Munqez J Y Shtaya, Ph.D

Personal information:

Date of birth: 23/06/1973

Address:

Faculty of Agriculture and Vet. Med.
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Web pages and social reds

- Personal Web. Page: http://staff.najah.edu/mshtaya
- ResearherID: http://www.researcherid.com/rid/G-6459-2018
- ORCID: http://orcid.org/0000-0003-3602-8518
- Scopus: www.scopus.com/authid/detail.uri?authorId=14051148900
- Google Scholar: https://scholar.google.com/citations?user=U2opYdYAAAAJ&hl=en&authuser=1

Academic qualifications:

- Doctor of Philosophy (PhD) in Plant Breeding and Genetic Engineering. University of Córdoba, Córdoba, Spain. October 2005. (Identification and inheritance of resistance against fungal diseases in barley)
- Diploma of Specialized Post-Graduate Studies (Plant Breeding). The Mediterranean Agronomic Institute of Zaragoza. Zaragoza, Spain. June 2001.
- Bachelor of Science (BSc) in Plant Production and Protection. Faculty of Agriculture, An-Najah National University. Nablus, Palestine. February 1997.

Employment and work experiences:

- **October 2015 - present:** Associate Professor, Department of Plant Production and Protection, Faulty of Agriculture and Veterinary Medicine, An-Najah National University.

- **July 2008 – July 2012:** Dean of Faculty of Agriculture, An-Najah National University, Palestine.
- **January 2006 – October 2015:** Assistant Professor, Department of Plant Production and Protection, Faulty of Agriculture, An-Najah National University.
- **February 1997 – September 2002:** Full time research assistant at the Faculty of Agriculture Experimental Station at An-Najah N. University.

Research interests

- Breeding of legumes and cereals for biotic and abiotic stress.
- Mechanisms of resistance.
- Gene mapping and QTL analysis.
- Plant genetic resources conservation.

Scientific publications:

- **Publications in journals with reference at SCI (Science Citation Index)**

1. Hassan Abu Qaoud, Baker Bsharat and **Munqez Shtaya**. 2023. Effect of growth regulators and colchicine on regeneration of two potato cultivars in vitro. Res. Crop. 24 (3): 548-554.
2. Hassan Abu Qaoud, Ihsan Abu Ali, Heba Al-Fares, Tawfiq Qubbaj and **Munqez J Y Shtaya.** 2023. Effect of salinity on the growth and some morphological traits of pearl millet. Pakistan Journal of Botany, 55(3): 807-811 (Impact Factor = 1.2)
3. Salah-Eddine Laasli, Fouad Mokrini, Driss Iraqi, **Munqez J. Y. Shtaya**, Said Amiri, Abdelfattah A. Dababat, Timothy Paulitz, Khalid Khff, Rachid Lahlali. 2023. Phytopathogenic nematode communities infesting Moroccan olive agroecosystems: impact of agroecological patterns. Plant and Soil (2023). (Impact Factor = 4.9)
4. Al-Sayaydeh, R. **Shtaya, M.J.** Qubbaj, T. Al-Rifaee, M.K. Alabdallah, M.A. Migdadi, O. Gammoh, I.A. Al-Abdallat, A.M. 2023. Performance and Stability Analysis of Selected Durum Wheat Genotypes Differing in Their Kernel Characteristics. Plants 2023, 12, 2664. (Impact Factor = 4.5)
5. Marwan Haddad, Doa Nassar and **Munqez Shtaya.** 2023. Heavy metals accumulation in soil and uptake by barley (*Hordeum vulgare*) irrigated with contaminated water. Scientific Reports, 13:4121. (Impact Factor: 4.6)

6. **Munqez J Y Shtaya,** Mahmoud Droubi, Heba Al-Fares, and Hassan Abu-Qaoud. 2022. The effect of Salicylic acid and Brassinosteroids on the performance of sweet pepper plant (*Capsicum annuum*) under different salinity levels. Desalination and water treatment, 275: 177–183. (Impact Factor: 1.273).
7. Hassan Abu Qauod1, Raed Alkowni and **Munqez J Y Shtaya**. 2022. Meristems culture for virus irradiation in potato (*Solanum tuberosum*) cultivars in Palestine. Research on Crops, 23(2): 363-369. (Scopus).
8. Hassan Abu Qaoud, **Munqez Shtaya**, Numan Mizyed, Heba Al-Fares, Ahmed Lebdi. 2022. Effect of short-term irrigation of treated wastewater on vetch (*Vicia sativa* L.) and alfalfa (*Medicago sativa* L.) growth. Legume Research, 45(5): 626-630. (Impact Factor: 0.669).
9. **Munqez J Y Shtaya** and Tawfiq Qubbaj. 2022. Effect of different soilless agriculture methods on irrigation water saving and growth of lettuce (*Lactuca sativa*). Research on Crops, 23(1): 156-162. (Scopus)
10. **Munqez J. Y. Shtaya** and J. M. Abdallah. 2021. Assessment of phenotypic diversity of barley genotypes through cluster and principal component analyses. Journal of Animal and Plant Sciences, 31(5): 1345-1351. (Impact Factor: 0.490).
11. **Munqez JY Shtaya**, Khalid Yaseen, Waed Abdelraheem, Yahya Hannoun, Hassan Abu Qaoud, Heba Al-Fares, Akram Daoud, Zeyad Fadah and Abdallah Alimari. 2021. Effects of tertiary wastewater reuse on some soil properties and wheat yield. Desalination and water treatment, 236: 300–305. (Impact Factor 1.273)
12. **Munqez JY Shtaya**, Heba Al-Fares, Tawfiq Qubbaj, Hassan Abu-Qaoud and Faisal Shraim. 2021. Influence of salt stress on seed germination and agro-morphological traits in chickpea (*Cicer arietinum* L.). Legume research, 44 (12): 1455-1459.
13. Hassan Abu-Qaoud, Heba Al-Fares, **Munqez J. Y. Shtaya**, and Nuha Shawarb. 2021. Effect of effective microorganism on wheat growth under salt stress condition. Chilean Journal of Agricultural Research, 81(03): 351-356. (IF: 1.677)
14. **Munqez J. Y. Shtaya**, Amero A. Emeran, Mónica Fernández-Aparicio, Hassan Abu Qaoud, Jihad Abdallah, and Diego Rubiales. 2021. Effects of crop mixtures on rust development on faba bean grown in Mediterranean climates. Crop Protection, 146: 105686 doi.org/10.1016/j.cropro.2021.105686. (Impact Factor: 2.571).
15. Rana M. Jamous, Salam Y. Abu Zaitoun, Omar B. Mallah, **Munqez Shtaya**, Toufic Elbeaino and Mohammed S. Ali-Shtayeh. 2020. Detection and phylogenetic analysis of

viruses associated with fig mosaic disease in seventeen fig cultivars in Palestine. Plant Pathology Journal 36(3): 267-279 (IF: 1.795)

16. Salam Y. Abu Zaitoun, Rana M. Jamous, **Munqez J. Shtaya**, Omar B. Mallah, Imad S. Eid and Mohammed S. Ali-Shtayeh. 2018. Characterizing Palestinian snake melon (*Cucumis melo* var. *flexuosus*) germplasm diversity and structure using SNP and DArTseq markers. BMC Plant Biology 18:246 (Impact Factor: 4.215).
17. Hassan Abu-Qaoud, Nuha Shawarb, Fatima Hussen, Nidal Jaradat, **Munqez Shtaya**. 2018. Comparison of qualitative, quantitative analysis and antioxidant potential between wild and cultivated Borago officinalis leaves from Palestine. Pakistan Journal of Pharmaceutical Sciences, 31(3) (Impact Factor: 0.684)
18. Nidal Jaradat, Lina Adwan, Shadi K'aibni, Abdel Naser Zaid, **Munqez JY Shtaya**, Naser Shraim, and Mohyeddin Assali. 2017. Variability of chemical compositions, antimicrobial and antioxidant activities of *Ruta chalepensis* leaf essential oils from three Palestinian regions. BioMed Research International, 2017 (Impact Factor: 3.411).
19. Mohammed S. Ali-Shtayeh, Rana M. Jamous, **Munqez J. Shtaya**, Omar B. Mallah, Imad S. Eid and Salam Y Abu Zaitoun. 2017. Morphological characterization of snake melon (*Cucumis melo* var. *flexuosus*) populations from Palestine. Genetic Resources and Crop Evolution. 64: 7–22 (Impact Factor: 1.524)
20. **Munqez Jamil Shtaya**, Jihad Abdallah, Heba Al-Fares, Hassan Abu-Qaoud, Maria von Korf, Marwan Haddad. 2015. Detecting genetic diversity among barley landraces grown in the West-Bank. Journal of Animal and Plant Sciences, 25 (5): 1365-1370. (Impact Factor: 0.490)
21. Habte Ermias, Müller Lukas, **Shtaya Munqez**, Davis Seth and von Korff Maria. 2014. Osmotic stress at the barley root affects expression of circadian clock genes in the hoot. Plant, Cell & Environment, 37 (6): 1321-1337. (Impact Factor: 7.228)
22. Sánchez-Martín, J., D. Rubiales, F. Flores, A. A. Emeran, **M. J. Y. Shtaya**, J. C. Sillero, M. B. Allagui and E. Prats. 2014. Adaptation of oat (*Avena sativa*) cultivars to autumn sowings in Mediterranean environments. Field Crops Research, 156: 111-122 (IF = 5.224)
23. Campoli, C., **M. Shtaya,** S. J. Davis and M. von Korff. 2012. Expression conservation within the circadian clock of a monocot: natural variation at barley Ppd-H1 affects circadian expression of flowering time genes, but not clock orthologs. BMC Plant Biology 2012, 12:97 (IF = 4.215)

24. Fernández-Aparicio **M., Shtaya** M., Emeran A.A., Allagui M.B., Kharrat M and Rubiales D. 2011. Effects of crop mixtures on chocolate spot development on faba bean grown in Mediterranean climates. Crop Protection 30: 1015-1023. (IF = 2.571)
25. **Shtaya, M. J. Y**., Sillero, J. C., Flath, K., Pickering, R., and Rubiales, D. 2007. The resistance to leaf rust and powdery mildew of recombinant lines of barley (*Hordeum vulgare* L.) derived from *H. vulgare* x *H. bulbosum* crosses. Plant Breeding, 126: 259-267. (IF = 1.832)
26. **Shtaya, M. J. Y.,** Sillero, J. C. and Rubiales, D. 2006. Screening for resistance to leaf rust (*Puccinia hordei*) in a collection of Spanish barleys. Breeding Science 56, 173-177. (IF = 2.086)
27. **Shtaya, M. J. Y.,** Sillero, J. C. and Rubiales, D. 2006. Search for partial resistance against Puccinia hordei in barley landraces from Fertile Crescent. Plant Breeding, 125: 343-346. (IF = 1.832)
28. **Shtaya, M. J. Y.,** Sillero, J. C. and Rubiales, D. 2006. Identification of a new pathotype of *Puccinia hordei* with virulence for the resistance gene Rph7. European Journal of Plant Pathology, 116 (2): 103-106. (IF = 1.907)
29. **Shtaya, M. J. Y.,** Marcel, T. C., Sillero, J. C., Niks, R. E. and Rubiales, D. 2006. Identification of QTLs for powdery mildew and scald resistance in barley. Euphytica, 151: 421-429. (IF = 1.895)

- **Publications in journals without reference at SCI (Science Citation Index).**

1. Najjar, M., **M. Shtaya** and M. Hawawreh. 2021. ERASMUS+ projects' resilience during covid-19 pandemic: the case of benefit project "boosting innovation in education and research of precision agriculture in Palestine". INTED2021: 15th annual International Technology, Education and Development Conference. INTED2021 Proceedings, pp. 3755-3763.
2. Jamil Harb, **Munqez Shtaya**, Halla Shoaibi, Thafer Salhab, Mohammad Omari, Sofia Rizqallah, Dalia Abu Daher and Bayan Shamasneh. 2019. Assessment of plant nutrition programs of tomato, cucumber, and sweet pepper cultivated in greenhouses located in Northern West Bank – Palestine. Palestine Economic Policy Research Institute (MAS). 164 pp. ISBN 978-9950-374-88-1
3. **Munqez J Y Shtaya,** Ahmad Yasin, Jawad Fatoom and Muntaser Jebreen. 2019. The effect of salinity on leaf relative water content and chlorophyll content of three wheat

(*Triticum aestivum* L.) landraces from Palestine. Hebron University Research Journal (A), 8: 52-65.

4. Raslan Shanableh, Hassan Abu Qaoud Numan Myzied, **Munqez Jamil Shtaya.** 2016. Forage yield of pearl millet (Pennisetum glaucum) under different water quality and accessions Indian Journal of Agricultural Research, 50 (3): 264-267
5. Mohammad Sawafta and **Munqez J Y Shtaya**. 2016. Resistance of Some Tomato Species to *Orobanche aegyptiaca* (Comparative Study). An-Najah University Journal for Research (Natural Sciences), 30(2):
6. **Shtaya, M J Y**. 2015. Sources of partial resistance to leaf rust in hard wheat landraces cultivated in Palestine. Walailak Journal of Science and Technology, 12(3): 245-250
7. Hassan Abu-Qaoud and **Munqez J Y Shtaya**. 2014. The effect of colchicine on adventitious shoot regeneration from cultured leaf explants of *Petunia hybrida*. British Biotechnology Journal, 4(5): 531-540
8. Alihan Cokkizgin and Munqez J. Y. Shtaya. 2013. Lentil: Origin, Cultivation Techniques, Utilization and Advances in Transformation. Agricultural Science, 1(1): 55-62
9. Basheer-Salimia, R., **M. Shtaya**, M. Awad, J. Abdallah and Y. Hamdan. 2013. Genetic diversity of faba bean genotypes using RAPD markers. Genetics and Molecular Research, 12 (3): 3314-3323. (**Q4:** Molecular biology)
10. Talal Al Barri and **Munqez J Y Shtaya**. 2013. Phenotypic characterization of faba bean (*Vicia faba* L.) landraces grown in Palestine. Journal of Agricultural Science, 5 (2): 110-117.
11. Omar Abo Baker and **Munqez J Y Shtaya**. 2013. Identification of resistant sources to crown rust (*Puccinia coronata*) in oat. An-Najah University Journal for Research (Natural Sciences), 27: 129 - 140.
12. Rezq Basheer-Salimia, Murad Awad, Yamen Hamdan and **Munqez Shtaya**. (2013). Genetic variability of some Palestinian fig (*Ficus carica* L.) genotypes based on pomological and morphological descriptors. An-Najah University Journal for Research (Natural Sciences), 27: 83 - 110.
13. **Munqez J. Y. Shtaya** and Fernando Martínez. 2011. Identification of QTL Involved in Resistance of Barley Seedling to Scald (*Rhynchosporium secalis*). Hebron University Research Journal (A), 5: 49-62
14. **Shtaya, M. J. Y.** 2009. Characterization of new sources of resistance in some Palestinian barley landraces against *Blumeria graminis* f.sp. *hordei* under controlled

and field conditions. Journal of Al-Azhar University-Gaza (Natural Science), 11: 51-58.

15. **Shtaya, M. J. Y.,** Sillero, J. C. and Rubiales, D. 2006. Search for resistance against *Blumeria graminis* f.sp. *hordei* in barley landraces from Fertile Crescent. Barley Newsletter, 49. http://wheat.pw.usda.gov/ggpages/BarleyNewsletter/49/

Supervision of MSc students:

1. **Thesis Title:** Identification of resistant sources to leaf rust and powdery mildew disease in oats
   Student name: Omar Issam Abu Baker
   Supervisor: Munqez Shtaya
   Year of graduation: 2011

2. **Thesis Title:** Phenotypic characterization of faba bean (*Vicia faba* L.) landraces grown in Palestine
   Student name: Talal Hassan Al Barri
   Supervisor: Munqez Shtaya
   Year of graduation: 2012

3. **Thesis Title:** Resistance of some tomato species to *Orobanche aegyptiaca* (Comparative study)
   Student name: Mohammad Suleiman Sawafta
   Supervisor: Munqez Shtaya
   Year of graduation: 2012

4. **Thesis Title:** In-vitro evaluation of acetylcholinesterase inhibition and antioxidant activity of selected Palestinian medicinal plants: Implications for Alzheimer's disease therapy
   Student name: Salam Yousef Abu Zaitoun
   Supervisor: Munqez Shtaya
   Year of graduation: 2014

5. **Thesis Title:** Assessment of biodiversity among Palestinian landraces of *Cucumis melo* L. groups based on morphological descriptors and molecular markers (RAPD and ISSR)
   Student name: Omar Bassam Mallah
   Supervisor: Munqez Shtaya
   Year of graduation: 2014

6. **Thesis Title:** Evaluation and Assessment of Growth, yield and uptake of Various non local Barley Cultivars Irrigated with Simulated Wastewater
   Student name: Zakiyeh S. Namrotee
   Supervisor: Marwan Haddad and Munqez Shtaya
   Year of graduation: 2016

7. **Thesis Title:** Environmental risk assessment and modelling of heavy metals uptake by barely irrigated with water containing heavy metals.

Student name: Doa'a Majed Nassar
Supervisor: Munqez Shtaya and Marwan Haddad
Year of graduation: 2017

8. **Thesis Title:** Evaluation of different Pearl millet ecotypes under saline conditions
Student name: Ihsan Abu Ali
Supervisor: Hassan Abu Qaoud and Munqez Shtaya
Year of graduation: 2018

9. **Thesis Title:** Study the morphological and agronomic variation of local and improved barley lines.
Student name: Tariq Abu Baker
Supervisor: Munqez Shtaya and Marwan Haddad
Year of graduation: 2019

10. **Thesis Title:** Characterization of novel sources of Fusarium resistance in Fakous (*Cucumis melo* subsp. *melo* var. *flexuosus*), by phytopathgological approaches
Student name: Imad Subhi Eid
Supervisor: Munqez Shtaya
Year of graduation: 2019

11. **Thesis Title:** Screening for genetic variation in the circadian clock in diverse barley collection
Student name: Abd Al-Raheem Hamdan
Supervisor: Munqez Shtaya and Marwan Haddad
Year of graduation: 2020

Teaching Experiences:

- Under graduate students (BSc): Protected agriculture, Principles of Genetics, Biotechnology, Entrepreneurship and Plant Breeding.
- Post graduate students (MSc): Plant biotechnology, Advanced plant breeding

Participation in research projects:

- Project title: Integrated European Project (FP6) Grain Legumes (New strategies to improve grain legumes for food and feed)

  Funded by: European Union

  Grant number: FP6-2002-FOOD-1-506223.

  Duration: 48 months (2004 – 2008).

  General Coordinator: Noel Ellis (JIC-UK)

  Local Coordinator: Munqez Shtaya

- Project title: Integrated oat production in the Mediterranean Basin under the Azahar Program: Physiological, phytopathological, and agronomical approaches.
  Funded by: Spanish Ministry of Economy and Competitivity
  Grant number: Ref. AGL2007-65031/AGR
  Duration: 36 months (2007 – 2010).
  General Coordinator: Elena Prats (IAS-CSIC)
  Local Coordinator: Munqez Shtaya

- Project title: Circadian clocks and stress adaptation in barley.
  Funded by: Deutsche Forschungsgemeinschaft (DFG)
  Grant number: 206837439
  Duration: 60 months (2011 –2017)
  General coordinator: Maria von Korf (Max Planck Institute for Plant Breeding, Köln)
  Local Coordinator: Munqez Shtaya

- Project title: Transforming Agriculture Curriculum and Training Practices – TACT
  Funded by: Ministry of Education and Higher Education (QIF).
  Grant number: C3-17-U-NNU-05
  Duration: 36 months (2017 –2020)
  General coordinator: Munqez Shtaya

- Project title: Utilization of speed breeding to produce climate-smart wheat lines to improve productivity and food security in dry areas.
  Funded by: AlQuds academy for scientific research
  Grant number: 2020/2019.2.9
  Duration: 24 months (2021 –2023)
  General coordinator: Munqez Shtaya

- Project title: Capacity Building in WASH and CSA Education and Research in Palestine.

Funded by: the Netherlands' Ministry of Foreign Affairs
Grant number: OKP-ICP-PAA-103455
Duration: 2019 –2023
Project director: Akeam Daoud
Coordinator: Munqez Shtaya

- Project title: Utilization of Speed Breeding to Produce Climate-Smart Wheat Lines to Improve Productivity and Food Security in Dry Areas.
  Funded by: Alquds Academy for Scientific Research
  Grant number: (2019.2.9 / 2020)
  Duration: 2021 –2023
  Project director: Munqez Shtaya

Courses/Conferences Attended

- Annual Conference Best Practice. Brighton, UK. 21-25 September 2019
- International Workshop on "Use of Genome Editing & Other New Breeding Technologies for Global Food Security" at COMSTECH, Islamabad. April 8-10, 2019
- Advanced course on Advances in breeding and agronomy for improving sustainability and quality of grain legume crops. Zaragoza, Spain. 16-20/10/2017
- International Visitor Leadership Program (IVLP) "Agricultural and Economic Development" August 24 - September 11, 2015.
- Food Security Prospects and Challenges Conference (FSPC-2014). Faculty of Agriculture and Veterinary Medicine, An-Najah National University, Nablus, Palestine. 30 October, 2014.
- The 6th International conference (Intellectual property rights in agriculture). Amman, Jordan. 18-19 September, 2012.
- The Scientific Conference for Agricultural Research (SCAR2012). Faculty of Agriculture, An-Najah National University, Nablus, Palestine. 25 March, 2012.
- The 1st international conference on olive in Palestine: Status and challenges. Tulkarm, Palestine. 8-10 February 2011.

- The 1st agricultural conference of the Agricultural Engineers Association (Agriculture in Palestine: Reality and Challenges), An-Najah National University, Nablus, Palestine. 23 December, 2009.
- The 1st workshop on: Horticultural productivity in Palestine: Current status and future challenges in education, outreach and applied research. Bethlehem University, 19-20 March, 2009.
- The 6th European Conference on grain legumes "Integrating Legume Biology for Sustainable Agriculture" Lisbon, Portugal. 12-16 November, 2007.
- The 6th Jordanian Agricultural Scientific Conference (Safe agriculture to human health and environment), Amman, Jordan, 9-12 April, 2007.

Other scientific activities:

- Membership of the editorial team for Journal of Plant Breeding and Genetics (http://escijournals.net/JPBG/index)
- Membership of the editorial team for Journal of Developmental Biology and Tissue Engineering (http://www.acadjourn.org/JDBTE/Email.htm).
- Trainer of 15 youth students in agriculture principles and agricultural practices. The project was organized by Nablus Municipality and in cooperation with The Glocal Forum. Nablus, Palestinian Territories. 2006-2007
- Trainer of 25 agricultural engineers in postharvest technology. Ministry of Agriculture, Tulkarm, Palestinian Territories. June 2007.

Skills:

A good knowledge of the following software systems:

- Windows (Microsoft word, PowerPoint and Excel).
- The Statistical Analysis System (SAS).
- MAPQTL version 5.0 modified from version 3.0.

Scholarships and Prizes:

- The International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), provided for a Specialized Post-Graduate Studies in Plant Breeding. 2000-2001.

- The Spanish Agency for International Cooperation (AECI), provided for Doctoral study. 2002-2005.
- The German Academic Exchange Service (DAAD) scholarship for short scientific visits, provided to study the circadian clock and stress adaptation in barley (*Hordeum vulgare* L.). 15th of June – 30th of July, 2009.
- An-Najah Award for High Impact Scientific Research, 2012.
- An-Najah Award for High Impact Scientific Research, 2013.
- Zamalah Fellowship for capacity building, 2014
- An-Najah Award for High Impact Scientific Research, 2015.
- An-Najah Award for High Impact Scientific Research, 2017.
- An-Najah Award for High Impact Scientific Research, 2018.
- An-Najah Award for High Impact Scientific Research, 2020.
- An-Najah Award for High Impact Scientific Research, 2021.
- An-Najah Research Production Award, 2021.
- An-Najah Award for High Impact Scientific Research, 2022.

Languages:

Language	**Speaking**	**Reading**	**Writing**
Arabic	*Mother tongue*		
English	Very Good	Very Good	Very Good
Spanish	Excellent	Excellent	Excellent