

# UNIVERSITY OF ALEPPO FACULTY OF AGRICULTURE DEPARTMENT OF HORTICULTURE

# Curriculum vitae



Prof. Abdulhakim Bawadekji
Director of Edible Mushroom Research Laboratory
Aleppo, P.O.Box 420 – Syria
Fax: +963 21 5264070
Mobile phone: +963 994612698

# Personal:

Name: Abdulhakim Bawadekji

Marital status: Married

Nationality: Syrian Sex: Male

Locality: Extension of Aleppo city, square N° 273/12, Aleppo, Syria

## Present Address & Job:

Northern Border University

**Advisor of Scientific Research Deanship** 

P.O.Box 1321, Arar 91431

Saudi Arabia

Tel: +966 14 661 4943 (direct)

Fax: +966 14 662 0771

Mobile phone: +966 557528348 E-mail: hakimbawadekji@gmail.com

#### **Education (from the most recent):**

#### 1- Postgraduate education:

- a- Ph.D. degree in Agricultural Sciences (1989-1993). The Ph.D. thesis title was "Controlled mycorrhization between four noble mushrooms (CEPES) and some forest trees: Cultivation Techniques and Ultra-structural aspects". (Montpellier France).
- b- M.Sc. degree (DEA = Diplôme des Etudes Approfondies) in Experimental Ecology & Applied Mycology (1987-1988). The M.Sc. thesis title was "Contribution to a study of some problems related to the quality of the prepared substrate for *Pleurotus sp.* cultivation". (Bordeaux France).

#### 2- Graduate education:

a- B.Sc. degree in Agricultural Sciences (1976-1980). Aleppo - Syria.

#### Languages:

- Arabic (mother tongue) : Excellent reading, writing and speaking- French : Excellent reading, writing and speaking

English : Excellent reading, V. good writing and speakingTurkish : V. good reading, slight writing and weak speaking

#### **Work Experience (from the most recent):**

- 1- Full-time Consultant at Deanship of Scientific Research, Northern Border University, Arar, Saudi Arabia, since 08/2014 till now.
- 2- Professor of Botany, Mycology, Department of Biology, College of Science, Northern Border University, Arar, Saudi Arabia, since 2007 till 06/2014.
- 3- Professor of Applied Mycology and Mushroom Production Technology, Dep. of Horticulture, Fac. of Agri., University of Aleppo, Aleppo, Syria. (1994-2005).
- 4- Guest researcher (visiting scientist at University of Hasselt formerly "Limburg Universitaire Centrum"). Department of Botany, Diepenbeek, Belgium. (2004).
- 5- National Expert for IPGRI-CWANA, identification of fungal resources during Master sponsor in collaboration with the Faculty of Agriculture (University of Aleppo), during 2002-2004.
- 6- Director of Edible Mushroom Research Laboratory, Faculty of Agriculture University of Aleppo, Aleppo, Syria, since 2001- 2005.
- 7- Associate Professor of Applied Mycology (Mushroom Production Technology) and Horticulture, Department of Horticulture, Faculty of Agriculture, University of Aleppo, Aleppo, Syria, since 2001.
- 8- Assistant Professor of Applied Mycology (Mushroom Production Technology) and Horticulture, Dep. of Horticulture, Faculty of Agriculture, University of Aleppo, Aleppo, Syria. (1997-2001).
- 9- FAO's national consultant for the development of rural communities (Tele-food Project), in the year 2000.
- 10- Lecturer of Applied Mycology (Mushroom Production Technology) and Horticulture, Dep. of Horticulture, Faculty of Agriculture, University of Aleppo, Aleppo, Syria. (1995-1997).

- 11- FAO's national consultant, project GCP/INT/539/ITA (Forestry and Food Security in the Mediterranean and Near East Region), during 1996-1997.
- 12- Assistant lecturer of Applied Mycology and Horticulture, University of Aleppo, Aleppo, Syria (1994-1995).
- 13- Achievement of my higher education, France (1986-1993).
- 14- Instructor in the field of Horticulture. Horticulture Department, Faculty of Agriculture, University of Aleppo, Aleppo, Syria. (1984-1986).

# Research Experience:

- 1- Desert Truffles & European Truffles cultivation (Orchard Implementation).
- 2- Fungal Biodiversity Macro and Micromorphology & Valorization of Fungal Resources.
- 3- Applied Mycology (Edible Mushroom Production Technology).
- 4- Restoration of Deteriorated Sites & Desertification Control via Mycorrhization.
- 5- Sustainable Agricultural & Recycling of Agricultural Wastes.
- 6- Micro-propagation of Plants.

#### **Awards and Grants:**

- 1- Best Ten Graduates (1980), from Faculty of Agriculture, Aleppo University.
- 2- Grant from the French government (CIES= Centre Internationale des Etudiants et des Stagiaires), for 4 years to achieve my post graduate study in France (1986-1990).
- 3- Grant from the University of Aleppo, Syria, for 3 years to accomplish my Ph D. research in France (1990-1993).
- 4- Invited Professor; Invitation from the Ministry of Exterior (France) in 1997 to activate the scientific cooperation between French and Syrian universities.
- 5- Acknowledgment from Syrian Ministry of Agriculture for my efforts during the achievement of the FAO's national consultation of Mushroom production in Syria.
- 6- Acknowledgment from the General Union of Women (Syria) in the year 2000, for my precious participation in the international project for food security (telefood 2000) of rural region in Syria. This project was proposed by the FAO.
- 7- Individual Mobility Grant (IMG 03-SY2010) in 2004 granted by the European Union (TEMPUS-MEDA project Belgium), for amelioration of the high education in Syria), and postulate a cooperation program between the University of Aleppo (Syria) and Hasselt University (Belgium).
- 8- ICDL Certificate + Acknowledgment, 2007.
- 9- Acknowledgment from Saudi Ministry of Agriculture (Northern Border Province-Arar city) in the year 2010, for my efforts in the success of the tree festival (**Week of the Tree**).
- 10- Certificate of attendance awarded for the training program (Developing Research Abilities: Idea Formulation and Research Management) which was held at Northern Border University on 11 November 2012)

# Field of Interest:

- 1- Applied Mycology:
  - Desert Truffles Orchards Implementation.
  - Edible Mushroom Production.
- 2- Reforestation of Semi-arid and Arid zones
- 3- Biodiversity and Fungal Resources.
- 4- Sustainable Agriculture and Ecotourism.

## **Membership (from the most recent):**

- 1- Member of the committee of Ethics of Scientific Research at Northern Border University.
- 2- Member of the Editorial Board of Journal of the North Basic and Applied Sciences (Issued by Northern Border University).
- 3- Member of the commission on fungi at the organization **OPTIMA** (Organization for the Phyto-Taxonomic Investigation in the Mediterranean Area).
- 4- Member of the Editorial Board (Editor in Chief) of the refereed journal *IJASR* (International Journal of Academic and Scientific Research).
- 5- Reviewer for Different Refereed Journals & Scientific Institutions.
- 6- Member of the committee of plans and curricula development for the Department of Biological Sciences at the Faculty of Science Northern Border University (Arar, Saudi Arabia 2011 till now).
- 7- Committee of Revision for the Deanship of Scientific Research & Publication of Aleppo University, Syria, (since 1996).
- 8- Member of the committee for evaluation & studying the equipment of different biological and biotechnological research laboratories (Saudi Arabia & Syria).
- 9- Reviewer for the Deanship of Scientific Research of Taibah University (Saudi Arabia).
- 10- Reviewer for the Deanship of Scientific Research & Publication of Aleppo University (Syria).
- 11- Member of the Academic staff at the University of Aleppo, Syria, (since 1984).
- 12- Syndicate of Agricultural Engineers, Syria, (since 1980).

# Conferences, Meetings and Workshops:

- 1- Presentation of research article, ISMS, 1-6 September 1991, Dublin -Ireland.
- 2- Attended and presented a poster at "Application of mychorrizae" 10 October 1991, Bordeaux France.
- 3- Presentation of a research summary at 4<sup>th</sup> European Symposium on Mycorrhizas. 11-14 July 1994, Granada Spain.

4- Attended and presented a research article at International Expert Meeting on Medicinal, Culinary and Aromatic Plants in the Near East, 19-21 May 1997, Cairo - Egypt.

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- 5- Attended and presented a research article at the 2<sup>nd</sup> Congress of Recent Technologies in Agriculture, 28-30 October 2002, Cairo Egypt.
- 6- Attended and presented a research article at "Premier Symposium sur les Champignons Hypogés du Bassin Méditerranéen", 6-8 Avril 2004, Rabat Maroc.
- 7- Participating in the meeting of the concerned parties in *Capparis spinosa* market in Syria, organized by IPGRI-CWANA in 25<sup>th</sup> July 2005 at Jabal Al Hoss region, Aleppo Syria.
- 8- Presentation of a Poster at the 6<sup>th</sup> International Conference on Mushroom Biology and mushroom products, 29<sup>th</sup> September 3<sup>rd</sup> October 2008, Bonn Germany.
- 9- Presentation of a Poster at The 18th Congress of the ISMS, International Congress on the Science and the Cultivation of Edible and Medicinal Fungi. Beijing, China, 25-30 August 2012.
- 10- Attending the training program (Developing Research Abilities: Idea Formulation and Research Management), organized by king Abdulaziz City for Sciences and Technology (General Directorate of Research Grants), held on 11, November 2012 at Northern Border University, Arar, Saudi Arabia.

# Training Courses (as trainer):

- 1- Mycorrhizal inoculation in forest plant nurseries in dry land regions, 1995.
- 2- Valorization of agricultural wastes, 1996.
- 3- Production of *Agaricus bisporus* at village level, 1997-1998.
- 4- How to collect wild fungi (in French), 1998.
- 5- Production of *Pleurotus ostreatus* at village level, 2000-2002.
- 6- Conservation and sustainable use of fungal genetic resources, 2002.
- 7- Utilization of agricultural wastes for producing edible fungi (in French), 2002.
- 8- Fungal resources identification, 2005.
- 9- Youth Taking care (for the undergraduate period), 1994 2005.

# **Projects:**

- 1- Fungal biodiversity in the north of Syria. Faculty of Agriculture + Faculty of Science (Aleppo Syria), 1996-2000.
- 2- Sustainable development of rural region in Syria. University of Aleppo + FAO + UNDP, 1997-2000.
- 3- Establishment of Edible Fungal Research Laboratory. University of Aleppo (Syria) + INRA (France), 1998-2000.
- 4- Ecology of desert truffles. University of Aleppo (Syria) + INRA (France) Hasselt University (Belgium) + Wageningen Research Center (Holland), 2002-2004.

- 5- Establishment of a natural reserve for *In situ* Edible Mushroom Biodiversity, in Maskana region at the south east of Aleppo (Syria), 2004-2005.
- 6- Bioconversion of Palm date by-product via the saprophytic edible mushroom *Pleurotus ostreatus*. Northern Border University + King Saud University (Saudi Arabia), 2007-2009.
- 7- European Truffle production in the north-west of Syria: cultivation of *Quercus pubescens*, *Q.ilex*, *Corylus avellana* inoculated with *Tuber melanosporum*. University of Aleppo (Syria) + INRA (France), 2008.
- 8- Desert truffles cultivation, in collaboration with the Saudi Ministry of Agriculture and Water. "Development of the protected area (Muayalah) to study the desert truffles biodiversity at Northern Border Region (Saudi Arabia)", 2009-2011. (Please visit this internet link:

  <a href="http://www.alshmaly.net/vb/showthread.php?t=68355&page=1">http://www.alshmaly.net/vb/showthread.php?t=68355&page=1</a>

  <a href="http://www.alriyadh.com/2011/05/13/section.last.html">http://www.alriyadh.com/2011/05/13/section.last.html</a>
- 9- Mycorrhizal inoculation of some desert trees by *Picoa* sp. at Arar District in Saudi Arabia. Project funded by the Deanship of Scientific Research at Northern Border University, project N° 032-434, (1434 H., 2013 G.).
- 10- Survey of Macromycetes in Wadi Arar at Northern Borders Region (Saudi Arabia). Project funded by the Deanship of Scientific Research at Northern Border University, for the academic year (1435-1436 H., 2014-2015 G.).
- 11- Large Scale Inoculum Production of Arbuscular Mycorrhizal Fungi from Saudi Soils. Project funded by the Deanship of Scientific Research at Northern Border University, project N° 5-10-1436-5 for the academic year (1436-1437 H., 2015-2016 G.).
- 12- Antioxidant and immune-stimulating activities of mycelial extract from the edible mushroom *Pleurotus ostreatus*. Project funded by the Deanship of Scientific Research at Northern Border University, project N° 16-05-1436-5 for the academic year (1436-1437 H., 2015-2016 G.).

# SCIENTIFIC SCHOOL:

# I- B. Sc. Degrees:

- Different graduation projects: in (Fungal Biodiversity, Microbiology, Sustainable Agriculture, Edible Mushroom Production, Medicinal Plants, Biotechnology, In vitro culture & micro-propagation) for the students of the 5<sup>th</sup> year and for the students of the first year of the post graduate study at the university of Aleppo (SY). Also, different graduation projects in the field of the mentioned topics for the students at the final level (8<sup>th</sup> level) in the department of Biological Sciences at the Faculty of Science, in Northern Border University (KSA)

# II- M. Sc. Degrees:

 Eco-geographic Survey and Genetic Diversity Assessment of Oyster Mushroom Pleurotus ostreatus (Jacq. ex: Fr.) Kummer in Syria. In cooperation between University of Aleppo (Syria), IPGRI-CWANA(International Plant Genetic Resources Institute - Regional office for Central West Asia and North Africa - Italy) and CNR-IBAF (Consiglio Nazionale delle Ricerche, Istituto di Biologia Agroambientale Forestale - Italy), 2002-2004.

#### Consultancy work:

- 1- Advisor at the Deanship of Scientific Research, Northern Border University (Arar, Saudi Arabia 2010 till now).
- 2- FAO's national consultant for Edible Mushroom Production.
- 3- IPGRI-CWANA's national expert (Fungal Biodiversity).
- 4- Edible Mushroom Production Consultant for the agricultural governmental and private sector.
- 5- Fungal Resources Identification consultant (Edible & poisonous).

#### **Publications:**

- 1- <u>BAWADIKJI Abdul-Hakim</u> (1988). La notion d'indicateur biologique est souvent utilisée; quelles sont les avantages et les limites dans l'utilisation d'un tel concept? D.E.A D'Ecologie Expérimentale. I.B.E.A.S-CNRS 340. Université de Pau et des Pays de l'Adour **FRANCE**. 25 p.
- 2- <u>BAWADIKJI Abdul-Hakim</u> (1988). Contribution à une étude des problèmes liés à la qualité du substrat destiné à la culture du *Pleurotus* sp. Rapport D.E.A. INRA Bordeaux **FRANCE**. 46 p.
- 3- HOUDEAU G., OLIVIER J.M., LIBMOND S. and <u>BAWADIKJI A-H.</u> (1991). Improvement of *Pleurotus sp.* cultivation. Science and Cultivation of Edible Fungi. Dublin 1-6 September 1991. Maher (ed.). p. 549-554.
- 4- **BAWADIKJI A-H.** et CHEVALIER G. (1991). Synthèse des mycorhizes de *Boletus edulis* avec *Pinus sylvestris*. Poster présenté au Groupe de travail "Application des Mycorhizes" 10-12 Octobre, 1991. Bordeaux **FRANCE**.
- 5- BAWADIKJI Abdul-Hakim (1993). Essai de Mycorhization Contrôlée entre Quatre Cèpes et Quelques Essences Forestières: Techniques Culturales et Aspects Ultrastructuraux. Thèse de Doctorat E.N.S.A. I.N.R.A. Montpellier FRANCE, 305 p.
- 6- <u>BAWADIKJI A-H.</u>, PARGNEY J.C. and CHEVALIER G. (1994). Evolution of wall structure of natural and synthetic mycorrhizae of *Boletus edulis*. Fourth European Symposium on Mycorrhizae. Granada 11-14 July 1994 (SPAIN). p.80.
- 7- **BAWADIKJI A-H.** (1996). Production of the saprophytic edible mushroom *Pleurotus pulmonarius* on cotton culture wastes. *R. J. of Aleppo University* (Agricultural Sciences Series). N 26, pp: 213-225.
- 8- BAWADIKJI A-H. (1997). La culture des champignons comestibles dans les villages forestières en Syrie. Projet régionale FAO, GCP/INT/539/ITA. Consultation Nationale SYRIE, Rapport N° 9, 59 P.
- 9- **BAWADIKJI A-H.** (1997). *Agaricus bisporus* production in forest villages in Syria. International Expert Meeting on Medicinal, Culinary and Aromatic Plants in the Near East. Cairo. **EGYPT**, 19 21 May 1997.

- 10- <u>BAWADIKJI Abdul-Hakim</u> and Ahmad Abdulmounem (1997). Identification de quelques espèces fongiques sauvages répandues sous *Pinus brutia*, dans les zones de reboisement par cette essence dans le gouvernorat d'Alep (SYRIE). *R. J. of Aleppo University* (Basic Sciences). N 26, pp: 79-105.
- 11- <u>BAWADIKJI A-H.</u> and AHMAD A.M. (2002). Fungal genetic resources in Syria and their contribution to food security and income generation. National training course on conservation and sustainable use of plant genetic resources, 7-13 October 2002. ACSAD, ICARDA, IPGRI, Univ. of Aleppo and Univ. of Damascus Syria.
- 12- **BAWADIKJI A-H.** and AHMAD A.M. (**2002**). Utilization of wheat-hay and olive fruit pressing wastes for the production of *Pleurotus ostreatus*: mycelia growth study and sporocarps production. 2<sup>nd</sup> Congress of Recent Technologies in Agriculture, University of Cairo, Faculty of Agriculture, Giza **Egypt**, 28-30 Oct. 2002, pp:463-472.
- 13- BAWADIKJI A-H. and AHMAD A.M. (2003). Contribution à l'identification des espèces fongiques sauvages (Macromycetes) dans les zones arides et semi-arides du gouvernorat d'Alep (Syrie). Damascus University Journal for Basic Sciences. Vol. 19, N° 1, pp: 93-112.
- 14- <u>BAWADIKJI A-H.</u> and AHMAD A.M. (2003). Contribution to the identification of some wild fungal species (Macromycetes) in the north of Aleppo district (Syria); their role in food security and sustainable agriculture development. Workshop on underutilized and neglected plants between reality and the future, organized by IPGRI and the University of Aleppo, 6-8 August 2003.
- 15- <u>BAWADIKJI A-H.</u> and AHMAD A.M. (2003). Production of Edible Mushroom Pleurotus ostreatus by Using Wheat-Hay and Olive Fruit Pressing Wastes: Mycelia Growth Study and Sporocarps Production. R. J. of Aleppo Univ., Agricultural Sciences Series. Vol. 45.
- 16- **BAWADIKJI A-H.** (2004). La Truffe de Désert en Syrie: Aspects Ecologiques et Economiques. Premier Symposium Sur Les Champignons Hypogés du Bassin Méditerranéen. Université Mohammed V, Faculté des Sciences, Rabat, **MAROC**. 6-8 Avril, 2004.
- 17- <u>Bawadekji Abdulhakim</u>, Tomati U., Padulosi S., Ahmad A., Oulabi M.M. and Ez A. (2006). Eco-geographic survey as a complementary conservation approach for *Pleurotus ostreatus* (Jacq. ex. Fr.) kummer genetic resources in Syria. *R. J. of Aleppo Univ.*, Agricultural Sciences Series. Vol. 58.
- 18- <u>Bawadekji Abdulhakim</u> (2007). Production du Pleurote en Forme des huîtres (*Pleurotus ostreatus*) Dans les Conditions Rurales. *R. J. of Aleppo Univ.*, Agricultural Sciences Series. Vol. 65.
- 19- Hassani Z., <u>Bawadekji Abdulhakim</u> and Albiski F. (**2008**). *In vitro* propagation of *Zizyphus spina-christi* L. 1<sup>st</sup> International Agricultural Conference at Aleppo University (Faculty of Agriculture). Aleppo, 13-15 October 2008.
- 20- <u>Bawadekji Abdulhakim</u> and Alqarawi A. (2008). Sustainable technique for rural production of Oyster mushroom *Pleurotus ostreatus*. Poster presented during the 6<sup>th</sup> International Conference on Mushroom Biology and Mushroom products, Bonn (**Germany**), Sep. 29<sup>th</sup> Oct. 3<sup>rd</sup> 2008.

- 21- <u>Bawadekji Abdulhakim</u> (2009). Effect of two Different Types of Nitrogen on Mycelia Growth of *Pleurotus Ostreatus*. *R. J. of Aleppo Univ*., Agricultural Sciences Series. Vol. 74.
- 22- <u>Bawadekji Abdulhakim</u> (2010). Effect of Quality and Process of Straw Preparation in the Production of Edible Oyster Mushroom *Pleurotus pulmonarius* (Fr.) Quél. *Damascus University Journal* for Agricultural Sciences. Vol. 26, N° 1, pp: 61-73.
- 23- Alqarawi A.A. and <u>Bawadekji A.</u> (2012). Production of *Pleurotus ostreatus* on Date Palm Residues. Poster N°(P7-23), The 18<sup>th</sup> Congress of the ISMS, International Congress on the Science and the Cultivation of Edible an Medicinal Fungi. Beijing, China, 25-30 August 2012.
- 24- Abdulhakim Bawadekji, Maria Letizia Gargano, Alessandro Saitta & Giuseppe Venturella (2012). A new record of *Picoa lefebvrei* in Saudi Arabia. *Mycotaxon*. Vol. 122, pp. 243-247. DOI:http://dx.doi.org/10.5248/122.243
- 25- A.A. Al-Qarawi, E.F. Adb\_Allah and <u>A. Bawadikji</u> (2013). Production of *Pleurotus ostreatus* on Date Palm Residues. *Journal of Pure and Applied Microbiology*. Vol. 7(2) pp:1093-1097.
- 26- A. Zambonelli, D. Donnini, G. L. Rana, S. Fascetti, G. M. N. Benucci, M. Iotti, A. Morte, L. Khabar, A. Bawadekji, F. Piattoni, R. Compagno, G. Venturella. (2013). Hypogeous fungi in Mediterranean maquis, arid and semi-arid forests. *Plant Biosystems*. (Taylor & Francis Group)Volume 147, Issue 4. <a href="http://dx.doi.org/10.1080/11263504.2013.877537">http://dx.doi.org/10.1080/11263504.2013.877537</a>
- 27- Ahmed Osman, Faraj Al-Ghamdi and **Abdulhakim Bawadekji** (2014). Floristic diversity and vegetation analysis of Wadi Arar: A typical desert Wadi of the Northern Border region of Saudi Arabia. Saudi Journal of Biological Sciences. <a href="http://dx.doi.org/10.1016/j.sjbs.2014.02.001">http://dx.doi.org/10.1016/j.sjbs.2014.02.001</a>
- 28- **Bawadekji, A.**, Mridha, M.A.U., Al-Barakah, F.N., Compagno, R., Torta, L., Gargano, M.L. and Venturella, G. (2015). First Report of *Agaricus aridicola* in Saudi Arabia and Ecological Notes on *Agaricus bisporus*. J. Appl. Environ. Biol. Sci., 5(5)19-24.
- 29- D. Schillaci, M. G. Cusimano, V. Di Stefano, V. Arizza, D. Russo, A. Bawadekji, S. Davino, M. L. Gargano, G. Venturella. (2015). Antimicrobial Activity of the Desert Truffles *Tirmania pinoyi* and *Terfezia claveryi* Against Human Pathogens. (Conference paper). The 8<sup>th</sup> International Medicinal Mushroom Conference, August 24-27, 2015. Manizales, Colombia.
- 30- P. Bella, M.L. Gargano, S. Davino, M. Davino, V. Arizza, **A. Bawadekji**, V. Catara, R. Compagno and G. Venturella. (2015). *In Vitro* Antibacterial Activity of Extract from the Desert Truffles *Tirmania pinoyi* and *Terfezia claveryi* against Plant Pathogenic Bacteria. (Conference paper). The 8<sup>th</sup> International Medicinal Mushroom Conference, August 24-27, 2015. Manizales, Colombia.
- 31- Giuseppe Venturella, Vladimír Antonín, <u>Abdulhakim Bawadekji</u>, Vasilica Chinan, Marco Floriani, Maja Karaman, Lahsen Khabar, Asunción Morte, Luis Alberto Parra, Ursula Peintner, Pierre Roux, Elena Savino, Alessandra Zambonelli, Georgios Zervakis. (2015). Local names for common wild edible mushrooms growing in Europe, North Africa and the Kingdom of Saudi Arabia.

- XVII Congress of European Mycologists. Poster nr. 50, Madeira, Portugal 21-25 September 2015.
- 32- Giuseppe Venturella, Vladimír Antonín, <u>Abdulhakim Bawadekji</u>, Vasilica Chinan, Marco Floriani, Maja Karaman, Lahsen Khabar, Asunción Morte, Luis Alberto Parra, Ursula Peintner, Pierre Roux, Elena Savino, Alessandra Zambonelli, Georgios Zervakis. (2015). The OPTIMA (Organization for the Phyto-Taxonomic Investigation of the Mediterranean Area) Commission on Fungi. XVII Congress of European Mycologists. Poster nr. 52, Madeira, Portugal. 21-25 September 2015.

Abdulhakim Bawadekji Northern Border University Deanship of Scientific Research Arar, P.O.Box 1321 Saudi Arabia