YASSER NEHELA, Ph.D.

Plant Pathologist | Vegetable Crop Pathology | Plant Health Innovator | Translational Research and Extension Specialist
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PROFESSIONAL PROFILE

Plant pathologist with more than 20 years of experience integrating applied research, extension, and teaching to address plant disease challenges in vegetable, specialty, field, and citrus cropping systems. My expertise spans plant disease epidemiology, host-pathogen interactions, diagnostics, and integrated disease management, combining classical plant pathology with advanced molecular and metabolomic approaches to develop science-based solutions for emerging and economically important diseases. My program emphasizes translational research that bridges fundamental discoveries with practical disease management strategies for growers and agricultural professionals. I have developed integrated management approaches for fungal and bacterial diseases affecting vegetable, fruit, cereal, and specialty crops, including tomato, pepper, onion, bean, strawberry, apple, rice, wheat, and citrus, in both field and protected production systems. Through collaborative extension, stakeholder engagement, diagnostic support, and interdisciplinary partnerships, I translate research into actionable recommendations that improve crop productivity, sustainability, and resilience. My long-term goal is to build a stakeholder-driven research and extension program that advances disease epidemiology, rapid diagnostics, and integrated disease management while addressing emerging plant health challenges threatening vegetable and ornamental production systems.

Research & Extension Interests

- Vegetable and ornamental crop pathology
- Plant disease epidemiology and integrated disease management
- Emerging and invasive plant pathogens
- Disease diagnostics and surveillance technologies
- Sustainable disease management in field and protected production systems
- Survey of specialty crop growers for IPM resource and diagnostic needs
- Translational research, Extension programming, and outreach activities
- Digital agriculture and decision-support tools for disease management
- Host-pathogen interactions and plant immunity

EDUCATION & TRAINING

- Ph.D., Plant Pathology Advisor: Dr. Nabil Killiny. **Dec. 2018**
University of Florida, Gainesville, FL, USA
- Dissertation: *Host-pathogen-vector interactions and metabolic responses in citrus Huanglongbing.*

- M.Sc., Plant Pathology Advisor: Dr. Hassan El-Zahaby. **Oct. 2012**
Tanta University, Tanta, Egypt
- Thesis: *Management of rice blast disease in Egyptian rice cultivars using agricultural practices*.

- B.Sc., Agriculture Science (Honors in Agriculture Science) **May 2004**
Tanta University, Tanta, Egypt.

ACADEMIC APPOINTMENTS & PROFESSIONAL EXPERIENCE

- Postdoctoral Research Associate January 2025 - Present
University of Florida, Citrus Research and Education Center (CREC), Lake Alfred, FL
- Lead translational research integrating molecular diagnostics, metabolomics, and field-based studies to advance sustainable management of citrus Huanglongbing (HLB).
- Develop and validate disease-management strategies, including optimization of OTC and other antimicrobial applications and residue monitoring, to support science-based recommendations for commercial citrus production.
- Collaborate with multidisciplinary teams on competitive grant proposals, extension programming, and research initiatives addressing emerging plant health challenges.
- Mentor next-generation researchers and contribute to collaborative research and stakeholder outreach.

- Associate Professor of Vegetable and Specialty Crop Pathology July 2024 - January 2025
Faculty of Agriculture, Tanta University, Egypt
- Led an integrated research and extension program addressing fungal and bacterial diseases of vegetable and specialty crops, emphasizing sustainable disease management and integrated pest management (IPM).
- Partnered with growers, agricultural service providers, and extension personnel to identify disease-management priorities and translate research findings into practical recommendations.
- Supervised graduate students, secured competitive research funding, and taught undergraduate and graduate courses in plant pathology.

- Assistant Professor of vegetable and cereal crop Pathology January 2022 - June 2024

Faculty of Agriculture, Tanta University, Egypt

- Established a multidisciplinary research and extension program focused on disease epidemiology, diagnostics, and integrated management of vegetable and cereal crop diseases.
- Provided leadership in regional disease surveillance initiatives, including coordination of yellow rust monitoring and development of grower-focused outreach and early-warning resources.
- Developed decision-support tools and science-based management strategies to improve disease diagnosis, surveillance, and sustainable crop protection.
- Expanded stakeholder engagement through extension workshops, field demonstrations, and diagnostic support for vegetable production systems.
- Built interdisciplinary collaborations, secured competitive funding, and mentored graduate students while delivering undergraduate and graduate instruction in plant pathology.

- Postdoctoral Research Associate January 2019 - December 2021

Department of Plant Pathology, University of Florida, Lake Alfred, FL

- Conducted interdisciplinary research on host-pathogen interactions, disease epidemiology, and sustainable management of citrus Huanglongbing using multi-omics, bioinformatics, and molecular biology approaches.
- Identified molecular and metabolic mechanisms associated with disease tolerance and evaluated novel plant defense inducers, including γ-aminobutyric acid (GABA) and melatonin, for HLB management.
- Designed and coordinated laboratory, greenhouse, and field experiments to evaluate disease-management strategies and support best management practices (BMPs) for Florida citrus production.
- Collaborated with faculty, industry partners, and extension specialists on research projects, scientific publications, and stakeholder engagement activities.

- Doctoral Researcher May 2016 - December 2018

Department of Plant Pathology, University of Florida, Gainesville, FL

- Investigated metabolic and physiological responses of citrus to Huanglongbing infection and its insect vector, integrating metabolomics, molecular biology, and plant pathology.
- Conducted laboratory and greenhouse research on host-pathogen-vector interactions and disease biology.
- Assisted in mentoring students and contributed to collaborative research, scientific publications, and outreach activities.

- Visiting Research Scholar March 2014 - May 2016

Citrus Research and Education Center, University of Florida, Lake Alfred, FL

- Conducted collaborative research on citrus-pathogen-vector interactions, contributing to multidisciplinary projects investigating the biology and management of Huanglongbing.

- Teaching Assistant / Assistant Lecturer January 2006 - March 2014

Department of Agricultural Botany, Faculty of Agriculture, Tanta University, Egypt

- Conducted research on the epidemiology and integrated management of rice blast disease while supporting undergraduate instruction in plant pathology and related disciplines.
- Assisted with laboratory and field instruction, curriculum delivery, and student mentoring.
- Contributed to departmental research, extension activities, and applied disease-management programs.

EXTENSION & OUTREACH EXPERIENCE

- **Extension And Outreach Overview**
  - Developed and delivered statewide, stakeholder-driven extension programs focused on plant disease diagnostics, integrated disease management, and technology transfer for growers, extension educators, crop consultants, and agricultural professionals across field and protected production systems, addressing emerging disease challenges and industry priorities.
  - Translated research discoveries into science-based, practical management recommendations through field demonstrations, workshops, digital decision-support tools, and diagnostic consultations, promoting sustainable crop production and informed disease-management decisions.
  - Fostered partnerships with growers, industry representatives, extension educators, and commodity organizations through agricultural exhibitions, field events, and outreach programs to facilitate knowledge exchange, promote adoption of emerging disease-management strategies, and strengthen stakeholder engagement.
- **Disease Surveillance, Diagnostics, and Grower Support**
  - Regional **Yellow Rust Surveillance Committee Member** (2022-2023).
  - Conducted **20+ field disease surveillance surveys** across major wheat-growing regions and interacted with 200+ growers to monitor disease occurrence and support early detection and management.
  - Provided **500+ disease diagnostic consultations** and integrated disease-management recommendations, supporting timely and evidence-based crop protection decisions.

- **Digital Extension and Decision-Support Tools**
  - Developed the '**Mentoring Interactive System for Stripe Rust (MISSR)**', a mobile-based decision-support platform for wheat stripe rust diagnosis, surveillance, and disease management.
  - Trained **20+ extension agents** on implementation of MISSR to strengthen regional disease surveillance and extension delivery (2024)
  - Delivered digital extension training to **150+ growers**, promoting adoption of decision-support technologies and best management practices for wheat disease management (2024).

- **Field Days and Agricultural Outreach Events** (5)
  - Organized and delivered extension field days and professional training programs focused on integrated disease management in vegetable, cereal, and ornamental production systems, including:-
    - Common Bean Field Day, Egypt (2022) **120+ participants.**
    - Greenhouse Tomato Production Field Day, Egypt (2022) **45+ participants.**
    - Rice Field Day, Egypt (2023) **65+ participants.**
  - Participated in stakeholder engagement and agricultural technology outreach, fostering interactions with growers, industry representatives, and extension professionals, including:-
    - Sahara International Agricultural Exhibition Egypt (2022-2024)
    - Citrus Expo FL, USA (several years)

- **Workshops and Professional Training** (3)
  - Integrated Management of Tomato Diseases Workshop Egypt (2022) **20+ trainees**.
  - Best Management Practices for Wheat Rusts Workshop Egypt (2023) **35+ trainees.**
  - Ornamental Plant Disease Management Workshop Egypt (2023) **40+ trainees.**

- **STEM, Youth, and Community Outreach**
  - Contributed to **4-H Youth Development** through plant pathology education and STEM outreach.
  - Delivered the outreach presentation "*Plants Get Sick Too*" to approximately **100+ third-grade students** at Eagle Lake Elementary School (Florida, 2026), promoting awareness of plant health, agriculture, and careers in plant sciences.

- **Extension Impact Highlights**
  - 500+ grower consultations and disease diagnoses.
  - 200+ growers engaged through disease surveillance and field activities.
  - 150+ growers trained through digital extension programming.
  - 20+ extension agents trained in mobile decision-support technologies.
  - Developed and implemented one mobile decision-support platform (MISSR) for disease surveillance and management.

MENTORING EXPERIENCE

- Supervised and co-supervised (11) MSc and PhD students conducting research in plant disease epidemiology, vegetable and specialty crop pathology, host-pathogen interactions, biological control, nanotechnology-based disease management, and sustainable crop protection.

- Completed Graduate Students (3)

- **Souzan Abd Elwahab**, MS.c., Tanta University, Egypt (*Supervisor*, 2026)
  Thesis title: "Integrative Multi-Omics Insights into *Sclerotinia sclerotiorum*-Bean Interactions and the Role of Pipecolic acid in Inducing Host Defense Mechanisms"

- **Aya Abdelhalim**, MS.c., Tanta University, Egypt (*Co-advisor*, 2024)
  Thesis title: "Control of Postharvest Gray Mold of Apple Fruits Caused by *Botrytis Cinerea*"

- **Mohamed Hassan**, MS.c., Tanta University, Egypt (*External examiner*, 2024)
  Thesis title: "Control of Potato Dry Rot Disease Caused by *Fusarium Incarnatum* Under Normal and Cold Conditions Using Some Plant Extracts."

- Ongoing Graduate Research Supervision

- ***PhD Students*** (3)
  - **El-Gali Salman:** Host-pathogen interactions and resistance mechanisms in rice sheath blight. (Expected 2027).
  - **Eman Fathy:** Genetics and breeding for yellow rust resistance in wheat. (Expected 2027).
  - **Aya Abdelhalim:** Gene-specific therapeutics for sustainable management of strawberry diseases. (Expected 2028).

- ***MSc Students*** (5)
  - **Mohamed El-Qady:** Induced resistance mechanisms against onion purple blotch disease. (Expected 2026).
  - **Asmaa Hassan:** Plant extracts and biological control strategies for maize and sorghum diseases. (Expected 2026).
  - **Dunya Shahdi:** Nanomaterial applications for management of leaf spot diseases in pea. (Expected 2026).
  - **Aya Emara:** *Trichoderma*-based biocontrol approaches against *Septoria*-infected potato. (Expected 2027).
  - **Badiaa Negm:** Integrated management of foliar diseases in legume crops. (Expected 2027).

TEACHING EXPERIENCE

- Contributed to the development and accreditation of the 'Graduate Studies By-Laws' for M.Sc. and Ph.D. programs in plant pathology, Faculty of Agriculture, Tanta University (2023).

- Designed and developed experiential curricula integrating laboratory diagnostics, field disease assessment, and evidence-based disease management (Spring 2022–Fall 2024).

- Developed and delivered undergraduate and graduate courses in plant pathology, integrating classical pathology, molecular diagnostics, host-pathogen interactions, and field-based disease management approaches, including:-

- **Undergraduate level** (2)
  - PLP 322 General Plant Pathology (3 Credits) Spring 22, Spring 23, and Spring 24.
  - PLP 563 Disease Diagnostics (3 Credits) Spring 22, Spring 23, and Spring 24.

- **Graduate level** (5)
  - PLP 062702 Host-parasite interactions (3 Credits) Fall 22 and Fall 23.
  - PLP 062703 Fungi and fungi-like plant diseases (3 Credits) Fall 24.
  - PLP 062704 Bacterial plant diseases (3 Credits) Fall 22.
  - PLP 062803 Field-crops diseases (3 Credits) Spring 22, and Spring 24.
  - PLP 062807 Rusts and smuts (3 Credits) Spring 23 and Fall 24.

GRANTS & FUNDING AWARDED

- **Grants Awarded** (Total ~10 Millions Egyptian pounds [EGP] ~ $192.000)

  - Grant No. RGP. 2/295/46 Total ~2.5M EGP (~$48.000)
  Nehela, Y. (Co-PI), Mazrou, Y. S. (PI), et al., 2025. King Khalid University, KSA.

  - Grant No. RGP. 2/249/45 Total ~2.5M EGP (~$48.000)
  Nehela, Y. (Co-PI), Mazrou, Y. S. (PI), et al., 2024. King Khalid University, KSA.

  - Grant No. RGP. 2/386/44 Total ~2.5M EGP (~$48.000)
  Nehela, Y. (Co-PI), Mazrou, Y. S. (PI), et al., 2023. King Khalid University, KSA.

  - Grant No. RGP. 2/67/43 Total ~2.5M EGP (~$48.000)
  Nehela, Y. (Co-PI), Mazrou, Y. S. (PI), et al., 2022. King Khalid University, KSA.

- **Other Fundings Awarded**

  - Egyptian Ministry of Higher Education and Scientific Research Award (2014) (Total ~$100,000)
  Awarded competitive funding supporting a 24-month "Joint-supervision scholarship" at the UF-CREC, covering the monthly stipend, health insurance, bench fees, and related research expenses.

PUBLICATIONS (75+) (Google Scholar Citations = 3014, h-index = 30, As of July 18, 2026)

2026 (8)

Nehela, Y. & Killiny, N. (2026). Revisiting SA biosynthesis: new post-PAL route in plant immunity. *Trends in Plant Science*. Online first, https://doi.org/10.1016/j.tplants.2026.03.011

Nehela, Y., & Killiny, N. (2026). Not just a cycle: mitochondrial *CsgabD* is involved in GABA metabolism during citrus defense against biotic stress. *Plant Molecular Biology*, 116(1), 11. https://doi.org/10.1007/s11103-025-01673-8

Nehela, Y., Vincent, C., Heck, M., & Killiny, N. (2026). A sensitive HPLC method for quantitative determination of oxytetracycline and its structural analogues to support residue monitoring in disease-managed crops. *Environmental Research*, 123755. https://doi.org/10.1016/j.envres.2026.123755

Nehela, Y., Mazrou, Y. S., El_Gammal, N. A., El-Khamisy, R. R., Makhlouf, A. H., & Hussain, W. A. (2026). Humic substances and folic acid supplementation enhance soil health and boost tomato growth and response against *Alternaria alternata*. *Pedosphere*. Online first, https://doi.org/10.1016/j.pedsph.2026.02.007

Nehela, Y., Mazrou, Y. S., El_Gammal, N. A., El-Khamisy, R. R., Soliman, H. M., Mohammed, A. A., Makhlouf, A. H., Al-Sawy, A. I., & Hussain, W. A. (2026). Humic Substances and Folic Acid Reduce Fungicide Inputs, Maintain Effective Control of *Alternaria alternata*, and Support Tomato Performance and Agroecosystem Health. *Plant and Soil*, (Accepted). https://doi.org/10.1007/s11104-026-08727-w

Youssif, S. F., Hussain, W. A., El-Zahaby, H. M., & **Nehela, Y.** (2026). Characterization and Molecular Identification of *Sclerotinia Sclerotiorum* Isolates Causing White Mold of Bean in the Nile Delta, Egypt. *Journal of Sustainable Agricultural and Environmental Sciences*, 5(1), 50-60. https://doi.org/10.21608/jsaes.2026.449284.1193

Shilts, T., **Nehela, Y.**, & Killiny, N. (2026). Dissecting aphid transmission determinants in *Citrus Tristeza Virus* using chimeric viruses and gene substitutions. *Virology*, 110928. https://doi.org/10.1016/j.virol.2026.110928

El-Sagheer, A. M., Mazrou, Y. S., Hifney, A. F., Salem, S. H., **Nehela, Y.**, & Abdel-Wahab, D. A. (2026). Synergistic effects of *Paecilomyces* sp. and *Padina boergesenii* on sweet pepper growth under stress of the root-knot nematode, *Meloidogyne javanica*. *J Soil Science and Plant Nutrition*, 1-20. https://doi.org/10.1007/s42729-025-02973-0

2025 (5)

Nehela, Y., & Killiny, N. (2025). *In silico* characterization, structural modeling, and molecular docking of *GabP* in citrus and its potential role in GABA uptake. Scientific Reports, 15, 23919. https://doi.org/10.1038/s41598-025-07447-y

Nehela, Y., Mazrou, Y.S., EL_Gammal, N.A., Atallah, O., Abdelrhim, A.S., Kumar, S., Ahmed, T., Ali, Q., Makhlouf, A.H., & Hussain, W.A. (2025). Ornithine enhances common bean growth and defense against white mold disease via interfering with *SsOAH* and diminishing the biosynthesis of oxalic acid in *Sclerotinia sclerotiorum*. Frontiers in Plant Science, 16, 1483417. https://doi.org/10.3389/fpls.2025.1483417

Kalboush, Z. A., Mazrou, Y. S., Hassan, A. A., Abd El Badeea, O., & **Nehela, Y.** (2025). Oil-in-Water Nano-Emulsions Boost Rice Innate Immune Response Against *Pyricularia oryzae* via the Induction of Salicylic Acid-Mediated Pathway and the Enhancement of Antioxidant Machinery. Plant Stress, 100889. https://doi.org/10.1016/j.stress.2025.100889

Killiny, N., **Nehela, Y.**, Hijaz, F., Rashidi, M., & Jones, S. E. (2025). *Galleria mellonella* possesses the essential nutritional needs to host the fastidious Huanglongbing bacterial pathogen '*Candidatus* Liberibacter asiaticus'. Communications Biology, 8(1), 1398. https://doi.org/10.1038/s42003-025-08802-5

Killiny, N., **Nehela, Y.**, Hajeri, S., Gowda, S., & Stelinski, L. L. (2025). Virus-induced gene silencing simultaneously exploits 'attract and kill' traits in plants and insects to manage huanglongbing. Horticulture Research, 12(2), uhae311. https://doi.org/10.1093/hr/uhae311

2024 (6)

Nehela, Y., Mazrou, Y.S., El_Gammal, N.A., Atallah, O., Xuan, T.D., Elzaawely, A.A., El-Zahaby, H.M., Abdelrhim, A.S., Behiry, S.I., Hafez, E.M., Makhlouf, A.H., & Hussain, W. A. M. (2024). Non-proteinogenic amino acids mitigate oxidative stress and enhance the resistance of common bean plants against *Sclerotinia sclerotiorum*. Frontiers in Plant Science, 15, p.1385785. https://doi.org/10.3389/fpls.2024.1385785

Kalboush, Z. A., Mazrou, Y. S., Hassan, A. A., Sherif, A., Gabr, W. E., Ali, Q., & **Nehela, Y.** (2024). Revisiting the emerging pathosystem of rice sheath blight: deciphering the *Rhizoctonia solani* virulence, host range, and rice genotype-based resistance. Frontiers in Plant Science, 15, 1499785. https://doi.org/10.3389/fpls.2024.1499785

Kalboush, Z.A., Mazrou, Y.S., Elzan, S.H., Zanaty, E.M., Gazzy, A.A., Gomaa, M.B., Makhlouf, A.H. & **Nehela, Y.**, (2024). Regional Propolis Extracts Suppress *Fusarium fujikuroi* and Boost Rice Seedling Growth and Response against Bakanae Disease. Plant Stress, p.100610. https://doi.org/10.1016/j.stress.2024.100610

Abdelhalim, A., Mazrou, Y.S., Shahin, N., El-Kot, G.A., Elzaawely, A.A., Maswada, H.F., Makhlouf, A.H. & **Nehela, Y.**, (2024). Enhancing the Storage Longevity of Apples: The Potential of *Bacillus subtilis* and *Streptomyces endus* as Preventative Bioagents against Post-Harvest Gray Mold Disease, Caused by *Botrytis cinerea*. Plants, 13(13), 1844. https://doi.org/10.3390/plants13131844

Atallah, O., Hassanin, A., Yassin, S.M., Aloufi, A.S., Almanzalawi, E.A., Abdelkhalek, A., Atia, M.M., Behiry, S., Abdelrhim, A.S. & **Nehela, Y.** (2024). Pathological characterization and management of *Lasiodiplodia theobromae*, a hemi-biotroph with an interkingdom host range. Plant Disease, 108(11), 3243-3257. https://doi.org/10.1094/PDIS-03-24-0713-RE

Killiny, N., **Nehela, Y.**, Hajeri, S., Gowda, S., & Stelinski, L. L. (2024). Virus-Induced Gene Silencing Simultaneously Exploits 'Attract and Kill' Traits in Plants and Insects to Manage Huanglongbing. Horticulture Research, uhae311. https://doi.org/10.1093/hr/uhae311

2023 (7)

Nehela, Y., & Killiny, N. (2023). Gamma-Aminobutyric Acid Accumulation Contributes to *Citrus sinensis* Response against '*Candidatus* Liberibacter Asiaticus' via Modulation of Multiple Metabolic Pathways and Redox Status. Plants, 12(21), 3753. https://doi.org/10.3390/plants12213753

Nehela, Y., & Killiny, N. (2023). Gamma-Aminobutyric Acid Supplementation Boosts the Phytohormonal Profile in '*Candidatus* Liberibacter asiaticus'-Infected Citrus. Plants, 12(20), 3647. https://doi.org/10.3390/plants12203647

Nehela, Y., Mazrou, Y. S., Taha, N. A., Elzaawely, A. A., Xuan, T. D., Makhlouf, A. H., & El-Nagar, A. (2023). Hydroxylated Cinnamates Enhance Tomato Resilience to *Alternaria alternata*, the Causal Agent of Early Blight Disease, and Stimulate Growth and Yield Traits. *Plants*, *12*(9), 1775. https://doi.org/10.3390/plants12091775

El-Nagar, A., Elzaawely, A. A., El-Zahaby, H. M., Xuan, T. D., Khanh, T. D., Gaber, M., ... & **Nehela, Y.** (2023). Benzimidazole Derivatives Suppress Fusarium Wilt Disease via Interaction with *ERG6* of *Fusarium equiseti* and Activation of the Antioxidant Defense System of Pepper Plants. *Journal of Fungi*, *9*(2), 244. https://doi.org/10.3390/jof9020244

Osman, H. E., **Nehela, Y.,** Elzaawely, A. A., El-Morsy, M. H., & El-Nagar, A. (2023). Two Bacterial Bioagents Boost Onion Response to *Stromatinia cepivora* and Promote Growth and Yield via Enhancing the Antioxidant Defense System and Auxin Production. *Horticulturae*, *9*(7), 780. https://doi.org/10.3390/horticulturae9070780

Abo-Elwafa, T. M., Ragab, S. S. M., **Nehela, Y.,** & Essa, T. A. (2023). First report of strawberry anthracnose caused by *Colletotrichum nymphaeae* in Egypt. *New Disease Reports*, *48*(1), e12205. https://doi.org/10.1002/ndr2.12205

Abdallah, Y., **Nehela, Y.,** Ogunyemi, S. O., Ijaz, M., Ahmed, T., Elashmony, R., ... & Li, B. (2023). Bio-functionalized nickel-silica nanoparticles suppress bacterial leaf blight disease in rice (*Oryza sativa* L.). *Frontiers in Plant Science*, *14*. https://doi.org/10.3389/fpls.2023.1216782

2022 (7)

Nehela, Y., & Killiny, N. (2022). Not Just a Cycle: Three *gab* genes Enable the Non-cyclic Flux Toward Succinate Via GABA Shunt in '*Candidatus* Liberibacter asiaticus'-infected citrus. Molecular Plant-Microbe Interactions, 35 (3), 200-214. https://doi.org/10.1094/MPMI-09-21-0241-R.

El-Nogoumy, B. A., Salem, M. A., El-Kot, G. A., Hamden, S., Sehsah, M. D., Makhlouf, A. H., & **Nehela, Y.** (2022). Evaluation of the Impacts of Potassium Bicarbonate, *Moringa oleifera* Seed Extract, and *Bacillus subtilis* on Sugar Beet Powdery Mildew. *Plants*, *11*(23), 3258. https://doi.org/10.3390/plants11233258

Shahin, A., Mazrou, Y.S., Omara, R.I., Hermas, G., Gad, M., Mabrouk, O.I., Abd-Elsalam, K.A. & **Nehela, Y.** (2022). Geographical Correlation and Genetic Diversity of Newly Emerged Races within the Ug99 Lineage of Stem Rust Pathogen, *Puccinia graminis* f. sp. *tritici*, in Different Wheat-Producing Areas. Journal of Fungi, 8(10), 1041. https://doi.org/10.3390/jof8101041.

El-Nagar, A., Elzaawely, A. A., Xuan, T. D., Gaber, M., El-Wakeil, N., El-Sayed, Y., & **Nehela, Y.** (2022). Metal Complexation of Bis-Chalcone Derivatives Enhances Their Efficacy against Fusarium Wilt Disease, Caused by *Fusarium equiseti*, via Induction of Antioxidant Defense Machinery. Plants, 11(18), 2418. https://doi.org/10.3390/plants11182418

Dutt, M., Mahmoud, L. M., **Nehela, Y.**, Grosser, J. W., & Killiny, N. (2022). The *Citrus sinensis* TILLER ANGLE CONTROL 1 (*CsTAC1*) gene regulates tree architecture in sweet oranges by modulating the endogenous hormone content. Plant Science, 323, 111401. https://doi.org/10.1016/j.plantsci.2022.111401.

Atallah, O. O., Mazrou, Y. S., Atia, M. M., **Nehela, Y.**, Abdelrhim, A. S., & Nader, M. M. (2022). Polyphasic Characterization of Four *Aspergillus* Species as Potential Biocontrol Agents for White Mold Disease of Bean. Journal of Fungi, 8(6), 626. https://doi.org/10.3390/jof8060626.

Omara, R. I., Mazrou, Y. S., Elsayed, A., Moawad, N., **Nehela, Y.**, & Shahin, A. A. (2022). MISSR: A Mentoring Interactive System for Stripe Rust. Agronomy, 12(10), 2416. https://doi.org/10.3390/agronomy12102416.

2021 (10)

Nehela, Y., & Killiny, N. (2021). *Diaphorina citri* Genome Possesses a Complete Melatonin Biosynthesis Pathway Differentially Expressed under the Influence of the Phytopathogenic Bacterium, *Candidatus* Liberibacter asiaticus. Insects, 12(4), 317. https://doi.org/10.3390/insects12040317

Nehela, Y., Taha, N. A., Elzaawely, A. A., Xuan, T. D., Amin, M. A., Ahmed, M. E., & El-Nagar, A. (2021). Benzoic Acid and Its Hydroxylated Derivatives Suppress Early Blight of Tomato (*Alternaria solani*) via the Induction of Salicylic Acid Biosynthesis and Enzymatic and Nonenzymatic Antioxidant Defense Machinery. Journal of Fungi, 7(8), 663. https://doi.org/10.3390/jof7080663

Killiny, N., **Nehela, Y.,** George, J., Rashidi, M., Stelinski, L. L., & Lapointe, S. L. (2021). Phytoene desaturase-silenced citrus as a trap crop with multiple cues to attract *Diaphorina citri*, the vector of Huanglongbing. Plant Science, 308, 110930. https://doi.org/10.1016/j.plantsci.2021.110930

Hijaz, F., **Nehela, Y.,** Batuman, O., & Killiny, N. (2021). Citrate Mediated Europium-Based Detection of Oxytetracycline in Citrus Tissues. Antibiotics, 10(5), 566. https://doi.org/10.3390/antibiotics10050566

Hijaz, F., **Nehela, Y.,** Gonzalez-Blanco, P., & Killiny, N. (2021). Development of Europium-Sensitized Fluorescence-Based Method for Sensitive Detection of Oxytetracycline in Citrus Tissues. Antibiotics, 10(2), 224. https://doi.org/10.3390/antibiotics10020224

Hijaz, F., **Nehela, Y.,** Batuman, O., & Killiny, N. (2021). Detection of Oxytetracycline in Citrus Phloem and Xylem Saps Using Europium-Based Method. Antibiotics, 10, 1036. https://doi.org/10.3390/antibiotics10091036

Omara, R.I., **Nehela, Y.,** Mabrouk, O.I., & Elsharkawy, M.M. (2021). The Emergence of New Aggressive Leaf Rust Races with the Potential to Supplant the Resistance of Wheat Cultivars. Biology, 10, 925. https://doi.org/10.3390/biology10090925

Abdelrhim, A. S., Mazrou, Y. S., **Nehela, Y.,** Atallah, O. O., El-Ashmony, R. M., & Dawood, M. F. (2021). Silicon Dioxide Nanoparticles Induce Innate Immune Responses and Activate Antioxidant Machinery in Wheat Against *Rhizoctonia solani*. Plants, 10(12), 2758. https://doi.org/10.3390/plants10122758

Abdelkhalek, A., Qari, S. H., Abu-Saied, M. A. A. R., Khalil, A. M., Younes, H. A., **Nehela, Y.,** & Behiry, S. I. (2021). Chitosan Nanoparticles Inactivate *Alfalfa Mosaic Virus* Replication and Boost Innate Immunity in *Nicotiana glutinosa* Plants. Plants, 10(12), 2701. https://doi.org/10.3390/plants10122701

Omar, G. E., Mazrou, Y. S., El-Kazzaz, M. K., Ghoniem, K. E., Ashmawy, M. A., Emeran, A. A., ... & **Nehela, Y.** (2021). Durability of Adult Plant Resistance Gene Yr18 in Partial Resistance Behavior of Wheat (*Triticum aestivum*) Genotypes with Different Degrees of Tolerance to Stripe Rust Disease, Caused by *Puccinia striiformis* f. sp. *tritici*: A Five-Year Study. Plants, 10(11), 2262. https://doi.org/10.3390/plants10112262

Before 2021 (21)

Nehela, Y. & Killiny, N. (2020). Melatonin is involved in citrus response to the pathogen Huanglongbing via modulation of phytohormonal biosynthesis. Plant Physiology, 184(4), 2216-2239. https://doi.org/10.1104/pp.20.00393

Nehela, Y. & Killiny, N. (2019). *Candidatus* Liberibacter asiaticus' and its vector, *Diaphorina citri*, augment the tricarboxylic acid cycle of their host via the γ-Aminobutyric acid shunt and polyamines pathway. Molecular Plant-Microbe Interactions 32 (4): 413–427. https://doi.org/10.1094/MPMI-09-18-0238-R

Nehela, Y. & Killiny, N. (2018). Infection with phytopathogenic bacterium inhibits melatonin biosynthesis, decreases longevity of its vector, and suppresses the free radical-defense. Journal of Pineal Research 65(3): e12511. https://doi.org/10.1111/jpi.12511

Nehela, Y., Hijaz, F., Elzaawely, A. A., El-Zahaby, H. M., & Killiny, N. (2018). Citrus phytohormonal response to *Candidatus* Liberibacter asiaticus and its vector *Diaphorina citri*. Physiological and Molecular Plant Pathology 102: 24-35. http:/doi.org/10.1016/j.pmpp.2017.11.004

Nehela, Y., Hijaz, F., Elzaawely, A. A., El-Zahaby, H. M., & Killiny, N. (2016). Phytohormone profiling of the sweet orange (Citrus sinensis (L.) Osbeck) leaves and roots using GC-MS-based method. Journal of Plant Physiology, 199: 12-17. http://doi.org/10.1016/j.jplph.2016.04.005

Killiny, N., **Nehela, Y.**, Hijaz, F., Gonzalez-Blanco, P., Hajeri, S., & Gowda, S. (2020). Knock-down of δ-aminolevulinic acid dehydratase via virus-induced gene silencing alters the microRNA biogenesis and causes stress-related reactions in citrus plants. Plant Science, 299, 110622. https://doi.org/10.1016/j.plantsci.2020.110622

Killiny, N., Jones, S.E., Hijaz, F., Kishk, A., Santos-Ortega, Y., **Nehela, Y.**, Omar, A.A., Yu, Q., Gmitter, F.G., Grosser, J.W. & Dutt, M. (2020). Metabolic Profiling of Hybrids Generated from Pummelo and *Citrus latipes* in Relation to Their Attraction to *Diaphorina citri*, the Vector of Huanglongbing. Metabolites, 10(12), 477. https://doi.org/10.3390/metabo10120477

Killiny, N. & **Nehela, Y.** (2019). Abscisic acid deficiency caused by phytoene desaturase silencing is associated with dwarfing syndrome in citrus. Plant Cell Reports 38(8): 965–980. https://doi.org/10.1007/s00299-019-02418-w.

Killiny, N., **Nehela, Y.**, Hijaz, F., Ben-Mahmoud, S.K., Hajeri, S., & Gowda, S. (2019). *Citrus tristeza virus*-based induced gene silencing of phytoene desaturase is more efficient when antisense orientation is used. Plant Biotechnology Reports 13(2): 179–192. https://doi.org/10.1007/s11816-019-00529-0

Killiny, N., Hijaz, F., Al-Rimawi, F., **Nehela, Y.**, & Batuman, O. (2019). Translocation of Oxytetracycline in Citrus Plants after Root Drench and Stem Delivery. Proceedings of the Florida State Horticultural Society 132:68-71.

Killiny, N., **Nehela, Y.**, Hijaz, F., & Vincent, C. I. (2018). A plant pathogenic bacterium exploits the tricarboxylic acid cycle metabolic pathway of its insect vector. Virulence 9(1): 99-109. http://doi.org/10.1080/21505594.2017.1339008

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El-Nagar, A., Elzaawely, A. A., Taha, N. A., & **Nehela, Y.** (2020). The Antifungal Activity of Gallic Acid and Its Derivatives against *Alternaria solani*, the Causal Agent of Tomato Early Blight. Agronomy, 10(9), 1402. https://doi.org/10.3390/agronomy10091402

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Review articles, Editorials, and Book chapters (11)

Nehela, Y. & Killiny, N. (2026). Revisiting SA biosynthesis: new post-PAL route in plant immunity. *Trends in Plant Science*. Online first, https://doi.org/10.1016/j.tplants.2026.03.011

Nehela, Y., Atallah, O., Dang Xuan, T., & Elzaawely, A. A. (2023). Exploring metabolic-based host-pathogen interactions. *Frontiers in Plant Science*, *14*, 1247913. https://doi.org/10.3389/fpls.2023.1247913

Nehela, Y., & Killiny, N. (2020). Revisiting the Complex Pathosystem of Huanglongbing: Deciphering the Role of Citrus Metabolites in Symptom Development. Metabolites, 10(10), 409. https://doi.org/10.3390/metabo10100409

Nehela, Y., & Killiny, N. (2020). The unknown soldier in citrus plants: polyamines-based defensive mechanisms against biotic and abiotic stresses and their relationship with other stress-associated metabolites. Plant Signaling & Behavior, 1761080. https://doi.org/10.1080/15592324.2020.1761080

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Ahmed, T., Janssen, D., & **Nehela, Y.** (2025). Editorial: Innovative strategies for enhancing plant resilience to phytopathogenic microbes. *Frontiers in Plant Science*, *16*, 1632709. https://doi.org/10.3389/fpls.2025.1632709

Ali, Q., Zheng, H., Rao, M. J., Ali, M., Hussain, A., Saleem, M. H., **Nehela, Y.,** Sohail, M. A., Ahmed, A. M., Kubar, K. A. and Ali, S., Usman, K., Manghwar, H., & Zhou, L. (2022). Advances, limitations, and prospects of biosensing technology for detecting phytopathogenic bacteria. *Chemosphere*, *296*, 133773. https://doi.org/10.1016/j.chemosphere.2022.133773

Kumar, S., Arutselvan, R., Greeshma, K., Bodhankar, S., Akash, A.U., Prasad, V.S.S.K., **Nehela, Y.**, Singh, U.B., Bhupenchandra, I., Sen, A. & Rajput, L.S., (2024). Unraveling the Seed Bio-priming Contours for Managing Plant Health. Journal of Plant Growth Regulation, pp.1-50. https://doi.org/10.1007/s00344-024-11277-z

Kumar, S., Behera, L., Kumari, R., Bag, D., Sowmya, V., Keswani, C., Minkina, T., Bouket, A.C., Dutta, P., **Nehela, Y.** & Singh, U.B., (2024). Unraveling the role of antimicrobial peptides in plant resistance against phytopathogens. Discover Sustainability, 5(1), p.243. https://doi.org/10.1007/s43621-024-00456-3

Kumar, S., Korra, T., Thakur, R., Arutselvan, R., Kashyap, A.S., **Nehela, Y.**, Chaplygin, V., Minkina, T. & Keswani, C. (2023). Role of Plant Secondary Metabolites in Defence and Transcriptional Regulation in Response to Biotic Stress. *Plant Stress*, 100154. https://doi.org/10.1016/j.stress.2023.100154

Kumar, S., Anjali, Arutselvan, R., Verma, R., Pattanayak, S., Bouket, A.C., **Nehela, Y.**, Malviya, D., & Singh, U.B. (2025). Biocontrol Agents-Mediated Management of Air-Borne Plant Diseases. In *Detection, Diagnosis and Management of Air-Borne Diseases in Agricultural Crops* (pp. 189-208). Singapore: Springer Nature Singapore.

PROFESSIONAL TALKS & PRESENTATIONS

Invited Talks and Seminars (5)

Nehela, Y. Melatonin as a cross-kingdom metabolic hub coordinates vector fitness and host immunity in the Huanglongbing pathosystem. CREC-UF/IFAS Friday Morning Seminar Series, Lake Alfred, Florida, USA. April 2026. (*Invited Seminar*)

Nehela, Y. Broad-spectrum plant defense activation for sustainable management of specialty and vegetable crop diseases in protected production systems. Permanent Scientific Committee for Plant Protection and Plant Pathology, Ministry of Higher Education and Scientific Research, Egypt. June 2024. (*Invited Talk*)

Nehela, Y. Beauty and the Beast: Disease of ornamental plants. Horticultural Sciences Department Seminar Series, Faculty of Agriculture, Tanta University, Tanta, Egypt. May 2023. (*Invited Talk*)

Nehela, Y. Epidemiology of wheat rust diseases in Egyptian production systems. Agronomy Department Seminar Series, Faculty of Agriculture, Tanta University, Tanta, Egypt. March 2022. (*Invited Talk*)

Nehela, Y. Metabolic responses of citrus plants to the bacterial pathogen '*Candidatus* Liberibacter asiaticus' and its insect vector *Diaphorina citri*. CREC-UF/IFAS, Lake Alfred, Florida, USA. Oct. 2018. (*PhD Exit seminar*)

Oral Presentations (6)

Nehela, Y. Roles of melatonin in the Huanglongbing pathosystem. Plant Pathology Research and Professional Development Symposium, GCREC-UF/IFAS, Wimauma, Florida, USA. May 2026. (*Oral Presentation*)

Nehela, Y., Hussain, W.A.M., and El-Gammal, N.A. Non-proteinogenic amino acids and diamines stimulate bean responses to Sclerotinia white rot disease via enhancing the non-cyclic flux toward succinate from the GABA shunt. 5th International Environmental Forum: Smart Environment Towards Climate Changes, Tanta University, Tanta, Egypt. October 2022. (*Oral Presentation*)

Nehela, Y., and Killiny, N. '*Candidatus* Liberibacter asiaticus' alters the TCA cycle of its host plant via the GABA shunt and polyamine pathways. 16th Biennial Florida Phytopathological Society Meeting, Lake Alfred, Fl, USA, May 2019. (*Oral Presentation*)

Nehela, Y., and Killiny, N. Citrus phytohormonal crosstalk in the presence of '*Candidatus* Liberibacter asiaticus'. CREC-UF/IFAS Seminar Series, Lake Alfred, Florida, USA. September 2017. (*Oral Presentation*)

Nehela, Y., and Killiny, N. Developing a GC/MS-based method for phytohormone profiling of *Citrus sinensis* tissues. 15th Biennial Florida Phytopathological Society Meeting, Quincy, Florida, USA. May 2017. (*Oral Presentation*)

Nehela, Y., and Killiny, N. Effect of infection with '*Candidatus* Liberibacter asiaticus' and/or infestation with the Asian citrus psyllid on phytohormonal balance in citrus plants. 4th International Research Conference on Huanglongbing (IRCHLB IV), Orlando, Florida, USA. February 2015. (*Oral Presentation*)

Poster Presentations (13)

Nehela, Y., and Killiny, N. Reprogramming vector circadian rhythms: Targeting melatonin biosynthesis in *Diaphorina citri* to disrupt '*Candidatus* Liberibacter asiaticus' transmission. EPI Research Day 2026, Emerging Pathogens Institute, Gainesville, Florida, USA. April 2026. (Poster Presentation)

Nehela, Y., and Killiny, N. Not just a cycle: Structural and functional characterization of *CsgabP* and its role in GABA metabolism and citrus defense response to Huanglongbing. Plant Health 2025: Annual Meeting of the American Phytopathological Society (APS), Honolulu, Hawaii, USA. August 2025. (Poster Presentation)

Nehela, Y., and Killiny, N. Three *gab* genes facilitate shifting the cyclic flux of the TCA cycle to an alternative non-cyclic pathway via the GABA shunt in HLB-infected citrus. Plant Health 2021: Annual Meeting of the American Phytopathological Society (APS), Virtual. August 2021. (Poster Presentation)

Nehela, Y., and Killiny, N. Detection of phytomelatonin in Huanglongbing-infected sweet orange (*Citrus sinensis*) plants and its correlation with stress-associated phytohormones. Plant Health 2020: Annual Meeting of the American Phytopathological Society (APS), Virtual. August 2020. (Poster Presentation)

Nehela, Y., and Killiny, N. GABA shunt and polyamine pathways are alternative routes contributing to flux toward succinate rather than an intact TCA cycle in HLB-infected citrus plants. 8th Annual UF/IFAS CREC Posters & Pastries Research Symposium, Lake Alfred, Florida, USA. April 2019. (Poster Presentation)

Nehela, Y., and Killiny, N. Multiple phytohormonal signaling pathways mediate citrus responses to the bacterial pathogen '*Candidatus* Liberibacter asiaticus'. International Congress of Plant Pathology (ICPP 2018): Plant Health in a Global Economy, Boston, Massachusetts, USA. August 2018. (Poster Presentation)

Nehela, Y., and Killiny, N. The role of phytohormones in citrus response to the Huanglongbing pathogen '*Candidatus* Liberibacter asiaticus' and its vector *Diaphorina citri*. 7th Annual UF/IFAS CREC Posters & Pastries Research Symposium, Lake Alfred, Florida, USA. April 2018. (Poster Presentation)

Nehela, Y., and Killiny, N. The role of phytohormones in citrus response to the Huanglongbing pathogen '*Candidatus* Liberibacter asiaticus' and its vector *Diaphorina citri*. 2nd Annual Plant Science Symposium: Advancing Frontiers in Plant Sciences, Gainesville, Florida, USA. January 2018. (Poster Presentation)

Nehela, Y., and Killiny, N. Developing a GC/MS-based method for phytohormone profiling of *Citrus sinensis* leaves and roots. 1st Graduate Student Research Day, Gainesville, Florida, USA. April 2017. (Poster Presentation)

Nehela, Y., and Killiny, N. The role of carboxylic compounds in citrus defense against '*Candidatus* Liberibacter asiaticus' and/or its vector *Diaphorina citri*. 5th Annual UF/IFAS CREC Posters & Pastries Research Symposium, Lake Alfred, Florida, USA. April 2016. (Poster Presentation)

Nehela, Y., and Killiny, N. Effect of infection with '*Candidatus* Liberibacter asiaticus' and/or infestation with the Asian citrus psyllid on citrus leaf pigment content. Global Summit on Plant Science, San Antonio, Texas, USA. September 2015. (Poster Presentation)

Nehela, Y., and Killiny, N. One target, two mechanisms: The effect of infection with '*Candidatus* Liberibacter asiaticus' and/or infestation with the Asian citrus psyllid on citrus leaf pigment content. 4th Annual UF/IFAS CREC Posters & Pastries Research Symposium, Lake Alfred, Florida, USA. April 2015. (Poster Presentation)

Nehela, Y., and Killiny, N. Effect of infection with '*Candidatus* Liberibacter asiaticus' and/or infestation with the Asian citrus psyllid on citrus phytohormones. 3rd Annual UF/IFAS CREC Posters & Pastries Research Symposium, Lake Alfred, Florida, USA. March 2014. (Poster Presentation)

Workshops, Conferences, and Professional Meetings (Organizer/Scientific Committee Member) (4)

Nehela, Y. 1st International Scientific Conference "Agriculture and Achieving Food Security in Light of SDS 2030". Faculty of Agriculture, Tanta University, Tanta, Egypt. March 2024. (*Organizer, and Scientific Committee Member*)

Nehela, Y. 2nd Annual Scientific Conference: Applied Research Outcomes. Faculty of Agriculture, Tanta University, Tanta, Egypt. November 2023. (*Organizer*)

Nehela, Y. 5th International Environmental Forum: Smart Environment Towards Climate Changes, Tanta University, Tanta, Egypt. October 2022. (*Organizer, and Scientific Committee Member*)

Nehela, Y. 1st Annual Scientific Conference (ASCANTA): Applications of New Techniques in Agriculture. Faculty of Agriculture, Tanta University, Tanta, Egypt. May 2022. (*Organizer*)

Conference Participation (4)

Nehela, Y. FAO Global Conference on Sustainable Plant Production: Innovation, Efficiency and Resilience. Food and Agriculture Organization of the United Nations (FAO), Rome, Italy (Hybrid). November 2022. (Participant)

Nehela, Y. Youth in Agriculture Pre-Event for the Climate Adaptation Summit 2021. January 2021. (Participant)

Nehela, Y. 7th International Conference on Sustainable Agriculture and Environment (ICSAE-7). Surakarta, Indonesia (Virtual). August 2020. (Participant)

Nehela, Y. 3rd Conference for Enhancing Scientific Research. Tanta University, Tanta, Egypt. Nov. 2012. (Participant)

HONORS & AWARDS (selected)

- **2026 APS - OPSR Industry Tour** — July 2026:
  - The Office of Private Sector Relations (OPSR), the American Phytopathological Society (APS).
- **2026 Books for the World Program Award** — March 2026
  - The Office of International Programs, the American Phytopathological Society (APS).
- **Outstanding Scientific Publications Award 2021, 2022, 2023, and 2024** (four consecutive years) — 2021-2024
  - Cultural Affairs Sector, Tanta University, Tanta, Egypt.
- **Encouragement Award of Tanta University** (Agricultural Sciences-2022/2023) — May 2023
  - Cultural Affairs Sector, Tanta University, Tanta, Egypt.
- **Best Speaker,** The 5th International Environmental Forum — Oct. 2022
  - Tanta University, Tanta, Egypt.
- **Student Spotlight of The Month** — Dec. 2018
  - Phytopathology news, American Phytopathological Society (APS), USA
- **The Plant Pathology Graduate Student Organization (PPGSO) Travel Award** — July 2018
  - To attend The International Congress of Plant Pathology (ICPP) 2018, Boston, MA, USA
- **The Egyptian Students Association in North America (ESANA) Scholarship** — March 2018
  - Fall 2017 session
- **The 1st Place, The 5th Annual "Posters & Pastries" Research Gallery** — April 2016
  - Citrus Research and Education Center (IFAS/UF), Lake Alfred, FL, USA.
- **Joint supervision scholarship** (funded by the Egyptian government for two years) — March 2013
  - Cultural Affairs & Missions Sector, Ministry of Higher Education, Egypt.
- **Travel Award** To attend the "Applications of HPLC and GC in Medical Biochemistry workshop" — Jan. 2013
  - Cultural Affairs Sector, Tanta University, Tanta, Egypt.

PROFESSIONAL ACTIVITIES & EXTERNAL SERVICE

- **Editorial board membership:**
  - **Frontiers in Plant Science:**
    - Review Editor for "Plant Metabolism and Chemodiversity"
    - Guest Editor for three research topics:-
      - Enhancing Plant Resistance and Resilience to Phytopathogenic Microbes.
      - Exploring Metabolic-Based Host-Pathogen Interactions.
      - Novel Insights into the Complex Chloroplastic Plant-Microbe Interactions.
  - **Plants:**
    - Topical Advisory Panel Member
    - Guest Editor for two special Issues:-
      - "New and Re-emerging Plant Diseases and Pathogens.
      - "Diseases Caused by Plant Pathogenic Bacteria and Their Management.

- **Ad-Hoc Review:** for several journals, including, but not limited to:-
  - Agriculture
  - Agronomy
  - BMC Plant Biology
  - Frontiers in Genetics
  - Frontiers in Microbiology
  - Frontiers in Plant Science
  - Journal of Fungi
  - J. of Plant Interactions
  - Metabolites
  - Microorganisms
  - Molecules
  - Molecular Plant Pathology
  - Phytopathology
  - Pharmaceuticals
  - Plants
  - Peer J.

PROFESSIONAL ASSOCIATIONS MEMBERSHIP (8)

- The American Phytopathological Society (APS), USA. (2015-Present)
- The Southern Division of the American Phytopathological Society (SD-APS), USA. (2015-Present)
- The African Division of the American Phytopathological Society, USA. (2020-Present)
- The International Society for Plant Phytopathology (ISPP), USA. (2015-Present)
- The Egyptian Society for Plant Phytopathology (ESPP), Egypt. (2012-Present)
- The Golden Key International Honor Society, USA. (2019-Present)
- The American Association for the Advancement of Science (AAAS), USA. (2018-2019)
- The Art in Phytopathology subcommittee, Graduate Student Committee (APS), USA. (2018)

TECHNICAL TRAINING & CERTIFICATION (9)

- Data analysis and experimental design Jan. 26th - 27th, 2026
Citrus Research and Education Center, University of Florida

- Genome-Wide Association Studies (GWAS) Approaches for Identifying Key Genomic Variants Associated with Quantitative Traits in the Plant Genome Nov. 4th-5th, 2024
Agricultural Genetic Engineering Research Institute (AGERI), Egypt

- Crop Pest Management Foundation Nov. 15th, 2022
Powered by Plantwise Plus, CABI Academy, UK

- Crop Pest Diagnosis (English) v2.0 Certification May 2nd, 2021
Powered by Plantwise, CABI Academy, UK

- The Engaging NASA Workshop May 24-27, 2021
The space science community, UF, Gainesville, FL, USA.

- Plant Sap Analysis Workshop in Citrus Production April 28th, 2021
Indian River Research and Education Center, University of Florida, Gainesville, FL, USA.

- PlantSEED Metabolic Modelling Workshop Aug. 17-18, 2017
Horticultural Sciences Department, University of Florida, Gainesville, FL, USA.

- Basics and Applications of HPLC and GC in Biochemistry Feb. 26 - 28, 2013
Medical Technology Center, Alexandria University, Alexandria, Egypt.

- Basic Electrophoresis Techniques in Protein Research March 6 - 7, 2013
Medical Technology Center, Alexandria University, Alexandria, Egypt.

LEADERSHIP & PERSONAL SKILLS TRAINING (30)

- University Administration - Advanced	TICFLD, Tanta University, Egypt	Oct. 18th -19th, 2023
- Use of Technology in Teaching - Advanced	TICFLD, Tanta University, Egypt	Oct. 11th -12th, 2023
- Effective Presentation Skills - Advanced	TICFLD, Tanta University, Egypt	Sep. 23rd -24th, 2023
- Research Team Management	TICFLD, Tanta University, Egypt	Sep. 20th -21st, 2023
- Conference Organization	TICFLD, Tanta University, Egypt	Sep. 16th -17th, 2023
- Fundamentals of Digital Transformation Certificate	Tanta University, Egypt	Oct. 8th -9th, 2023
- The Code of Ethics	TICFLD, Tanta University, Egypt	June 15th -17th, 2019
- The Strategic Planning	TICFLD, Tanta University, Egypt	June 11th -13th, 2019
- The Research Ethics	TICFLD, Tanta University, Egypt	June 1st -3rd, 2019
- Use of Technology in Teaching - I	TICFLD, Tanta University, Egypt	May 28th -30th, 2019
- University Administration - I	TICFLD, Tanta University, Egypt	May 25th -27th, 2019
- Effective Presentation Skills	TICFLD, Tanta University, Egypt	May 21st -23rd, 2019
- Preparation of Higher Education Teacher (PHET)	Faculty of Education, Tanta University, Egypt.	March 30th - April 11th, 2013
- Computer skills for Postgraduates (level I)	Tanta University, Egypt.	Oct. 23rd - Nov. 1st, 2011
- Training of Trainer (TOT)	Cairo University, Egypt	June 11th -15th, 2011
- Human Rights Training Certification	The American University in Cairo, Egypt	Aug. 17th, 2009
- Human Rights Camps (Scientific faculties)	The American University in Cairo, Egypt	July 19th - 21st, 2009
- Advanced Human Rights (Resource Persons - II)	The American University in Cairo, Egypt	April 11th - 13th, 2009
- Advanced Human Rights (Resource Persons - I)	The American University in Cairo, Egypt	March 3rd - 6th, 2009
- Human Rights Training Course (Basics II)	The American University in Cairo, Egypt	Nov. 22nd - 25th, 2008
- Human Rights Training Course (Basics I)	The American University in Cairo, Egypt	April 6th - 10th, 2008
- Competitive Research Projects	FLDP, Tanta University, Egypt	June 15th - 17th, 2008
- Scientific Publishing,	FLDP, Tanta University, Egypt	Oct. 8th - 11th, 2007
- Scientific Research Methods,	FLDP, Tanta University, Egypt	April 22nd - 26th, 2007
- Effective Communication Skills,	FLDP, Tanta University, Egypt	April 17th - 19th, 2007

- Critical Thinking Skills,	FLDP, Tanta University, Egypt	March 21st - 25th, 2007
- Stress and Time Management,	FLDP, Tanta University, Egypt	March 7th - 11th, 2007
- Effective Teaching Skills,	FLDP, Tanta University, Egypt	Feb. 12th - 15th, 2007
- Advanced Photoshop, Flash, and 2D animation	Ministry of Youth, Egypt	Aug. 21st -25th, 2004
- Graphic Design Using Adobe Photoshop 6 ME	Ministry of Youth, Egypt	Aug. 23rd -27th, 2003

NON-ACADEMIA EXPERIENCE (3)

- Strategic Planning Advisor Dec. 2021-Dec. 2024
- Quality Assurance Unit, Faculty of Agriculture, Tanta University, Tanta, Egypt.

- Leadership and Soft Skill Trainer June 2011 - Present
- Center of Advancement of Postgraduate Studies and Research (CAPSCU), Cairo University, Egypt

- Human Rights Trainer and Resource Person Aug. 2009 - Present
- The American University in Cairo (AUC), Egypt

PROFESSIONAL REFERENCES

- Dr. Nabil Killiny,
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