

CURRICULUM VITAE

Name: Ahmed Mohamed Soliman Mohamed

Date of Birth: ٨/ ١/١٩٧٤

Place of Birth: Giza, Egypt

Nationality: Egyptian

Family status: Married.

Residence: Khalidiah – Hufuf – Alahsa - Saudi Arabia.

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Work Address: Plant Protection Program, Department of Agriculture of Arid Land,
College of Agriculture & Food Sciences, King Faisal University.

Education ١٩٩٢-١٩٩٦: B. Sc. In Major Chemistry (very good with honor),

Background: Department of Chemistry, Faculty of Science, Cairo University, Egypt.

١٩٩٨-٢٠٠٢: M. Sc. In Chemistry, Department of Chemistry, Faculty of
Science, Cairo University, Egypt.

Title of Thesis: "Comparative Studies on Virus X Affecting Potato Plants
in Egypt".

٢٠٠٣-٢٠٠٦: Ph. D. In Chemistry, Department of Chemistry, Faculty of
Science, Cairo University, Egypt.

Title of Thesis: "Advanced Molecular Studies on Potato Virus X (PVX)".

Employment ١٩٩٧-٢٠٠٢: Assistant Researcher, Molecular Biology Unit, Virus and
History: Phytoplasma Section, Plant Pathology Research Institute, Agricultural
Research Center, Egypt.

٢٠٠٢-٢٠٠٧: Research Assistant, Molecular Biology Unit, Virus and
Phytoplasma Section, Plant Pathology Research Institute, Agricultural
Research Center, Egypt.

٢٠٠٧-٢٠١٢: Researcher, Molecular Biology Unit, Virus and Phytoplasma
Section, Plant Pathology Research Institute, Agricultural Research
Center, Egypt.

٢٠١٢- Till Now: Associate Professor, Molecular Biology Unit, Virus and
Phytoplasma Section, Plant Pathology Research Institute, Agricultural
Research Center, Egypt.



IN Saudi Arabia

٢٠١١- ٢٠١٢: Researcher, King Faisal University, College of Agriculture & Food Sciences, KSA. In project “RNA-mediated protection against new threatening cucurbit-infecting whitefly-transmitted viruses in Saudi Arabia” funded from King Abdulaziz City for Science and Technology (KACST).

٢٠١٢- Till Now: Associate Professor, Dept. of Arid Land Agriculture, College of Agriculture & Food Sciences, King Faisal University.

Projects in KSA:

- ١-** RNA-mediated protection against new threatening cucurbit-infecting whitefly-transmitted viruses in Saudi Arabia. Funded from King Abdul-Aziz City for Science and Technology (KACST). *As Researcher*
- ٢-** Identification of fusarium wilt in date palm using biotechnology. Funded from Deanship of Scientific Research (DSR), King Faisal University. *As Researcher*
- ٣-** Using molecular tools to analyze the whitefly species and biotypes in Saudi Arabia. Funded from DSR, King Faisal University. *As Researcher*
- ٤-** Development of the sensitive methods for the detection of potato viruses in Saudi Arabia. Funded from DSR, King Faisal University. *As co-PI*
- ٥-** Production of diagnostic kit for cucurbit yellow stunting disorder virus through coat protein gene expression. Funded from DSR, King Faisal University. *As co-PI*
- ٦-** DNA barcode identification of the two newly characterized Saudi chicken lines compared to commercial layer using mtDNA sequence variations. Funded from DSR, King Faisal University. *As co-PI*
- ٧-** Phytotoxicity of the systemic insecticides; imidaclopride, methomyl on tomato plant, and the quality of post harvested tomato in green house. Funded from DSR, King Faisal University. *As PI*
- ٨-** Development of the diagnostic tools for potato viruses in Saudi Arabia. Funded from King Abdul-Aziz City for Science and

Technology (KACST). *As co-PI*

- ٩- The physiological effect of organo-phosphorous insecticides on peroxidase activity in tomato plant grown in Al-Hassa, Saudi Arabia. Funded from DSR, King Faisal University. *As co-PI*

**Membership
in Scientific
Organization:**

- ١- Member of Egyptian Virological Society (EVS).
٢- Member of Association of Research Members of Agricultural Research Center (ARMARC).

**Training
Courses:**

In ١٩٩٩: Training on Molecular Biology Techniques (PCR, Cloning, Sequencing, RT-PCR-ELISA, Gene Expression in *E. Coli*etc) for ٩ months at Department of Plant Pathology, College of Agriculture & Life Sciences, University of Wisconsin-Madison, USA.

In ٢٠٠١: Laboratory instructor in the ١st international workshop of the plant virus indexing and certification program organized by USAID-MERC Project, Agricultural Research Center, Giza, Egypt.

In ٢٠٠٢: Training for ٣ months on “ Diagnosis of Bacterial Diseases of Plants (symptoms, isolation, pure culture, identification with classical methods and molecular biology methods, pathogenicity test)” organized by Plant Pathology Research Institute, Agricultural Research Center, Giza, Egypt.

In ٢٠٠٤: International attendance in the workshop done at Crete-Greece for training on PCR- Based Tagging Technology and celebrating the annual meeting for the MERC program.

In ٢٠٠٥: Sharing in the training of junior scientists from different countries in the workshop on *Agrobacterium* transformation for tomato plants at Giza, Egypt.

In ٢٠٠٦: Sharing in the annual meeting for the project "Development of Tomatoes with Combined Resistance to TYLCV Using Both Virus-Derived Resistance and Molecular Marker-Assisted Breeding (MERC)" at Giza, Egypt.

In ٢٠٠٧: Attend the workshop “Plant Bacterial Disease Symptoms with examples of current Bacterial problems in Egypt” organized by Agricultural Research Center, Giza, Egypt.

In ٢٠٠٨: International attendance in the annual meeting for the project

"Development and Improvement of Local Seed Potato Production in the Middle East (MERC)" at Taba, Egypt.

In ٢٠٠٩: International attendance in the annual meeting for the project "Development and Improvement of Local Seed Potato Production in the Middle East (MERC)" at Larnaca, Cyprus.

In ٢٠١٠: International attendance in the annual meeting at Larnaca, Cyprus, for three projects:

- i- Development and Improvement of Local Seed Potato Production in the Middle East (MERC).**
- ii- Monitoring of cereal virus and virus-like diseases for prevention through regional detection and quarantine systems (MERC).**
- iii- Control of New Threatening Cucurbit-Infecting Whitefly-Transmitted Gemini viruses in the Middle East (MERC).**

In ٢٠١٠: International attendance in the conference that AVSI Foundation organized in Milan-Italy on: Biodiversity, nutrition, development Almond witches' broom phytoplasma in Lebanon: a potential threat to all Mediterranean Countries?

In ٢٠١١: Sharing in the Training Program (as Lecturer & Lab Instructor) for the students of Biotechnology Department, College of Agricultural & Food Sciences, King Faisal University, Saudi Arabia.

In ٢٠١٢: Sharing in the Training Program entitled " Molecular Characterization of Date Palm Phytoplasma (AlWjam)" (as Lecturer & Lab Instructor) for the Agricultural engineers of Ministry of Agriculture - College of Agriculture & Food Sciences, King Faisal University, Saudi Arabia.

In ٢٠١٣: Sharing in ١st International Conference on Sustainability of Camel Population and Production. College of Agriculture and Food Sciences, , King Faisal University, Saudi Arabia.

In ٢٠١٣: Sharing in Fifth Symposium on Date Palm (Biotechnology in date palm), King Faisal University, Saudi Arabia.

In ٢٠١٣: Sharing in Training Program "Olympus High End Microscopy Convention". Al-Khobar, Saudi Arabia.

***Professional
Specialization***

- ☉ Very good experience in the molecular biology techniques such as,**

**&
Experience:**

isolation of total nucleic acid (DNA & RNA), identification, and diagnosis of plant bacteria, viruses and fungi using PCR, RT-PCR, IC-RT-PCR, multiplex PCR and RT-PCR-ELISA techniques, nucleic acid hybridization, western blotting, southern blotting and northern blotting, etc.

- ☉ Very good experience in molecular cloning, gene expression, production of polyclonal antibodies and ELISA kits (using gene expression techniques) specific for some plant viruses (e.g. PVX, PLRV and PVY).
- ☉ Very good experience in virus and bacteria diagnosis using serological methods such as, western blotting, direct & indirect ELISA and DIBAetc.
- ☉ Investigates the growth and characteristics of microscopic organisms such as bacteria, algae, fungi, or other micro-organisms.
- ☉ Isolates and makes cultures of significant bacteria or other micro-organisms in prescribed or standard inhibitory media, controlling factors, such as moisture, aeration, temperature, and nutrition.
- ☉ Make chemical analyses of substances, such as acids, alcohols, and enzymes, produced by bacteria and other micro-organisms on organic matter.
- ☉ Very good experience in post-transcriptional gene silencing (PTGS). Studying the efficiency of the dsRNA for the ability to trigger resistance against plant viruses.

**Developed
Techniques
& GenBank
Sequences:**

* I developed experimental protocols for the detection of potato viruses (PVX, PLRV) using molecular biology techniques. The technical sheets that I developed (*No 1* and *No 1A*) are published online at:

www.plantpath.wisc.edu/InVirLab/docs/VirusDetectionMethods.htm

* Many sequences are submitted and available now online at GenBank:

<http://www.ncbi.nlm.nih.gov/genbank/>

Ex: *AF 1911.0, AY773082, DQ 1273, EU 289226, GQ 148776, GU 00.076, GU 98.974, FJ 984062.....etc.*

**Teaching
Courses:**

General Plant Pathology - Advanced Plant Pathology - Plant Fungal Diseases - Plant Bacterial Diseases - Plant Viral Diseases - Special Studies.

Computer

Extremely familiar with Microsoft office programs (word, excel, power

Skills: point,).

Excellent web user.

Knowledge of Mother Tongue: Arabic

Languages: Other Languages: Very good in English (reading, speaking and writing)

- Publications:**
- ١- Soliman, A. M., Shalaby, A. A., Barsoum, B. N., Mohamed, G. G., Nakhla, M. K., Mazyad, H. M., and Maxwell, D. P. (٢٠٠٠). Molecular characterization and RT-PCR-ELISA detection of a potato virus X (PVX) isolate from Egypt. *Annals Agric. Sci., Sp. Issue*, ٤: ١٧٩١-١٨٠٤.
 - ٢- Shalaby, A. A., Nakhla, M. K., Soliman, A. M., Mazyad, H. M., Hadidi, A., and Maxwell, D. P. (٢٠٠٢). Development of a highly sensitive multiplex reverse transcription-polymerase chain reaction (m-RT-PCR) method for detection of three potato viruses in a single reaction and nested PCR. *Arab J. Biotech.* ٥ (٢): ٢٧٥-٢٨٦.
 - ٣- Soliman, A. M., Barsoum, B. N., Mohamed, G. G., El-Attar, A. K., and Mazyad, H. M. (٢٠٠٦). Expression of the coat protein gene of the Egyptian isolate of potato virus X in *Escherichia coli* and production of polyclonal antibodies against it. *Arab J. Biotech.* ٩ (١): ١١٥-١٢٨.
 - ٤- A. A Shalaby, A. A. Haj Kassem, A. A. Rezk, A. M. Soliman, Sahar A. Youssef. (٢٠٠٧). Detection of the most important potato viruses using ELISA, RT-PCR and nucleic acid hybridization in Egypt and Syria. *African Potato Association Conference Proceedings*, ٧: ٢٢٨-٢٣٧, Egypt.
 - ٥- Soliman, A. M., B. N., Barsoum, Mohamed, G. G., Rezk, A. A., Aboul-Ata, A. E., and Mazyad, H. M. (٢٠٠٨). siRNA silencing of PVX coat protein gene affects accumulation of viral RNA in potato and tobacco plants. *Int. J. Virol.* ٤(١): ١٤-٢٥.
 - ٦- El-Araby, W. S., Ibrahim, A. I., Hemeida, A. A., Amal Mahmoud, Soliman, A. M., El-Attar, A. K., Mazyad, H. M. (٢٠٠٩). Biological, serological and molecular diagnosis of three major potato viruses in Egypt. *Int. J. Virol.* ٥(٢): ٧٧-٨٨.
 - ٧- Rezk, A. A., Ahmed, Amal A., Farag, Azza G. and Soliman, A. M. (٢٠٠٩). Biological assay and molecular characterization of apricot isolate of Arabis mosaic virus. *Arab J. Biotech.* ١٢ (٢): ٢٣٧-٢٥٠.
 - ٨- Aboul-Ata, E. A., El-Attar, A. K., Soliman, A. M., Rezk, A. A., Wright,

- Sandra A. I., Mazyad, H. M., Harandi, A., Olson, O. (۲۰۰۹). Gene expression and gene suppression mechanisms for human and plant virus-infection control in Egypt: HCV, HSV-۲ and PVX-EG۲. *BIOSPECTRUM* ۲۰۰۹, International Symposium on Second Green Revolution: Priorities, Programmes, Social and Ethical Issues. (Abst.)
- ۹- El-Shazly, Manal A., Dawood, Rehab A. and Soliman, A. M. (۲۰۰۹). Biological, biochemical, serological, molecular and tissue cultural studies on an Egyptian isolate of *Tomato spotted wilt virus* infecting chrysanthemum plants. *Egypt. J. Phytopathol.* ۳۷(۲): ۷۹-۹۴.
- ۱۰- El-Attar, A. K., Riad, B. Y., Saad, A., Soliman, A. M. and Mazyad H. M. (۲۰۱۰). Expression of the coat protein gene of potato leaf roll virus in *Escherichia coli* and development of polyclonal antibodies against recombinant coat protein. *Arab J. Biotech.* ۱۳(۱): ۸۵-۹۸.
- ۱۱- Sofy, A. R., Soliman, A. M., Mousa, A. A., Ghazal, S. A. and El-DougDoug, K. A. (۲۰۱۰). First record of *Citrus viroid II* (CVd-II) associated with gummy bark disease in sweet orange (*Citrus sinensis*) in Egypt. *New Disease Reports* ۲۱, ۲۴. [doi:۱۰.۵۱۹۷/j.۲۰۴۴-۰۵۸۸.۲۰۱۰.۰۲۱.۰۲۴].
- ۱۲- Soliman, A. M., Mahmoud, S. Y. M. and Rehab, A. Dawood (۲۰۱۰). Molecular characterization of onion yellow dwarf virus (garlic isolate) and production of virus-free plantlets. ۳rd Inter. Conf. Virol., Cairo Univ. Center, Nov. ۲۴-۲۵, ۲۰۱۰. *Egyptian J. Virol.*, SP. Issue, ۴۰۷-۴۲۳. [*Int. J. Virol.* ۸(۱): ۶۱-۷۰, ۲۰۱۲].
- ۱۳- Sofy, A. R., Soliman, A. M., Mousa, A. A., and El-DougDoug, K. A. (۲۰۱۰). Molecular characterization and bioinformatics analysis of viroid isolate associated with citrus gummy bark disease in Egypt. ۳rd Inter. Conf. Virol., Cairo Univ. Center, Nov. ۲۴-۲۵, ۲۰۱۰. *Egyptian J. Virol.*, SP. Issue, ۴۸۵-۵۱۲. [*Int. J. Virol.* ۸(۲): ۱۳۳-۱۵۰, ۲۰۱۲].
- ۱۴- Sofy, A. R., Mousa, A. A., Soliman A. M., and El-DougDoug, K. A.

- (2010). The limiting of climatic factors and predicting suitable habitat for citrus gummy bark disease using GIS. 3rd Inter. Conf. Virol., Cairo Univ. Center, Nov. 24-25, 2010. *Egyptian J. Virol.*, SP. Issue, 513-532. [*Int. J. Virol.* 8(2): 165-177, 2012].
- 15- El-Helaly, Sahar H., Ahmed, Amal A., Awad, M. A. and Soliman, A. M. (2010). Biological and molecular characterization of potato infecting alfalfa mosaic virus in Egypt. *Egyptian J. Virol.*, 7: 175-187. [*Int. J. Virol.* 8(1): 106-113, 2012].
- 16- Aboul-Ata E. A., Mazyad, H. M., El-Attar, A. K., Soliman, A. M., Anfoka, G., Zeidan, Gorovits, M. R., Sobol, I. and Czosnek, H. (2011). Diagnosis and control of cereal viruses in the Middle East. *Advances in Virus Research* 81: 33-61.
- 17- Sofy, A. R. and Soliman, A. M. (2011). Molecular identification of a cucumber mosaic virus subgroup I Egyptian isolate from geranium based on bioinformatics analysis of CP gene sequence. *Egyptian J. Virol.* 8: 178-194.
- 18- Ahmed, Amal A., Soliman, A. M. and Waziri, Hoda M. (2012). Occurrence of carrot Virus Y Potyvirus in Egypt. *Egy. J. Virol.* 9: 1-23.
- 19- Soliman, A. M., Demiana, H. B. Hanna, Mervat, A. S. Mohamed, B. N. Barsoum and Amal, A. Ahmed. (2012). Gazar virus Y, a new member of the celery mosaic virus group of potyviruses, isolated from carrots in Egypt. *Australas. Plant Pathol.* 41(5): 529-534.
- 20- Abdel-Salam, A. M., El-Attar, A. K. and Soliman, A. M. (2013). The use of native and denatured recombinant coat protein forms for induction of good quality antisera for Potato virus X and Potato leaf roll virus. *Amer. J. Res. Commu.* 1(7): 70-86.

- ٢١- Al-Saikhan, M. S., Alhudaib, K. A. and Soliman, A. M. (٢٠١٤).
Detection of three potato viruses isolated from Saudi Arabia.
Int. J. Virol. ١٠(٣): ٢٢٤-٢٣٤.
- ٢٢- Hajjar, M. J., Al-Saikhan, M. S. and Soliman A. M. (٢٠١٤). The
phytotoxic effects of methomyl and imidacloprid insecticides on
tomato local variety in Al-Hassa, Saudi Arabia. *Annual Research &
Review in Biology* ٤(٢٤): ٤١٨١-٤١٨٩.
- ٢٣- Alhudaib, K. A., Rezk, A. A., Abdel-Banat, B. M. A. and Soliman, A.
M. (٢٠١٥). Molecular identification of the biotype of whitefly (*Bemisia
tabaci*) inhabiting the Eastern region of Saudi Arabia. *J. Biol. Sci.*
١٤(٨): ٤٩٤-٥٠٠.
- ٢٤- Rezk, A. A., Alhudaib, K. A., and Soliman, A. M. (٢٠١٥).
Characterization of *cucurbit yellow stunting disorder virus* and
development of polyclonal antibodies using recombinant coat protein.
Egyptian J. Virol. ١٢: ٩٣-١٠٤.
- ٢٥- Ahmed, A. S., Alhudaib, K. A. and Soliman A. M. (٢٠١٦). Assessment
of genetic diversity of Hajar ١ and Hajar ٢ local Saudi chicken lines
using mitochondrial DNA D-loop markers. (under revision)

References

- ١- Prof. Dr. Douglas P. Maxwell, Department of Plant Pathology,
University of Wisconsin-Madison, ١٦٣٠ Linden Dr., Madison WI
٥٣٧٠٦, USA. E-mail: douglas.maxwell.1@gmail.com
- ٢- Prof. Dr. Hamed M. Mazyad, Plant Pathology Research Institute,
Agricultural Research Center (ARC), ٩- El-Gamma St, Giza, Egypt. E-
mail: hamedmazyad@yahoo.com
- ٣- Prof. Dr. Abou-Elata E. Abou-Elata, Plant Pathology Research
Institute, Agricultural Research Center, ٩- El-Gamma St, Giza, Egypt.
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