie, M. ۲۰۱۵. Wheat rust diseases and its management. (In Farsi).
- ۴- Nikzad, A.R., Sarikhani, S., Ghaedsharaf, F., Yassaie, M., Dastfal, M., Zakeri, A. and Hassain, F. ۲۰۱۵. Introduction of durum wheat varieties for tropical climates zone of Fars province. (In Farsi).
- ۵- Nikzad, A.R., Sarikhani, S., Ghaedsharaf, F., Yassaie, M., Dastfal, M., Zakeri, A. and Hassain, F. ۲۰۱۵. Introduction of bread wheat and barley varieties for temperate climates zones of Fars province. (In Farsi).
- ۶- Nikzad, A.R., Sarikhani, S., Ghaedsharaf, F., Yassaie, M., Dastfal, M., Zakeri, A. and Hassain, F. ۲۰۱۵. Introduction of bread wheat varieties for tropical climates zones of Fars province. (In Farsi).
- ۷- Nikzad, A.R., Sarikhani, S., Ghaedsharaf, F., Yassaie, M., Dastfal, M., Zakeri, A. and Hassain, F. ۲۰۱۵. Introduction of bread wheat and barley varieties for cold climates zones of Fars province. (In Farsi).
- ۸- Nikzad, A.R., Zakeri, A., Yassaie, M., ۲۰۱۵. Manual of Wheat Cultivation in Cold Regions of Fars Province. ۶۶pp. (In Farsi).
- ۹- Estakhr, A. and Yassaie, M. ۲۰۱۹. Management of Important Viral Diseases of Maize in Fars Province. ۲۹pp. (In Farsi).