

Curriculum Vitae for Zoulikha KRIMI

Date of birth: 9th, September 1963. **Nationality:** Algerian. Family: single

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Professional preparation

University Degree: **1987, engineer** (Baccalaureat+5) in Agronomy (field of plant pathology), Institut National Agronomique, El Harrach, Algiers. **1989, Magister** en Sciences Agronomiques (plant pathology). **Doctoral degree:** **2003**, in plant pathology: 'Persistance du plasmide Ti d'*Agrobacterium* spp. dans le sol et son instabilité *in vitro* et *in situ*'. **Supervisor :** Prof. **Yves DESSAUX** (Laboratoire des Interactions Plantes-microorganismes, Institut des Sciences du Végétal, CNRS, Gif sur Yvette, France).

Professional experience

President of Scientific Council - Faculty of Natural and Live Sciences April 2014 – November 9th.

Lecturer, University Blida1, Faculty of Agronomic Sciences and Veterinary, University Blida1.

Lecturer, University of Tlemcen (Algeria) from 1994 to 2004.

President of Scientific Comity, Department of Forestry from 1998 to 2000.

Director of Studies Department of Forestry from 1996 to 1998.

Organizer, Agronomy Institute, University Blida from 1989 to 1994

Head of department of plant protection ministry of Agriculture from 1987 to 1989.

Teaching experience

As lecturer: Microbiology, Plant-pathology (Plant pathogenic bacteria, Mycology, Virology), Forest-pathology, Soil biology, Environment Microbiology, Bacterial taxonomy, Diagnosis of plant pathogenic bacteria, seed-pathology, Microbial biotechnology, plant-microorganisms interaction.

Appointments

Associate professor: (2008-2015)

Assistant-professor: (2003-2008)

PhD student: (1996-2003)

Laboratory trainings

- Molecular tests (PCR, RFLP, AFLP, Rep-PCR), **Laboratoire d'Ecologie Microbienne, Lyon 1, France. (Supervisor : Xavier Nesme).**
- Opine analysis, **Laboratoire des Interactions Plantes-Microorganismes, ISV Gif sur Yvette, France (supervisors : Dr. Yves Dessaux and Dr. Annick Petit).**
- Quarantine organisms. **Instituto Valenciano de Investigaciones Agrarias, laboratory of Bacteriology , Valencia, Spain (supervisor : Maria Milagros Lopez)**
- Isolation and molecular identification of Plant pathogenic bacteria. **Laboratory of**

Plant Pathology, Dipartimento di Agraria, Napoli, Italy (supervisor : Dr. Astolpho Zoina and Dr. Aida Raio)

- Isolation and molecular identification of Plant pathogenic bacteria, **Laboratory of Bacteriology, CNR, Firenze, Italy. (supervisor : Dr. Aida Raio).**
- **Phytoplasma characterisation, Dipartimento di scienze agrarie ed ambientali (DISA), Udine, Italy. (supervisor : Dr. Firrao Giuseppe).**
- Diagnosis of Plant pathogenic bacteria and Fungi from field to the laboratory, Benaki **Phytopathological Institute, Kifissia, Athens, (Greece) (supervisor: Dr. Maria Holeva).**
- Insect vectors, **Laboratorio di Entomologia Generale e Applicata, Dipartimento di Scienze Agrarie, Forestali e Alimentari, Grugliasco, Torino, Italy (supervisor: Dr. Domenico Bosco).**
- Isolation and characterization of fungal root endophytes, **Leibniz-Institute of Vegetable and Ornamental Crops (IGZ), Großbeeren, Germany, (Supervisor: Dr. Philipp Franken).**

Language

- French and English

Tutoring experience

Supervisor of more than 40 completed MSc projects

Main supervisor on license projects

Main supervisor on current PhD projects

Research activities and field of expertise

1. Diversity, ecology and systematic of fungal and bacterial endophytes from date palm and their potential for biocontrol against *Fusarium oxysporum* f.sp. *albedinis* agent of 'bayoud' disease
2. Characterization of wood decline fungi involved in decline of Citrus, olive, forest and ornamental trees
3. Epidemiology and ecology of fire blight disease (characterisation of *Erwinia amylovora* isolates from apple and pear diseased plants and monitoring of fire blight cankers and the appearance of blossom infections in relation to ambient temperature, rain fall...)
4. Vegetable field crop pathology (Characterization of bacterial plant diseases of potato in field and storage conditions).
5. Bacterial endophytes isolated from native (spontaneous) plant species and their potential to induce systemic resistance against bacterial plant diseases (crown gall, fire blight...)
6. Bacterial endophytes isolated from native (spontaneous) plant species and their potential to induce growth promotion on cultivated plants
7. Seasonal monitoring of *Xylella fastidiosa* vectors associated to scorch leaf symptoms on different plant hosts located in Northern Algeria.

Publications

H. Bouzar, N. Daouzli, **Z. Krimi**, A. Alim and E. Khemici. 1991. Crown gall in plant nurseries of Algeria, Characteristics of *Agrobacterium* strains, and biological control of sensitive and resistant to agrocin 84. *Agronomie*, 11: 901-908.

- H. Bouzar, D. Ouadah, **Z. Krimi**, J. B. Jones, M. Trovato, A. Petit, Y. Dessaux. 1993. Correlative association between resident plasmids and the host chromosome in a diverse *Agrobacterium* soil population. *Applied and Environmental Microbiology*, 59 :1310-1317.
- H. Bouzar, D. Ouadah, Y. Dessaux, A. Petit, **Z. Krimi**, M. Trovato. 1991. Composition of the *Agrobacterium* population from a fallow field. *Phytopathology*. 1222.
- Z. Krimi**. 2001. Crown gall on *Eucalyptus occidentalis* seedlings. New and unusual records. OEPP/EPPO bulletin 31, 111-117.
- Z. Krimi** and S. Mehdid. 2001. Identification of wood-decay fungi infecting various forest trees. OEPP/EPPO bulletin 31, 111-117.
- Benjama, A., A. Boubaker, A. Khelif, H., **Z. Krimi**, X. Nesme, , M. Lopez and A. Zoina. 2002. Susceptibility of stone rootstocks, rose and grapevine to *Agrobacterium radiobacter* var. *tumefaciens* in Arab Mediterranean Countries. EPPO/OEPP bulletins. Pp. 463-466(4).
- Z. Krimi**, A. Petit, C. Mougel, Y. Dessaux and X. Nesme. 2002. Seasonal fluctuations and long-term persistence of pathogenic populations of *Agrobacterium* spp. in soils. *Applied and Environmental Microbiology*, 68: 3358-3365.
- Krimi Z.**, Raio A. , Petit A. Nesme X. and Dessaux Y. 2006. *Eucalyptus occidentalis* plantlets are naturally infected by pathogenic *Agrobacterium* strains. *European Journal of Plant Pathology*. 116: 237-246.
- Krimi Z.** Raio A. And Dessaux Y. 2007. *In vitro* genetic instability of *Agrobacterium tumefaciens* strains isolated from eucalyptus tumors. *Biotechnologies Végétales*. pp. 5-10.
- Amdoun R., L. Khelifi, M. Khelifi, B. Zarouri, S. Amroune, A. Morsli, Y. Boutoumi et **Z. Krimi**. 2008. Chevelu racinaire de *Datura stramonium* L. induit par *Agrobacterium rhizogenes* en vue de la production d'alcaloïdes par voie biotechnologique. *Technologies avancées*, n°20
- Zoulikha Krimi**, Asma Belaskri and Aida Raio. 2011. Susceptibility of five Eucalyptus species to crown gall. *Forest Pathology*. 58: 235-239.
- Haddad N. **Krimi Z.** Raio A. 2013. Endophytic bacteria from weeds promote growth of tomato plants *in vitro* and in greenhouse. DPG Spectrum Phytomedizin, Endophytes for plant protection: the state of the art, 27 – 29, Berlin, Germany. pp : 27-32.
- Lamia Tafifet, **Zoulikha Krimi** & Dhaouya Nebih. **2015**. Evaluation of aqueous extracts from native plant species for their nematocidal effects on *Meloidogyne* spp. **Proceedings of the 7th Congress on Plant Protection**, IOBC-EPRS, IOBC-WPRS, Belgrade pp. 187-190.
- Lamia Tafifet, **Zoulikha Krimi** & Dhaouya Nebih. **2015**. Efficacité de lutte biologique par utilisation des extraits totaux de plantes adventices. **Agrobiologia** n°7, 27-32.
- Krimi Z.** Raio A. Djellout H. Alim D. Tafifet L. Mohamed-Mahmoud F. Smail K. & Khodja R. Antagonistic and PGP activities of endophytic bacteria inhabiting spontaneous plants. **Accepted for publication in Phytopathologia Mediterranea**.

Participation to conferences congresses and meetings

1. Benjama Ah., A. Boubaker, H. Khleif, **Z. Krimi**, X. Nesme, M. Lopez, A. Zoina. Susceptibility of some fruit rootstocks and rose to crown gall, caused by *Agrobacterium tumefaciens*, in arab mediterranean countries. Seventh Arab Congress of Plant Protection. 22-26 October 2000, Amman, Jordan.
2. **Krimi Z.** Ecology of *Agrobacterium* Ti plasmid in soil. Integrated Control of Crown Gall in Mediterranean Countries. 3rd Meeting, Instituto Valenciano de Investigaciones Agrarias, de Moncada, 5-6 February 2001, Valencia, Spain.
3. **Krimi Z.** Biochemical and Molecular characterization of *Agrobacterium tumefaciens* strains isolated from naturally infected Eucalyptus occidentalis seedlings. Integrated Control of Crown Gall in Mediterranean Countries. 3rd Meeting, Instituto Valenciano de Investigaciones Agrarias, de Moncada, 5-6 February 2001, Valencia, Spain.
4. **Krimi Z.** Characterization of *Agrobacterium* spp. isolated from *Eucalyptus* crown gall tumors. 4ièmes Rencontres de Phytopathologie, 13-17 Mars 2002, Aussois, France.
5. **Krimi Z.** Mehdid S. and S. Zaoui. Identification des polypores inféodés aux arbres de la région de Tlemcen. 2^{ième} Colloque International sur le Développement Durable : Diversités biologiques écologiques et environnementales. 28-30 Avril 2002. Université de Laghouat, Laghouat. Algérie.
6. **Krimi Z.** Diversité chromosomique et plasmidique d'une population d'*Agrobacterium tumefaciens* isolée du sol. Séminaire International de Biologie et Environnement. 20-22 Octobre 2002. Université Mentouri, Constantine. Algérie.
7. **Krimi Z.** l'eucalyptus hôte sensible à la maladie du crown gall. Séminaire international d'Ecologie Environnementale et Urbaine : état actuel et perspectives. 15-17 mai 2004. Université Mentouri, Constantine, Alger.
8. **Krimi Z.**, Benaïssa M. et Mehdid S. Diagnostic symptomatique des maladies du bois de peuplier blanc (*Populus alba* L.) cultivé dans la région de Tlemcen. Séminaire international d'Ecologie Environnementale et Urbaine : état actuel et perspectives. 15-17 mai 2004. Université Mentouri, Constantine, Alger.
9. **Krimi Z.** Mekoui A. Caractérisation de la diversité fongique du sol de la forêt de chêne liège de Hafir (Ouest Algérien). IOBC/OILB Integrated Protection in *Quercus* sp. forests. October 5 – 8th 2004, Hammamet, Tunisie.
10. **Krimi Z.** Lachgueur M. Diagnostic symptomatique des maladies du chêne-liège de Hafir (Ouest Algérien). IOBC/OILB Integrated Protection in *Quercus* sp. forests. October 5 – 8th 2004, Hammamet, Tunisie.
11. **Krimi Z.** L'Eucalyptus cultivé en pépinière est naturellement sensible à la maladie du crown gall. Colloque Méditerranéen sur la Gestion Durable des Espaces Montagnards. 10-11 Octobre 2004, Tlemcen, Algérie.
12. **Krimi Z.** and Benkacimi A. Characterization of *Agrobacterium vitis* from symptomless cuttings and potential for crown gall dissemination in Algerian grape nurseries. Ninth Arab Congress of Plant Protection, 19-23 November 2006, Damascus, Syria
13. **Krimi Z.** and Belaskri A. Crown gall incidence of eucalyptus in Algerian forest nurseries and susceptibility of cultivated species to *Agrobacterium tumefaciens*. 1st Egyptian-Jordanian Conference on Biotechnology and Sustainable Development: Current Status and Future Scenarios. December 2006. Cairo, Egypt
14. **Krimi Z.** and Belaskri A. Studies on *Agrobacterium tumefaciens*, the causal agent of a new disease that affects eucalyptus spp. In Algerian forest nurseries. Sixth Jordanian Agricultural Scientific Conference. April 9-12th 2007 Amman, Jordan.
15. **Krimi Z.** Participation to the first International Phytoplasmologist Working Group Meeting. November, 12-15th 2007. Bologna, Italy.

16. Azil N. Amdoun R. et **Krimi Z.** Analyse du pouvoir rhizogène de quelques isolats d'*Agrobacterium* spp. isolés du sol. Premier séminaire National sur le thème : Agriculture, Environnement et Santé. SNAES. 2008. Khemis Miliana, 11 et 12 Avril 2008.
17. Bouguessa Benblidia A. **Krimi Z.** et Bensaada A. Distribution quantitative de la population d'*Agrobacterium* spp. Dans la rhizosphère de la vigne. Premier séminaire National sur le thème : Agriculture, Environnement et Santé. SNAES. 2008. Khemis Miliana, 11 et 12 Avril 2008.
18. **Krimi Z.** Participation to the International Workshop on Real-Time PCR for the Detection and Identification of Plant Pathogenic Bacteria in Seeds and Plants. May, 6-13 2008, Agadir, Morocco.
19. **Krimi Z.** Azil N. and Amdoun R. *In vitro* hairy root induction with a collection of *Agrobacterium* spp. isolated from soil. 2nd Jordanian-Egyptian Biotechnology conference. Biotechnology and Society: Prospects and Challenges. Yarmouk University, Irbid, Jordan, 11-13 November 2008.
20. **Krimi Z.** Persistance du plasmide Ti d'*Agrobacterium* spp. dans le sol : étude écogénétique. Séminaire national : les interactions faune- flore et impact des changements globaux dans les espaces naturels, Blida, 2-3 décembre 2008, Algérie.
21. Bouguessa Benblidia A. et **Krimi Z.** Dynamique des populations d'*Agrobacterium* spp. dans le sol et la rhizosphère de la vigne. Séminaire national : les interactions faune- flore et impact des changements globaux dans les espaces naturels, Blida, 2-3 décembre 2008, Algérie.
22. Fadhela Mohamed Mahmoud , Jose G. Maciá-Vicente, Luis V. Lopez-Llorca et **Z. Krimi.** Effect of fungal endophytes on barley growth under stress conditions. Annual scientific meeting 2009. The fungal cell. September 1-4th 2009 . West park conference centre, University of Dundee.
23. **Krimi Z.** 2009. Détection d'*Agrobacterium vitis* dans le matériel de multiplication de la vigne et potentiel de dissémination de la maladie du crown gall. Colloque international « Gestion des risques phytosanitaires » Marrakech, 9-11 novembre 2009, Morocco.
24. Djellout H. & **Krimi Z.** Activité antibactérienne de quatre espèces spontanées sur une collection de bactéries phytopathogènes. Séminaire national sur la protection des plantes cultivées, Khemis Miliana, 25 et 26 mai 2010.
25. Alim D. & **Krimi Z.** Analyse du pouvoir pathogène de souches d'*Erwinia carotovora*. Séminaire national sur la protection des plantes cultivées, Khemis Miliana, 25 et 26 mai 2010.
26. Moudoud R. Issad N. & **Krimi Z.** Caractérisation biochimique et pouvoir pathogène d'une population d'*Agrobacterium* spp. Isolée de boutures de vigne (*Vitis vinifera*). Séminaire national sur la protection des plantes cultivées, Khemis Miliana, 25 et 26 mai 2010.
27. **Krimi Z.** Belaskri A. and Raio A., *Screening of eucalyptus species for sensitivity to crown gall disease*. 13th Congress of the Mediterranean Phytopathological Union, Petria, Roma. 20-25 June 2010.
28. Fettah A. & **Krimi Z.** Dépérissement du cèdre de l'atlas dans la cédraie de Chréa : état actuel et risques d'une éventuelle dégradation. Colloque international de gestion et conservation de la biodiversité continentale dans le bassin méditerranéen. Tlemcen 11-13 octobre 2010.
29. Fettah A. & **Krimi Z.** Dépérissement du cèdre de l'atlas dans la cédraie de Chréa. Approche climatique et phytopathologique. Premier séminaire international d'étude agriculture biologique et développement durable. 13-14 Février 2011.

30. Tafifet L., **Krimi Z.** et Nebih D. Activité nématocide *in vitro* d'extraits aqueux issus d'espèces adventices. Séminaire International sur la Protection des Végétaux. ENSA, El Harrach, Alger. Mars 2011.
31. Fadhela Mohamed Mahmoud, Y. Hamel, F. Sammet, **Z. Krimi**, S. Boudffer, J.G. Macia Vicenté, V. Luis. Lopez-Liorca. Activité antagoniste de quelques isolats fongiques endophytes vis-à-vis du *Fusarium oxysporum* f.sp. *albedinis*. Symposium international du palmier dattier. 13 - 14 Novembre 2011, l'USTHB Alger. Algérie.
32. **Krimi Z.** Raio A. Dessaux Y. Smain K. and Khodja R. **2012**. Bacterial endophytes from diverse spontaneous plant species with biological activities. COST FA1103 Endophytes in Biotechnology and Agriculture. Endophytes: from discovery to application. San Michele all'Adige (Trentino), November 14-16th, Italy. http://www.endophytes.eu/ac_2012trento.html
33. Mohamed Mahmoud, Y. Hamel, F. Samet, **Z. Krimi**, S. Boudffer, J.G. Macia Vicenté, Luis V. Lopez-Liorca. **2012**. Growth Inhibition of *Gaeumannomyces graminis* var. *tritici* by some endophytic fungi. BMS Annual Scientific Meeting. Fungal Interactions. University of Alicante; September 3-6th, Spain. <http://imem.ua.es/en/documentos/imem-files/bms/bms-2012-program-and-abstracts.pdf>
34. Haddad N. **Krimi Z.** Raio A. **2013**. Endophytic bacteria from weeds promote growth of tomato plants *in vitro* and in greenhouse. DPG Spectrum Phytomedizin, Endophytes for plant protection: the state of the art, 27 – 29, Berlin, Germany <http://endophytes.eu/wp/wp-content/uploads/2013/06/2013KrimiPosterBerlin1.pdf>
35. **Alim D. Krimi Z.** **2013**. Effet antagoniste des bactéries endophytes envers les agents de pourriture molle de la pomme de terre. Séminaire International d'écologie bactérienne. 29 au 30 novembre 2013 - Université Abderrahmen MIRA, Béjaia.
36. Mohamed Mahmoud F. C. Ziouch, **Z. Krimi**. **2013**. Evaluation of production of some secondary metabolites (*in vitro*) by four endophytic fungi and their effects on plants growth of barley (*Hordeum vulgare* L.). WG3 Meeting New concepts and strategies for long term cultivation and conservation of competent endophytes for plant growth and plant protection" from 16th-18th December. COST Office, Brussels, Belgium. endophytes.eu/.../FA1103-WG3-meeting-Minutes.pdf
37. Tafifet L. **Krimi Z.** & Nebih D. Evaluation of aqueous extracts from native plant species for their nematocidal properties on *Meloidogyne* spp. VII Congress on Plant Protection: Integrated Plant Protection – a Knowledge-Based Step towards Sustainable Agriculture, Forestry and Landscape Architecture, November 24-28, 2014, Zlatibor, Serbia.
38. **Krimi Z.** Isolation and characterisation of fungal root endophytes. Training school in the frame of COST Action FA1103, Leibniz-Institute of Vegetable and Ornamental Crops (IGZ) 8-12 September 2014 Grossbeeren, Germany
39. **Alim D. Krimi Z.** & Raio A. Endophytic bacteria from weeds reduce virulence of *Pectobacterium* spp. agents of potato soft rot. Eleventh Arab Congress of Plant Protection, 9-12 November, 2014 Amman, Jordan
40. Mohamed Mahmoud F. **Krimi Z.** & Boudfer H. Importance of the endophytic fungus *Aspergillus terreus* in biotechnology and public health. WG1-4 Meeting on "RISK Assessment of endophytes. WG Meeting 03-07 November 2014 University of Ege, Faculty of Agriculture, Department of Plant Protection Bornova, İzmir/Turkey
41. Lamia Tafifet, **Zoulikha Krimi** & Dhaouia Nebih. Activité biopesticide d'extraits aqueux issus de plantes adventices. 1ère exposition ethnobotanique et 2^{ème} atelier d'initiation à la phytothérapie le 7 juin 2014, Jardin d'essai du Hamma, Alger.
42. Tafifet L. **Krimi Z.** & Nebih D. Evaluation of aqueous extracts from native plant species for their nematocidal properties on *Meloidogyne* spp. VII Congress on Plant Protection: Integrated Plant Protection – a Knowledge-Based Step towards Sustainable Agriculture, Forestry and Landscape Architecture. November 24-28, 2014, Zlatibor, Serbia

43. Bellabd I. & **Krimi Z.** Potentiel antagoniste de bactéries endophytes des genres *Bacillus* et *Pseudomonas* sur des agents pathogènes de la pomme de terre. 3rd International Congress of Plant Diversity, Marrakech, 9-11th October 2015, Maroc.
44. Fadila Mohamed Mahmoud., Anissa Razali, Said Boudffer & **Z. Krimi.** *In vitro* production of secondary metabolites by four endophytic fungi and their effects on growth promotion of wheat (*Triticum durum Desf*). International miCROPe Symposium 2015 and Final Conference of COST Action FA1103. "**MICROBE-ASSISTED CROP PRODUCTION - OPPORTUNITIES, CHALLENGES & NEEDS**". November 23rd to 25th, 2015, Vienna, Austria.