



## **Curriculum Vitae**

**Prof. Dr. Zakaria Awad Mohamed Baka**  
Botany Department, Faculty of Science, University of Damietta

### **Personal Data**

**Name:** Prof. Dr. Zakaria Awad Mohamed Baka

**Field:** Microbiology (Mycology and Plant Pathology)

**Highest Education:** Ph. D. Degree from Univ. of Sheffield, Gt. Britain (Dec., 1987).

**Date & place of birth:** 7.6.1952 - Damietta, Egypt.

**Marital status:** Married with three kids.

**Present address:** Botany Dept., Faculty of Science, University of Damietta, New Damietta,  
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### **Academic Degrees:**

- B. Sc. (Special Botany), May, 1975, Univ. of Mansoura, Egypt.
- M. Sc. (Microbiology), April, 1981, Univ. of Mansoura, Egypt.
- Ph. D.(Microbiology, Mycology and Plant Pathology), Dec., 1987, Univ. of Sheffield, Gt. Britain

### **Professional Background:**

- Demonstrator (May, 1975 - Mar., 1981), Univ. of Mansoura, Egypt.
- Lecturer (Mar., 1981 - Apr., 1988), Univ. of Mansoura, Egypt.
- Assistant Professor (Apr., 1988 - July, 1993), Univ. of Mansoura, Egypt.
- Associate Professor (July 1993-Dec., 1998), Univ. of Mansoura, Egypt.
- Professor (Dec., 1998 up till now), Univ. of Mansoura, Egypt.

### **Postdoctoral Fellowships:**

- Botanical Institute, Univ. of Bergen, Norway (July-Sept. 1990).
- Faculty of Pure Science, Univ. of Sheffield, Gt. Britain (Sept.-Dec. 1990).
- Dept. of Plant Pathology, Univ. of California at Riverside, U. S. A. (Nov. 1991-Apr.,1992).
- Botanical Institute, Univ. of Bergen, Norway (July-Sept.1994).
- Faculty of Pure Science, Univ. of Sheffield, Gt. Britain (August, 1996).

### **Grants and Awards:**

- 1-Overseas Research Students Award (O.R.S.) for 3 years (1984-1987) from British Government during the study of Ph. D. degree at Univ. of Sheffield, England.
- 2- Financial grant from The Third World Academy of Sciences (Italy) as a contribution of the project "Biological Control of Waterhyacinth by mycoherbicides.

## **Conferences, Meetings, Training Sessions and Workshops**

- 1- Egyptian Botanical Society Meeting at Mansoura University, Mansoura, Egypt (October, 1981).
- 2- British Society of Plant Pathology Meeting in Bangor, Wales, Great Britain (April, 1985).
- 3- British Mycological Society Meeting in Hull, England (July, 1986).
- 4- British Royal Society of Electron Microscopy in Sheffield, England (December, 1986).
- 5- The National Conference on the River Nile at Univ. of Assuit, Egypt (February, 1994).
- 6- The First International Conference on "The New about Electron Microscopy" at Suez Canal University, Ismaiellia, Egypt (September 1995).
- 7- A Symposium about "The Environmental Project For Planting of *Ambrosia* (Damsisa) In Wide Scale which can be used for the control of *Belharezia* Snails" at Faculty of Science, Damietta Branch, Univ. of Mansoura, Egypt (December 1995).
- 8- A symposium about "Air Quality in Dakahlia Governorate and The Effect of Air Pollution on Plants" at Faculty of Engineering, Univ. of Mansoura, Egypt (March, 1996).
- 9- The First International Conference on "Fungi: Hopes and Challenges. I. Strategies for Controlling Fungal Activities in the Environment" at Al-Azhar Univ., Cairo, Egypt (September 1996).
- 10- The First Scientific Conference on "The Role of Science in the Development of the Egyptian Society and Development" at Faculty of Science (Benha Branch), Univ. of Zagazig, Egypt (October 1996).
- 11- The First International Conference on "Basic Sciences and Advanced Technology" a Univ. of Assuit, Egypt (November 1994).
- 12- The 4th Annual Conference of Arab Union of Biologists at Beni Sweef, Univ. Cairo, Egypt (November 1997).
- 13- The 7<sup>th</sup> international congress of plant pathology in Edinburgh, Scotland, U.K. (August, 1998).
- 14- The 21<sup>st</sup> meeting of Saudi Biological Society at King Khalid Univ., Abha (April, 2002).
- 15- The 2<sup>nd</sup> International Conference on Biological and Environmental Sciences Mansoura University (Mansoura and Luxor, March, 2010).
- 16- A training course about using basic data for staff members supported by the supreme council of Egyptian Universities held at Faculty of science at Damietta, University of Mansoura (30 November, 2011).
- 17- Workshop on biological biodiversity and fungal conservation held in Botany Department, Faculty of Science at Damietta in cooperation with Suez Canal University (3<sup>rd</sup> of December, 2011).
- 18- Workshop on Natural Resources, Environmental Problems and Development in Damietta held at Botany Department, Faculty of Science at Damietta (8<sup>th</sup> of April, 2012).
- 19- Vertification Session of Educational Programs under sponsorship of Continous Improvement and Qualifying for Accreditation Project (CIQAP) held at Faculty of Science, University of Damietta, Egypt (16<sup>th</sup> -17<sup>th</sup> May, 2012).
- 20- The Third International Conference on Biotechnology and its Application in Botany and Microbiology which Organized by Egyptian Botanical Society and Held at Botany and Microbiology Department, Helwan University, Faculty of Science, Egypt (17<sup>th</sup> – 18<sup>th</sup> April, 2013).
- 21- The First Internationl Conference on New Horizons in Basic and Applied Science which Organized by Faculty of Science at Assuit, Al-Azhar University and Held at Hurgada (21<sup>st</sup> -23<sup>rd</sup> September 2013).

## **Membership of Scientific Societies:**

- American Phytopathological Society (APS).
- Egyptian Society of Plant Pathology (ESPP).
- Egyptian Society of Mycology (ESM).
- Egyptian Society of Applied Microbiology (ESAM).
- Egyptian Botanical Society (EBS).
- Arab Union of Biologists (AUB).
- Saudi Biological Society (SBS)

### **Supervision on Scientific Theses:**

Fourteen Theses (Three Ph. D. Theses and eleven M. Sc. Theses) were awarded under my supervision and seven theses are in progress (Two Ph. D. Thesis and five M. Sc. Theses).

### **Contribution in Projects:**

- 1- The project of "River Nile and Lake Naser", Supported by Egyptian Academy of Scientific Research and Technology and Univ. of Michigan, U.S.A.
- 2- The project of "The cultivation of salt affected land in Nile Delta, Egypt", Supported by Univ. of Mansoura and The Egyptian High Education Ministry.
- 3- The project of "Biological control of water hyacinth by mycoherbicides", Supported by the Third World Academy of Sciences, Italy.
- 4- The project of "Biological control of serious weeds in Dakahlia Governorate, Egypt" supported by German Academic Exchange Service (DAAD).
- 5- The project of "Airborne pollen and fungal spores at Abha city, Saudi Arabia and their relation to allergy" supported by Sabec Company, Saudi Arabia.
- 6- The project of "Biological control of postharvest diseases of fruits and vegetables in Damietta Governorate" supported by Mansoura University.

### **Administrative Experiences:**

- Very good experience in both scanning and transmission electron microscopy.
- A scientific consultant for diagnosis of plant diseases in many agricultural farms.
- Good experience in using the computer.
- A scientific consultant for Electron Microscope Unit at University of Mansoura, Egypt
- Good experience in scientific photography.

### **Teaching Experience:**

**For undergraduate students:** The courses are: Bacteriology, Virology, Mycology, Plant Pathology, Cytology, Plant Anatomy, Plant Morphology, General Biology, Host-Parasite Relationship.

**For postgraduate students:** Host-parasite relationship, Applied microbiology, Cell Biology, Antibiotics, Advanced Mycology, Soil Microbiology.

### **Social Activities:**

- A member of the environmental and societal service committee.
- Giving general lectures and seminars about plant pathology.
- Giving lectures on advanced science for high school teachers.

### **Additional Activities:**

- Head of Botany Department, Faculty of Science at Damietta, Mansoura University, Egypt (from 6/12/2010-31/7/2012).
- Member of Faculty of Science Board.
- A reviewer of Permanent Committee of Botany and Microbiology for staff promotions.
- Member of Department of Botany Board.
- Consultant of sport's committee.
- Member in Who is Who in the world.
- A reviewer for some international and local scientific journals.

- A reviewer for many M. Sc. and Ph. D. Theses.
- Editorial Board member of Scientific Journal **for** Damietta Faculty of Science
- Editor of Life Sciences Leaflet (International Journal)
- Consultant of Electron Microscope Unit at University of Mansoura

## **Scientific Publications**

### **Published Books**

- 1- **Baka Z.**, ElAzab N. and Aldesuquy H. (2013). Biocontrol of chocolate spot disease of faba bean: Phenolic compounds as resistant inducers. LAP Lambert Academic Publishing, AV Akademikerverlag GmbH & Co. KG. pp. 168.
- 2- **Baka, Z. A. M.** (2000). Practical microbiology. In: Practical Lessons in General Biology. King Khalid University Press, Abha, Saudi Arabia. Pp. 202.
- 3- Baka, Z. A. M., Serag, M. S. and Kardosha, T. A. (2014). Biocontrol of seed-borne mycoflora by plant extracts. LAP Lambert Academic Publishing, AV Akademikerverlag GmbH & Co. KG. pp. 64.

### **Books in Preparation**

- 1- Principles of Plant pathology and Host-Parasite Relationship
- 2- Ultrastructure of Host-Parasite Interaction in Rust Infection

### **Scientific Papers**

- 77- Al-Askar, A. A., Rashad, Y. M., Hafez, E. E., Abdulkhair, W. M., **Baka, Z. A.**, Ghoneem, K. M. (2015). Characterization of alkaline protease produced by *Streptomyces mutabilis* E44g and its possibility for controlling Rhizoctonia root rot disease of corn. *Biotechnology and Biotechnological Equipment* (In Press).
- 76- Al-Askar, A. A., **Baka Z. A.**, Rashad, Y. M., Ghoneem, K. M., Abdulkhair, W. M., Hafez, E. E., Shabana Y.M. (2015). Evaluation of *Streptomyces griseorubens* E44G for the biocontrol of *Fusarium oxysporum* f. sp. *lycopersici*: ultrastructural and cytochemical investigations. *Annals of Microbiology* (In Press).
- 75- **Baka, Z. A. M.** (2015). Efficacy of wild medicinal plant extracts against predominant seed-borne fungi of broad bean cultivars. *Acta Phytopathologica et Entomologica Hungarica* 50 (1): (In Press).
- 74- **Baka, Z. A. M.**, Serag, M. S. and Kardosha, T. A. (2014). Mycoflora associated with some stored seeds and their control by aqueous extract from medicinal plants. *Life Science Leaflets* 57: 49-62.
- 73- **Baka, Z. A. M.** (2014a). Ultrastructure of the dikaryotic stage of anise rust, *Puccinia pimpinellae*. *African Journal of Microbiology Research* 8: 888-894.
- 72- **Baka, Z. A. M.** (2014b). Plant extract control of the fungi associated with different Egyptian wheat cultivars grains. *Journal of Plant Protection Research* 54: 231-237.
- 71- **Baka, Z. A. M.** (2014c). Antifungal activity of extracts from five Egyptian wild medicinal plants against late blight disease of tomato. *Archives of Phytopathology and Plant Protection* 47: 1988-2002.
- 70- **Baka, Z. A. M.** (2014d). Biological control of the predominant seed-borne fungi of tomato by using plant extracts. *Journal of Phytopathology and Pest Management* 1: 10-22.

- 69- Al-Askar, A. A., Abdulkhair, W. M, Rashad, Y. M., Hafez, E. E., Ghoneem, K. M. and **Baka Z. A.** (2014). *Streptomyces griseorubens* E44G: A potent antagonist isolated from soil in Saudi Arabia. *Journal of Pure and Applied Microbiology* 8: 221-230.
- 68- Al-Askar, A. A., Ghoneem, K. M., Rashad, Y. M., Abdulkhair, W. M., Hafez, E. E., Shabana Y.M. and **Baka Z. A.** (2014). Occurrence and distribution of tomato seed-borne mycoflora in Saudi Arabia and its correlation with the climatic variables. *Microbial Biotechnology* 7: 556-569.
- 67- Aldesuquy, H., **Baka, Z.** and Mickky, B. (2014). Kinetin and spermine mediated induction of salt tolerance in wheat plants: Leaf area, photosynthesis and chloroplast ultrastructure of flag leaf at ear emergence. *Egyptian Journal of Basic and Applied Sciences* 1: 77-87.
- 66- Aldesuquy, H. S., **Baka, Z. A. M.**, Abass, M. A. and Alazab, N. T. (2014). Control of chocolate spot infection of field beans by shikimic acid and salicylic acid: modulation of defense enzymes, phytohormones and simple phenols. *Phyton (Horn, Austria)* 54: 285-304.
- 65- **Baka, Z. A. M.**, Abou Dohara, M. I., El-Sayed, A. K. and Badawy, S. A. (2014). Isolation and characterization of some multi-antibiotic resistant bacterial isolates associated with nosocomial infections. *Scientific Journal for Damietta Faculty of Science* (In press).
- 64- **Baka, Z. A. M.**, Serag, M. S. and Kardosha, T. A. (2014). Evaluation of plant extracts for controlling mycoflora causing spoilage of stored cereals and legumes. *Scientific Journal for Damietta Faculty of Science* 3: 53-61.
- 63- **Baka, Z. A. M.**, Soliman, H. M., Ibrahim, H. I. and Ali, N. M. (2014). *In vitro*, biological control of *Fusarium oxysporum* f. sp. *lycopersici* and *Rhizoctonia solani* by essential oils and *Trichoderma harzianum*. *Mansoura Journal of Biology* (In Press)
- 62- Aldesuquy, H. S., **Baka, Z. A. M.** Abass, M. A. and Alazab, N. T. (2014). Faba bean can adapt to chocolate spot disease by pretreatment with shikimic and salicylic acids through osmotic adjustment, solutes allocation and leaf turgidity. *Journal of Stress Physiology and Biochemistry* 10: 230-243.
- 61- Aldesuquy, H. S., **Baka, Z. A. M.** and Mickky, B. M. (2013). Role of kinetin and spermine in the reversal of seawater stress-induced alteration in growth vigor, water relations and nucleic acids of wheat plants. *Phyton (Horn, Austria)* 54: 251-274.
- 60- Abou-Dohara, M. I., Massoud, O, N., **Baka, Z. A. M.** and Gaafar, D. F. (2013). The promotive effect of *Rhizobium leguminosarum* and arbuscular mycorrhizal fungi on growth and productivity of faba bean plants cultivated in newly reclaimed sandy and amended with compost. *Journal of Applied Sciences Research* 9: 5762-5769.
- 59- Aldesuquy, H.S., **Baka, Z.A.** El-Shehaby, O.A. and Ghanem, H.E. (2013). Growth, lipid peroxidation and antioxidant enzyme activities as a selection criterion for the salt tolerance of wheat cultivars irrigated by seawater. *Phyton (Horn, Austria)* 53: 151-162.
- 58- Elwakil, M. A., **Baka, Z. A. M.**, Soliman H. M. and Sadek, M. S. (2013). A modern tactic for reducing the biotic Stress on cucumber plants caused by *Fusarium oxysporum*. *Plant Pathology Journal* 12: 26-31.
- 57- **Baka, Z. A. M.** and Rabei, S. (2013). Morphology of uredinia and urediniospores of seven Puccinia species attacking Poaceae in Egypt. *Egyptian Journal of Botany* (3<sup>rd</sup> Inter. Conf. 17-18 April, Helwan Univ.) pp. 407-421.

- 56- Aldesuquy, H. S., **Baka, Z. A. M.** and Mickky, B. M. (2013). Does exogenous application of kinetin and spermine mitigate the effect of seawater on yield attributes and biochemical aspects of grains? *Journal of Stress Physiology and Biochemistry* 9: 21-34.
- 55- Aldesuquy, H. S., **Baka, Z. A. M.** and Mickky, B. M. (2013). Wheat can acclimate to seawater by pretreatment with kinetin and spermine through osmotic adjustment and solutes allocation. *Journal of Stress Physiology and Biochemistry* 9: 181-198.
- 54- Aldesuquy, H. S., **Baka, Z. A. M.** and El-Shehaby, O. A. and Ghanem H.E. (2012). Varietal differences in growth vigor, water relations, protein and nucleic acids content of two wheat varieties grown under seawater stress. *Journal of Stress Physiology and Biochemistry* 8 24-47.
- 53- Aldesuquy, H. S., **Baka, Z. A. M.**, El-Shehaby, O. A. and Ghanem H.E. (2012). Efficacy of seawater salinity on osmotic adjustment and solutes allocation in wheat (*Triticum aestivum*) flag leaf during grain filling. *International Journal of Plant Physiology and Biochemistry* 4: 33-45.
- 52- **Baka, Z.A.M.**, Aldesuquy, H. S., Abbas, M. A. and Alazab, N. T. (2012). Effect of phenolic compounds and fungicides on the ultrastructure of chloroplasts of *Vicia faba* infected by *Botrytis fabae*. *Journal of Environmental Sciences* 41:37-54.
- 51- Aldesuquy, H.S., **Baka, Z.A.M.**, El-Shehaby, O.A. and Ghanem, H.E.E. (2011). Impact of seawater irrigation on the ultrastructure of chloroplast and oleosomes in flag leaf of two wheat cultivars. *Journal of Environmental Sciences* 40:481-500.
- 50- Aldesuquy, H.S., **Baka, Z.A.M.** and Mikky, B.I. (2010). Mitigatory effect of kinetin and spermine on seawater-stressed wheat (*Triticum aestivum*) plants. I: Yielded components and biochemical aspects of yielded grains. *Journal of Environmental Sciences* 39:503-524.
- 49- **Baka, Z.A.M.** (2010). Antifungal activity of six Saudi medicinal plant extracts against five phytopathogenic fungi. *Archives of Phytopathology and Plant Protection* 43, 736-743.
- 48- **Baka, Z.A.M.** (2010b). Comparative ultrastructure of aecial and telial infections of the rust fungus, *Puccinia poarum* on new hosts in Egypt. The 2<sup>nd</sup> International Conference on Biological and Environmental Sciences. 15<sup>th</sup>-20<sup>th</sup> March, Mansoura and Luxor
- 47- **Baka, Z.A.M.** (2008). Occurrence and ultrastructure of *Albugo candida* on a new host, *Arabis alpina* in Saudi arabia. *Micron* 39, 1138–1144.
- 46- **Baka, Z.A.M.** and Alwadie, H.M. (2006). Mycoflora and aflatoxins associated with poultry feeds in Aseer region, Saudi Arabia. *Arab Gulf Journal of Scientific Research* 24, 75-82.
- 45- **Baka, Z.A.M.** (2004). Occurrence of *Puccinia isiacae* on *Phragmites australis* in Saudi Arabia and its possibility as a biological control agent. *Microbiological Research* 159, 175-179.
- 44- **Baka, Z.A.M.**; Alwadie, H.M. and Mostafa, Y.S. (2004). Comparative morphology of uredinia and urediniospores of six *Puccinia* species parasitic on Poaceae in Saudi Arabia. *Archives of Phytopathology and Plant Protection* 37, 89-101.
- 43- Alwadie, H.M. and **Baka, Z.A.M.** (2003). New records of fungal pathogens of *Euphorbia inarticulata* from Aseer region, south-west Saudi Arabia. *Archives of Phytopathology and Plant Protection*. 36, 195-209.
- 42- **Baka, Z.A.M.** (2003). Ultrastructure of intercellular hypha and haustorium of the rust fungus, *Uromyces euphorbiae*. *Mycopathologia*. 156, 215-221.

- 41-**Baka, Z.A.M.**; Migahed, F.F. and Nofel, A.M. (2002). Ultrastructural studies on *Vicia faba* and its pathogen, *Botrytis fabae* in response to lithium chloride. *Acta Botanica Hungarica* 44: 19-29.
- 40-Alwadi, H.M. and **Baka, Z.A.M.** (2001). Microorganisms associated with *Withania somnifera* leaves. *Microbiological Research* 156: 303-309.
- 39-Aldesuquy, H.S.; Abdel-Fattah, G.M. and **Baka, Z.A.M.** (2000). Changes in chlorophyll, polyamines and chloroplast ultrastructure of *Puccinia striiformis* induced 'green island' on detached leaves of *Triticum aestivum*. *Plant Physiology and Biochemistry* 38, 613-620.
- 38-Abdel-Fattah, G.M. and **Baka, Z.A.M.** (2000). The effect of benomyl on growth and ultrastructure of two isolates of *Phytophthora infestans* from Egypt. *Microbiological Research* 155, 243-248.
- 37-El-Katony, T.M.; **Baka, Z.A.M.**; Badawy, A.M. and Abo El-Naga, S.M. (1999a). Effect of phosphorus nutrition on growth, chloroplast ultrastructure and P uptake by *Nigella sativa* L. *J. Union Arab of Biologists, Cairo* 7(B), (Botany) *Physiology and Algae* 373-396.
- 36-El-Katony, T.M.; **Baka, Z.A.M.**; Badawy, A.M. and Abo El-Naga, S.M. (1999b). Effect of ammonium versus nitrate nutrition on growth, chloroplast ultrastructure and nutrient uptake by *Nigella sativa* L. *J. Union Arab of Biologists, Cairo* 7(B), (Botany) *Physiology and Algae* 397-419.
- 35-**Baka, Z.A.M.** and Lösel, D.M. (1999). Ultrastructure of intercellular hyphae and haustoria of the monokaryotic stage of *Puccinia lagenophorae*. *Microbiological Research* 154, 275-281.
- 34-**Baka, Z.A.M.** (1999). The ultrastructure and carbohydrate content of sporangium of *Phytophthora infestans* during zoosporegenesis. *Egyptian J. Microbiology* 34: 229-252.
- 33-Aldesuquy, H.S. and **Baka, Z.A.M.** (1998). Interactive effects of seawater and plant hormones on the pigment content and chloroplast ultrastructure of wheat flag leaf. *Proceedings, Sixth Egyptian Botanical Conference, Cairo University, Giza (November 24-26)* 1: 51-64.
- 32-**Baka, Z.A.M.** and Lösel, D.M. (1998). Ultrastructure and lectin-gold cytochemistry of *Melampsora euphorbiae* and its host, *Euphorbia peplus*. *Mycological Research* 102, 1387-1398.
- 31-**Baka, Z.A.M.** (1998a). A cytochemical investigation of the host-parasite interface in *Polypogon monspeliensis* infected by the dikaryotic haustorium of the rust fungus, *Puccinia polypogonis*. *Egyptian Journal of Microbiology* 32, 559-579.
- 30-**Baka, Z.A.M.** (1998b). The role of biological control by naturally occurring mycopathogens in the management of waterhyacinth in Egypt. *7th International Congress of Plant Pathology (Edinburgh, Scotland, 9-16 August, 1998)*.
- 29-**Baka, Z.A.M.** (1997). Mating type, Nuclear DNA content and isozyme analysis of Egyptian isolates of *Phytophthora infestans*. *Folia Microbiologica* 42, 613-620.
- 28- **Baka, Z.A.M.** (1997). Fungal pathogens of some serious weeds in Egypt and a review on their evaluation as biological control agents. *Journal of Union Arab of Biologists, Cairo* 4 (B), Botany, 105-127.
- 27-Shabana, Y.M., **Baka, Z.A.M.** and Abdel-Fattah, G.M. (1997). *Alternaria eichhorniae* a biological control agent for waterhyacinth: mycoherbicidal formulation and physiological and ultrastructural host responses". *European Journal of Plant Pathology* 103, 99-111.

- 26-**Baka, Z.A.M.** (1996a). Comparative ultrastructure of aecial and telial infections of the autoecious rust fungus, *Puccinia tuyutensis*. *Mycopathologia* 134, 143-150.
- 25-**Baka, Z.A.M.** (1996b). Occurrence and morphology of *Puccinia lagenophorae* on *Senecio glaucus* in Egypt. *Microbiological Research* 151, 81-85.
- 24-**Baka, Z.A.M.** and Gjaerum, H.B. (1996). Egyptian uredinales. I. Rusts on wild plants from the Nile Delta. *Mycotaxon* 60, 291-303.
- 23-**Baka, Z.A.M.** and Krzywinski, K. (1996). Fungi associated with leaf spots of *Dracaena ombet* (Kotschy & Peyr). *Microbiological Research* 151, 49-56.
- 22- Shabana, Y.M., **Baka, Z.A.M.** and Abdel-Fattah, G.M. (1996). Effect of designed mycoherbicide prepared from host-specific candidate, *Alternaria eichhorniae* on some physiological and ultrastructural characteristics of waterhyacinth. *Annals Agric. Sci. Ain Shams Univ. Cairo*, 41, 421-443.
- 21-**Baka, Z.A.M.** (1995). A fine structural study of the downy mildew fungus *Peronospora parasitica* in the new host *Cakile maritima*. *Archive of Phytopathologica Pflanze* 30, 41-51.
- 20-**Baka, Z.A.M.**, Larous, L. and Lösel, D.M. (1995). Distribution of ATP-ase activity at the host-pathogen interfaces of rust infection. *Physiological and Molecular Plant Pathology* 47, 67-82.
- 19-El-Mougith, A.A.; **Baka, Z.A.M.**; Sherief, A.A. and Gaber, A.M. (1994). Physiological and ultrastructural alterations in rust infected faba bean leaves at different stages of disease development". *Journal of Agricultural Research, Mansoura Univ, Egypt* 19, 2237-2250.
- 18-Swelim, M.A.; **Baka, Z.A.M.**; El-Dohlob, S.M.; Hazzaa, M.M. and El-Sayed, T.I. (1994). Mycoflora of stored poultry fodder in Egypt and their ability to produce aflatoxins. *Microbiological Research* 149, 435-442.
- 17-**Baka, Z.A.M.** (1993). Distribution of rust fungal haustoria in leaves of herbaceous hosts with special reference to vascular tissues. *Bulletin of Faculty of Science, Mansoura Univ. Eryp.* 20: 93-111.
- 16-Ayyad, S.M. and **Baka, Z.A.M.** (1993). Ultrastructure and localization of polysaccharides in pollen grains and young pollen tubes of *Plantago major*. *J. Environmental Science, Mansoura Univ., Egypt* 5: 223-234.
- 15-**Baka, Z.A.M.** (1992). Observations on the ultrastructure of the uredinal stage of *Puccinia polypogonis* on *Polypogon monspeliensis*. *Mycopathologia* 120 103-111.
- 14-**Baka, Z.A.M.** and Losel, D.M. (1992a). Ultrastructure of the thistle rust, *Puccinia punctiformis*. *Mycological Research* 96: 81-88.
- 13-**Baka, Z.A.M.** and Losel, D.M. (1992b). Infection of vascular tissues by autoecious rusts *Puccinia punctiformis* and *Puccinia lagenophorae*: a cytological study. *Physiological and Molecular Plant Pathology* 40: 411-421.
- 12-**Baka, Z.A.M.** and Aldesuquy, H.S. (1992). Studies on the powdery mildew fungus, *Sphaerotheca fuliginea* on squash in Egypt: ultrastructure and some physiological host responses. *Egyptian Journal of Microbiology* 27: 389-404.



- 11-Aldesuquy, H.S. and **Baka, Z.A.M.** (1992). Physiological and biochemical changes in host leaf tissues associated with the growth of two biotrophic fungi growing in Egypt". *Phyton (Horn, Austria)* 32: 129-142.
- 10-Soweha, H.E.; **Baka, Z.A.M.** and Sayed, E.T.A. (1992). Ultrastructural alterations in leaf tissues of *Nicotiana tabacum* systemically infected with tomato mosaic virus. *Egyptian Journal of Microbiology* 27: 215-227.
- 9- Sayed, E.T.A.; Soweha, H.E. and **Baka, Z.A.M.** (1991). Further studies on the ultrastructure of *Nicotiana tabacum* leaves infected with an Egyptian strains of tobacco mosaic virus. *Bulletin of Faculty of Science, Alexandria Univ., Egypt.* 31: 156-163.
- 8-**Baka, Z.A.M.** and Aldesuquy, H.S. (1991). Changes in ultrastructure and hormones of the fully senescent leaf of *Senecio aegyptius*. *Beitrage of Biological Pflanzen* 66: 271-281.
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