

CURRICULUM VITAE

Name of Applicant: Asma Laarif

Date of Birth: 30/10/1969, Sousse, Tunisia

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1. FIELD OF SPECIALIZATION:

- Insect ecology, biology, monitoring and control (*Parabemisia myricae*, *Bemisia tabaci*, *Phthorimae operculella*, *Tuta absoluta*, *Spodoptera littoralis*, *Helicoverpa armigera*, *cicadellidae*, stored grain insect...)
- Insects biocontrol: Use of microorganisms (Baculoviruses and bacteria) to control lepidopteran
- Use of botanicals (plant extracts and essential oils) for pest control
- Vegetable and fruits insect pest management
- Integrated pest management
- Laboratory Insect rearing
- Insect genetic studies(molecular, biochemical, immunological techniques: AND extraction, PCR, sequences analyze, spectroscopy, ELISA...)
- bacteriological and virological Techniques: isolation, identification et multiplication
- Bioinformatics: BLAST, NCBI Pubmed, Fasta, Clustal W, sequencing analysis software
- Statistics (Basic applied biostatistics)
- Microscopy: Histology, transmission microscopy
- Informatics: Application software: MS-OFFICE (Power point, Word, Excel, publisher, paint).

2. ACADEMIC QUALIFICATIONS:

- 2014 Habilitation to Supervise Research (HDR) in Plant Protection. University of Carthage.
- 2004 PhD, Study of a granulovirus isolated from potato tuber moth *Phthorimaea operculella* Zeller in Tunisia (*Lepidoptera: Gelechiidae*).University of Tunis El Manar,
- 1995 Master, Introduction and acclimatization of *Eretmocerus debachi* Rose & Rosen (Hym., *Aphelinidae*) parasitoid of *Parabemisia myricae* (Kuwana) (Hom., *Aleurodidae*) in Tunisia. University of Tunis El Manar
- 1992 Engineer of Agronomy, Higher Institute of Agronomic Sciences of Chott-Mariem. IRESA, University of Sousse,

3. PROFESSIONAL EXPERIENCE

March 2022 to day	Professor in Plant Protection (Entomology- Parasitology), Regional Research Centre on Horticulture and Organic Agriculture (CRRHAB/IRESA).
2014 to 2022	Associate Professor (Lecturer) in Plant Protection (Entomology- Parasitology), Regional Research Centre on Horticulture and Organic Agriculture (CRRHAB/IRESA).
2005- 2014	Assistant Professor (Chargé de Recherche), Regional Research Centre on Horticulture and Organic Agriculture (CRRHAB/IRESA).
1999-2005	Research assistant. National Institute of Agronomic Research of Tunisia (INRAT).

4. EXPERIMENTAL SKILLS

- Laboratory Insect rearing and maintenance
- Molecular, biochemical and immunological techniques: DNA extraction, Gel electrophoresis of DNA, PCR, data analysis of DNA sequencing, Spectroscopy, ELISA.
- Bacterial and viral techniques: isolation, culturing and regular maintenance of cultures
- Bioinformatics: BLAST, Fasta, Clustal W, sequencing analysis software
- Microscopy: Histology, transmission and fluorescence microscopy,
- Computer Skills: Application software: MS-OFFICE (Power point, Word, Excel, publisher, paint).
- Bioinformatics (NCBI Pubmed search engine, BLAST), Statistics (Basic applied biostatistics).

5. TRAINING COURSES

- Molecular biology techniques and bioinformatics (analyses of Bemisia project results). Centre de Biologie et Gestion des Populations (CBGP) Montpellier. France. June 1-30 2009.
- Molecular biology techniques (Bemisia genetic studies). Centre de Biologie et Gestion des Populations (CBGP), Montpelliers. France. October 3 - November 6 2008.
- Molecular biology techniques (characterization of Bemisia biotypes). Centre de Biologie et Gestion des Populations (CBGP) de Montpelliers (France). May 8- June 16 2007.
- Molecular biology techniques to study baculoviruses. Laboratory of Entomo- virology, Faculty of Agriculture-IRD, Cairo, Egypt. January, 01-24 2002.

6. PROFESSIONAL ACTIVITIES:

- Member of the technical commission of Management of the *Opuntia* cochineal scale insect
- Member of the National Committee of Protected and Geothermal Crops, Ministry of Agriculture.
- Member of the office of Mediterranean Group of Pesticides Research (MGPR)
- Member of the Arab Society of Plant Protection (ASPP)
- Member of the Scientific Council of the Regional Research Center on Horticulture and

Organic Agriculture (CRRHAB)

- Member of the scientific commission of the Technical Center of Potato and Artichoke.
- President of the Commission for the assessment of projects in plant protection and quality of agricultural products (IRESA)
- Member of the jury for recruitment and promotion of agricultural researchers.
- Member of the National Committee of Vegetable Crops, Ministry of Agriculture.
- Member of the National Committee of Organic Agriculture, Ministry of Agriculture
- Member of the National Committee of *Tuta absoluta*, Ministry of Agriculture
- Reviewer of Tunisian Journal of Plant Protection (TJPP), the Annals of the INRAT, Potato Journal, Jordan Journal of Biological Sciences
- Grant reviewer for the Institution of Agricultural Research and Higher Education (IRESA).

7. TEACHING

Courses in Entomology; Taxonomy, Agriculture insect pests, integrated pest management. School of Higher Education in Agriculture of Mograne, Zaghouan, Tunisia (Ecole Supérieure d'Agriculture de Mograne ESAM). 2008-2013.

8. UNDERGRADUATE AND GRADUATE STUDENTS SUPERVISION

8.1. Supervision of postdoctoral assistants

- 2020-2024. Post-doctoral contract as part of the iGUESS-MED project. Innovative Greenhouse Support System in the Mediterranean Region: efficient fertigation pest management through IoT based climate control. Dr. Thamer Bouslama.
- 2021-2022. Formulation of a biopesticide to control pests (tomato leaf miner and aphids) of vegetable crops under greenhouses. MOBIDOC-ANPR. Dr. Asma Ayeb Zakhama
- 2019-2020. Research and development of a biopesticide based on essential oils and its manufacturing and application process against stored food insects. MOBIDOC-ANPR. Dr. Mey Jerbi.

8.2. Supervision of doctoral theses

- 2020-2024. NIHED JERBI: Bio-ecological study of populations of *Orosius spp* and *Bemisia tabaci* potential vectors of Geminivirus and development of integrated control methods (IPM). Doctoral thesis in Agricultural Sciences. National Agronomic Institute of Tunisia. Thesis in progress.
- 2017-2021. SAWSEN BEN TIBA: Identification of nucleopolyhedroviruses isolated from tomato moths *Helicoverpa armigera* and *S. littoralis* and study of their biological activities. Doctoral thesis in Biological Sciences. Faculty of Sciences of Bizerte. (2013-2014; first thesis subject then change of subject). Thesis defended.
- 2015-2019. THAMEUR BOUSLAMA: Isolation, characterization and study of microbial communities associated with the tomato moth *Helicoverpa armigera*. Doctoral thesis in Plant Protection. Higher Agronomic Institute. Thesis defended. .
- 2014-2016: KHAOULA ZARRAD: Methods of biological control of *Bemisia tabaci* (GENNADIUS) (Hemiptera, Aleyrodidae) using bitter orange essential oil (*Citrus aurantium*). Doctoral thesis in Plant Protection. Higher Agronomic Institute. Thesis defended.

8.3. Supervision of masters

- 2013. AMENI DHOUIBI: Microbiological control trials by *Beauveria bassiana* and *Bacillus sp.* against some lepidoptera harmful to agriculture: *Tuta absoluta*, *Spodoptera littoralis* and *Prays oleae* Master of Plant Protection and Environment. ISA. Master defended on 11/27/2013.
- 2010. CHOURABI KHIRA: Biochemical characterization of phenoloxidase activities in the insect *Phthorimaea operculella* (Zeller). Master. Faculty of Sciences of Bizerte. .
- 2009. KAMEL NASRALLI: Analysis of the NPV baculovirus polymorphism in *Spodoptera littoralis*: amplification by PCR, cloning of amplified sequences, sequencing and phylogenetic analysis. Master of Plant Protection and Environment. ISA.
- 2008. Application of the bioinformatics and molecular tool for the detection of baculoviruses in *Phthorimaea operculella* (Zeller) and *Spodoptera littoralis* (Boisduval). Master of Plant Protection and Environment. ISA. ILHEM SALHI.

8.4. Engineer memories:

- Rana Dabbebi, 2023
- Wala Sassi, 2022
- Salma Essid, 2015
- Khaoula Bedis, 2014
- Thameur Bousselema, 2014
- Mohamed Ali Azaiz, 2013
- Amina Ayed, 2012
- Ines Touiri, 2010
- Karima Khsib, 2010
- Néziha boukhili, 2010
- Jihène Romdhane, 2009
- Mahfouf Mohamed Fayçal, 2008
- Anis Bouraoui, 2008
- Nesrine Zallama, 2007
- Hamdi Saidi, 2006

9. NATIONAL AND INTERNATIONAL RESEARCH –DEVELOPMENT PROJECTS

- Innovative Greenhouse Support System in the Mediterranean Region: Efficient fertigation and pest management through IoT based climate control. Partnership for Research and Innovation in the Mediterranean Area (PRIMA) program. **National Coordinator** of the project. 2019-2024
- GeMed: Prevention and control of new and invasive geminiviruses infecting vegetables in the Mediterranean. Partnership for Research and Innovation in the Mediterranean Area (PRIMA) program. **Member of the project.** 2019-2024
- Sustainable and integrated management of protected **vegetable crops** CléProD: Project funded by IRESA in the Center east of Tunisia. **National Coordinator** of the Project. 2016-2019

- Sustainable and integrated management of *Tuta absoluta* in tomat culture in Tunisia. Project funded by IRESA. 2010-2013
- JEAI BEMIGEST (management of the problem Bemisia in Vegetable Crops). Project funded by Institute of Research for Development (IRD). Partners: Centre de Biologie et Gestion des Populations (CBGP). Montpellier. France. **Member of the project.** 2007-2009
- Integrated pest management of the Potato tuber moth. Project funded by IRESA. 2000-2003
- Convention of research for development funded by the Group of Food Conservatives Industries (Groupement des Industries de Conserves Alimentaires (GICA)) to test resistance of some varieties of tomato to TYLC virus transmitted by *Bemisia tabaci*. 2014-2015
- Specific convention about excessive use of pesticides in agriculture funded by APE Wardenine association. 2013-2014
- Convention of research for development to evaluate efficacy of yellow sticky traps to control whiteflies in greenhouses funded by Regional Office of Agriculture Development of Monastir (CRDA Monastir). 2008-2011

10. EXTENSION

Courses and conferences for technical services administration

- Artichoke Integrated pest management (training courses organized by Technical Center of potato and artichoke).
- Integrated pest management to control the potato tubermoth *Phthorimaea operculella* (training courses organized by Technical Centre of potato and artichoke).
- Integrated pest management in greenhouses crops (Office of Agriculture Development of Sousse and Monastir).
- The safe use of agrochemical pesticides and Alternatives (Technical Centre of Organic Agriculture, Office of Agriculture Development of Sousse and Monastir...).

Technical reports and documents

- Angelo Canale, Giovanni Benelli, **Asma Laarif**, Luca Incrocci, Valeria Zeni, Thameur Bouslama, Marco Mosti, Stefano Foschi & Andrea Sala 2020. Integrated Pest Management Protocols. Hands-on Field Guidelines. chrome-extension://efaidnbmninnibpcajpcgclclefindmkaj/https://www.iguessmed.com/_files/ugd/4b1614_f e33f9416a3f4a38af661e68067aba1a.pdf
- Catello Pane, **Asma Laarif**, Nicola Nicastro, Thameur Bouslama, Alejandra Navarro Garcia, Marco Mosti, Stefano Foschi & Andrea Sala 2021. Integrated Disease Management Protocols. Hands-on Field Guidelines. chrome-extension://efaidnbmninnibpcajpcgclclefindmkaj/https://www.iguessmed.com/_files/ugd/4b1614_5ac44705b70d4ccab92d6af50a9dd4ea.pdf.

- Mansour M. and **Laarif A.** 2018. Leaflet for the presentation of the CRRHAB. 18 pages. Edition of 1000 copies.
- **Laarif A.** and I. Chaeb (2017). Insect pests in vegetables under protected cultivation and integrated pest management (in French ; Principaux ravageurs des cultures légumières protégées et lutte intégrée). 18 pp. Document distributed by IRESA at the SIAT 2017 fair in 300 copies.
- **Laarif A.**, M. Braham, K. Lebdi, M.H. Dhouibi, R. Soltani, S. Belkadhi et B. Chermiti (2014). Control strategy of the tomato leafminer; *Tuta absoluta* in greenhouse crops. Brochure published in French and distributed by the Agricultural Extension and Training Agency (Agence de vulgarisation et de formation agricole; AVFA).
- **Laarif A.** (2014). Reflections on the Restructuring of the Agricultural Research and Higher Education System (RESA) in relation to good governance. Summary Report of the Committee on Governance Reform of the Agricultural Research and Higher Education System (in French). Posted online, July 17, 2014 on the IRESA portal. 11 pp.
- **Laarif A.** and I. Chaeb (2014). the rationalization of the use of agricultural pesticides (in arabic) Brochure published and distributed by the Environment Association of Wardenine.
- Chaeb A. and **A. Laarif** (2014). Good practices in the use of pesticides. Guide published and distributed by the Tunisian Association for Sustainable Agriculture.
- **Laarif A.** (2003). Integrated pest management of the potato tuber moth *Phthorimaea operculella* (Zeller). Brochure published and distributed by the Technical Center of Potato and Artichoke.

11. NATIONAL AND INTERNATIONAL SYMPOSIUM ORGANIZATION

- 13th Arab Congress of Plant Protection. "Plant Health for Secure and Safe Food". Hotel Le Royal, Hammamet, Tunisia. 1-6 November 2020.
- First Maghreb Symposium of plant integrated management SYMPIP 2017.Sousse.Tunisia. 30 Oct-01 Nov. 2017.
- First national symposium on integrated plant protection (SYNPIP-2015). Sousse. Tunisia. 20-21 April 2015.
- 9th MGPR's International Symposium: Pesticides in Food and the Environment in Mediterranean Countries. Hammamet. Tunisia. 9-10 October 2015.
- The First Africa-International Allelopathy Congress (AIAC). Sousse, Tunisia. 6-9 February 2014.
- Crop Protection Management in Mediterranean Organic Agriculture. Sousse. Tunisia. 14-16 may 2013.
- Annual conference of Mediterranean group of pesticides (MGPR).Piacenza, Italy. 13-14 November 2008

12. PUBLICATIONS

- 62- SARA STURIALE, ORIANA GAVA, MARISA GALLARDO, DOLORES BUENDÍA GUERRERO, DURSUN BUYUKTAS, GULCINE ECE ASLAN, **ASMA LAARIF**, THAMEUR BOUSLAMA, ALEJANDRA NAVARRO, LUCA INCROCCI, FABIO BARTOLINI. (2024). Opportunities to boost sustainable greenhouse farming in the Mediterranean basin. Accepted to be published in Sustainability.
- 61- JERBI-ZRELLI, N., BOUSLAMA, T., BOUKHRIS-BOUHACHEM, S., CHAIEB, I., MNARI-HATTAB, M., & **LAARIF, A.** (2024). Morphological and molecular characterisations of *Orosius albicinctus* (Distant, 1918). *Oriental Insects*, 1–16. <https://doi.org/10.1080/00305316.2024.2327997>
- 60- BOUSLAMA, T., **LAARIF, A.**, CHATTAOUI, M., VIAL, L., LAVIRE, C., AND DORÉ, J., AND RHOUMA, A. 2023. Biochemical and molecular identification of a native *Bacillus thuringiensis* gv. cytolyticus isolate with insecticidal effect against the pod borer larvae (*Helicoverpa armigera*). *Tunisian Journal of Plant Protection* 18 (2): 71-91.
- 59- TIBA, S., **LAARIF, A.**, WENNMANN, J., BOUSLAMA, T & JEHL, J. **2022**. Biological activity and genome composition of a Tunisian isolate of *Spodoptera littoralis* nucleopolyhedrovirus (SpliNPV-Tun2). *Egyptian Journal of Biological Pest Control*. 32. 10.1186/s41938-022-00568-w.
- 58- **A. LAARIF** & T. BOUSLAMA. 2022. The Ficus Whitefly *Singhiella simplex* (Singh, 1931) (Hemiptera: Aleyrodidae): a new exotic whitefly found on urban *Ficus* species in Tunisia, *Oriental Insects*, DOI: [10.1080/00305316.2022.2056252](https://doi.org/10.1080/00305316.2022.2056252)
- 57- JERBI M., BEN HAMOUDA A., HAMDI F., **LAARIF A.**, CHAIEB I. **2021**. Fumigant activities of essential oils and their mixtures from cultivated aromatic plants against *Spodoptera littoralis* (Boisduval, 1833). *Journal of Entomology and Zoology Studies*. 9(2): 50-55.
- 56- JERBI M., BEN HAMOUDA A., HAMDI F., **LAARIF A.**, CHAIEB I. **2021**. Evaluation of repellent activity and toxicity of three essential oils against *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae) using a mixture design. *International Journal of Entomology Research*. 6(3). 69-75. ISSN: 2455-4758.
- 55- BEN HAMOUDA, A., BEN BNINA, E., CHAIEB, I. **LAARIF A.** and BEN JANNET H. (2020). Cyclic and acyclic alcohols: a structure-activity relationship study correlation between insecticidal activity and chemical structure. *Int J Trop Insect Sci* . <https://doi.org/10.1007/s42690-020-00277-7>
- 54- BOUSLAMA, T., CHAIEB, I. and **LAARIF, A.** 2020. Evaluation of a *Bacillus thuringiensis* isolate-based formulation against the pod borer *Helicoverpa armigera* Hübner (Lepidoptera: Noctuidae) (1808). *Egyptian Journal of Biological Pest Control*. 30 (16), 1-7
- 53- BOUSLAMA, T., **LAARIF, A.**, SOLTANI, A., CHAIEB, I., AMRI, L., AND RHOUMA, A. 2019. Screening chickpea lines and varieties for a possible resistance or tolerance to the pod borer *Helicoverpa armigera*. *Tunisian Journal of Plant Protection* 14 (1): 69-81.
- 52- BOUSLAMA, T., CHAIEB, I., JERBI-ELAYED, M., & **LAARIF, A.** (2019). Observations of some biological characteristics of *Helicoverpa armigera* reared under controlled conditions. *Tunisian Journal of Plant Protection*, 14(2), 17-27.

- 51- BEN TIBA S, LAREM A, **LAARIF A**, E. Fritsch, K. Undorf-Spahn, S. Abuelgasim Mohamed, S. Ekesi, J. T. Wennmann, J. Krosche, S. Fattouch, J. A. Jehle1 (2019). The potential of novel African isolates of *Phthorimaea operculella* granulovirus for the control of *Tuta absoluta*. *Journal of Applied Entomology*. 00:1–10. <https://doi.org/10.1111/jen.12568>.
- 50- H. JEDER, **A. LAARIF B**, I. CHAIEB B ET F. KSOURI (2018). Farmers'risk perceptions of pesticides used for greenhouses vegetables production in Tunisian Center-East. *New Medit*. 4. 45- 55.
- 49- N.E. BEN-KHALIFA, I. CHAIEB, **A. LAARIF**, R. HAOUALA. (2018). Insecticidal activity of six *Apiaceae* essential oils against *Spodoptera littoralis* Biosduval (Lepidoptera: Noctuidae). *Journal of New Science*. Volume 55 (1). www.jnsiences.org. E-ISSN 2286-5314.
- 48- SAFA RGUEZ, KAMEL MSAADA, MEJDA DAAMI-REMADI, IKBEL CHAYEB, INES BETTAIEB REBEY, MAJDI HAMMAMI, **ASMA LAARIF** & IBTISSEM HAMROUNI-SELLAMI (2018): Chemical composition and biological activities of essential oils of *Salvia officinalis* aerial parts as affected by diurnal variations, *Plant Biosystems*. DOI: 10.1080/11263504.2018.1473305.
- 47- I. CHAIEB1, K. ZARRAD, R. SELLAM., W. TAYEB., A. BEN HAMMOUDA., **A. LAARIF** and S.A BOUHACHEM (2018). Chemical composition and aphicidal potential of Citrus aurantium peel essential oils. *Entomologia Generalis*, Vol. 37, Issue 1. 063-075.
- 46-I. CHAIEB, A.L BEN HAMOUDA, W. TAYEB, K. ZARRAD, T. BOUSLEMA and **A. LAARIF** (2018).The Tunisian Artemisia Essential Oils for Reducing Contamination of Stored Cereals by *Tribolium castaneum*. *Food Technology and Biotechnology*56(2), 247-256.DOI10.17113/ftb.56.02.18.5414.
- 45- ZARRAD K., **LAARIF, A.** BEN HAMOUDA, I. CHAIEB, AND I. MEDIOUNI-BEN JEMAA. (2017) Anticholin- esterase Potential of Monoterpenoidson the Whitefly Bemisia Tabaci and Their Kinetic Studies". *Journal of Agricultural Science and Technology*. Vol 19, No 1.643-652.
- 44- A. ENNIGROU, HERVÉ CASABIANCA, **A. LAARIF**, B. HANCHI, KARIM HOSNI (2017). Maturation-related changes in phytochemicals and biological activities of the Brazilian pepper tree (*Schinus terebinthifolius* Raddi) fruits. *South African Journal of Botany*, Elsevier, 108, pp.407-415.
- 43- AKACHA, M., CHAIEB, I., **LAARIF, A.**, HAOUALA, R., AND BOUGHANMI, (2017). Effects of Melia azedarach leaf extracts on nutritional behavior and growth of *Spodoptera littoralis*. (Tunisia). *Tunisian Journal of Plant Protection*. Volume 12, Special Issue. 61-70.
- 42- ZARRAD, K., CHAIEB, I., BEN HAMOUDA, A., BOUSLAMA, T., AND **LAARIF, A.** (2017). Chemical composition and insecticidal effects of Citrus aurantium essential oil and its powdery formulation against Tuta absoluta. *Tunisian Journal of Plant Protection*. Volume 12, Special Issue. 83-94.
- 41- A. BEN HAMOUDA, I. CHAIEB, K. ZARRAD, **A. LAARIF** (2017). A New Pteromalid Species: *Anisopteromalus Quinari* (Gokhman & Baur, 2014) Found in Tunisia, *Entomology and Applied Science Letters*. 4 (4): 7-10.
- 40- BEN HAMOUDA, A., BOUSSADIA, O., BEDIS, K., CHAIEB, I., **LAARIF, A.**, AND BRAHAM, M. (2016). Effect of olive leaf extracts on the feeding, growth and metabolism of

Spodoptera littoralis. *Tunisian Journal of Plant Protection*. 11: 63-72.

39- DAMMAK M., BEN KHEDHER S., BOUKEDI H. CHAIB I., **LAARIF A.**, TOUNSI S. (2016) Involvement of the processing step in the susceptibility/tolerance of two lepidopteran larvae to *Bacillus thuringiensis* Cry1Aa toxin. *Pesticide Biochemistry and Physiology*. 127 46–50.

38- ELBAZ M., HANSON P., FGAIER S. & **LAARIF A.** (2016). Evaluation of tomato entries with different combinations of resistance genes to tomato yellow leaf curl virus (TYLCV) disease in Tunisia. *Plant Breeding* 135(4): 525-530. doi: 10.1111/pbr.12375.

37- M. DAMMAK, S. BEN KHEDHER, H. BOUKEDI, I. CHAIB, **A. LAARIF**, S. TOUNSI (2016). Involvement of the processing step in the susceptibility/tolerance of two lepidopteran larvae to *Bacillus thuringiensis* cry1Aa toxin *Pesticide Biochemistry and Physiology* . Volume 127. 46-50.

36- **A. LAARIF** , D. SALEH, C. CLOUET, N. GAUTHIER (2015). Regional co-occurrence between distinct *Bemisia tabaci* (Hemiptera: Aleyrodidae) species in Tunisia with new insights into the role of host plants. *Phytoparasitica*. DOI 10.1007/s12600-014-0437-y. 43:135-150.

35- ZARRAD K., A. BEN HAMOUDA, I. CHAIEB, **A. LAARIF**, J. MEDIOUNI-BEN JEMÂA. (2015). Chemical composition, fumigant and anti-acetylcholinesterase activity of the Tunisian *Citrus aurantium* L. Essential oils. *Industrial crops and products* 76, 121-127.

34- S. BEN KHEDHER, H. BOUKEDI, O. KILANI-FEKI, I. CHAIB, **A. LAARIF** , L. ABDELKEFI-MESRATI, S. TOUNSI (2015). *Bacillus amyloliquefaciens* AG1 biosurfactant putative: Receptor Diversity and histopathological effects on *Tuta absoluta* midgut. *Journal of invertebrate pathology*. Volume 132, 42-47.

33- BEN HAMOUDA, A., CHAIEB, I., ZARRAD, K., & **LAARIF, A.** (2015). Insecticidal activity of methanolic extract of Silverleaf nightshade against *Tribolium castaneum*. *International Journal of entomological research*, 3(1), 23-28.

32- A. BEN HAMOUDA, K. ZARRAD, I. CHAIEB, **A. LAARIF** (2015). Antifeedant and insecticidal properties of *Solanum elaeagnifolium* extracts on the African Cotton Leafworm. *Azarian Journal of agriculture*. 2 (3), 71-74.

31- A. BEN HAMOUDA, O. BOUSSADIA, K. BEDIS, **A. LAARIF**, M. BRAHAM (2015) studies on insecticidal and deterrent effects of olive leaf extracts on *Myzus persicae* and *Phthorimaea operculella*. *Journal of entomology and zoology Studies*. 3(6), 294-297.

30- AMEL BEN HAMOUDA, ZARRAD KHAOULA, **ASMA LAARIF** , IKBAL CHAIEB (2015). Insecticidal effect of *Solanum elaeagnifolium* extracts under laboratory conditions. *Journal of Entomology and Zoology Studies*. 3 (3), 187-190.

29- BEN HAMOUDA AMEL, MECI ATIKA , ZARRAD KHAOULA , **LAARIF ASMA** AND CHAIEB IKBAL (2015). Disruptive effects of pomegranate *Punica granatum* Linn. (Lythraceae) extracts on the feeding, digestion and morphology of *Spodoptera littoralis* (Boisduval) (Lepidoptera: Noctuidae). *Entomology and Applied Science Letters*, 2, 2:1-6.

28- AMEL BEN HAMOUDA, IKBAL CHAIEB, MEJDA DAAMI-REMADI and **ASMA LAARIF** (2015). In vitro evaluation of insecticidal and antifungal potencies of fruit peel extracts of pomegranate (*Punica granatum*). *Central European Journal of Experimental Biology*, 4 (1):11-15.

- 27- KHALIL, S., ZARRAD, K., BEN HAMMOUDA, A., AYED LAKHAL, Y., RGUEZ, S., TAYEB, W., **LAARIF, A.**, AND CHAIEB I. (2015). Comparison between insecticide effects of wild and cultivated rosemary essential oils we stored product insects. *Tunisian Journal of Plant Protection*. 10: 105-115.
- 26- MAJDOUB O., DHEN N., SOUGUIR S., HAOUAS D., BAOUANDI M., **LAARIF A .** and CHAIEB I. (2014). Chemical composition of the essential oils of the *Ruta chalepensis* and their insecticidal activity against *Tribolium castaneum*. *Tunisian Journal of Plant Protection* . 9: 83-90.
- 25- BEN HAMOUDA A., MECHE A., ZARRED K., CHAIEB I. and **LAARIF A.** (2014). Insecticidal activities of extracts from the bark of the Granada (*Punica granatum*) against the red flour beetle *Tribolium castaneum*. *Tunisian Journal of Plant Protection*, 9: 91-100.
- 24- DHEN N., MAJDOUB O., SOUGUIR S., TAYEB W., **LAARIF A.** and CHAIEB I. (2014). The chemical composition and toxicity by fumigation of essential oils of *Artemisia absinthium* against *Rhyzopertha dominica* and *Spodoptera littoralis*. *Tunisian Journal of Plant Protection* . 9: 57-65.
- 23- LADHARI A., OMEZZINE F., CHAIEB I., **LAARIF A.** and HAOUALA R. (2013). Antifeeding and insecticidal effects of *Capparis spinosa* L. It *Spodoptera littoralis* (Boisduval) larvae. *African Journal of Agricultural Research*. Vol. 8(42), pp. 5232-5238.
- 22- **LAARIF A .**, ZARRAD K, Tayeb W, AYED A, SOUGUIR S and CHAIEB I, (2013), chemical composition and insecticidal activity of essential oil from *Citrus aurantium* (Rutaceae) fruit peels against two greenhouse insects; *Spodoptera littoralis* (Noctuidae) and *Tuta absoluta* (Gelechiidae). *Advances in Agriculture, Science and Engineering Research*. 3 (5): 825 - 830.
- 21- LADHARI A, **LAARIF A.**, OMEZZINE F, HAOUALA R. (2013). Effect of the extracts of the spiderflower, **Cleome arabica**, on feeding and survival of larvae of the cotton leafworm, *Spodoptera littoralis*. *Journal of Insect Science* 13:61. Available online: <http://www.insectscience.org/13.61>.
- 20- SOUGUIR S., Chaieb I., BEN CHEIKH Z., **LAARIF A.** (2013). Insecticidal activities of essential oils from some cultivated aromatic plants against *Spodoptera littoralis* (Boisd). *Journal of plant protection research*. Vol. 53, No. 4. 388-391.
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- T. BOUSLAMA, M. MANSOUR, **A. LAARIF** (2024). Development and validation of a mathematical model to predict the occurrence of the different stages of the tomato leaf miner *Tuta absoluta* (Meyrick, 1917) in a context of a proactive Integrated Pest Management Strategy. Oral communication. 6th Euro-Mediterranean conference for environmental integration (EMCEI). 15–18 May 2024 at Marrakech-Morocco.

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16- LANGUAGES

- Arabic (*mother tongue*), with a good knowledge of spoken and written French and a good knowledge of English.