



CURRICULUM VITAE

PERSONAL DATA

Name Yasser M. Shabana
Title Professor of Plant Pathology
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Date of Birth July 1, 1960
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UNIVERSITY EDUCATION

1977-1981 B.Sc. Agricultural Sciences (Plant Production), Faculty of Agriculture, Mansoura University, Egypt. **Subject**: Plant Production.

1984-1987 M.Sc. Plant Pathology, Faculty of Agriculture, Mansoura University, Egypt.
Thesis Title: Biological Control of Water Weeds by Using Plant Pathogens.
Advisor: Professor Mohamed A. Elwakil

1987-1992 Ph.D., Plant Pathology, Faculty of Agriculture, Mansoura University, Egypt (through a joint supervision system with the University of Florida, USA)
Thesis Title: Biological Control of Waterhyacinth by Using Plant Pathogens.
Advisors: Professors R. Charudattan (USA) and M.A. Elwakil (Egypt).

PROFESSIONAL BACKGROUND

- Nov.1981-Aug. 1987 **Demonstrator** (25% teaching + 75% research), Plant Pathology Dept., Mansoura University, Egypt.
- Oct. 1987-Feb.1992 **Research Assistant** (100% research), Ph.D. Candidate, Plant Pathology Dept., Mansoura University, Egypt.
- Feb. 1992-Oct. 1998 **Assistant Professor** (25% teaching + 75% research), Plant Pathology Dept., Mansoura University, Egypt.
- Oct.1998-Nov. 2003 **Associate Professor** (25% teaching + 75% research), Plant Pathology Dept., Mansoura University, Egypt.
- Nov. 2003-present **Professor** (25% teaching + 75% research), Plant Pathology Dept., Mansoura University, Egypt.
- Aug. 2004-July 2005 **Head**, Plant Pathology Dept., Mansoura University, Egypt.

PERIODS OF STUDY AND RESEARCH ABROAD

- Nov. 1989-Nov 1991 Exchange student (100% research), Ph.D. Candidate, Plant Pathology Dept., University of Florida, **USA**, through a joint supervision system (channel system) to complete a cooperative Ph.D. program between Mansoura University, Egypt and University of Florida, USA on "Biological Control of Waterhyacinth with Fungal Plant Pathogens".
- Aug. 1994-Sep. 1994 Visiting Scientist at the Plant Pathology Dept., University of Florida, Gainesville, FL, **USA**.
- Nov. 1994-Apr. 1997 Visiting Research Scholar at the Plant Pathology Dept., University of Florida, Gainesville, FL, **USA** (working on biological control of hydrilla, a submerged aquatic weed, through a research project funded by USDA-ARS and the Center for Aquatic Plants, IFAS, Univ. Florida).
- Oct. 1999-Feb. 2000 German language scholarship at Goethe Institute, Schwäbisch Hall, **Germany**.
- Mar. 2000-Aug.2001 Alexander von Humboldt Research Fellow, Institute of Plant Production and Agroecology in the Tropics and Subtropics, University of Hohenheim, Stuttgart, **Germany**.
- Aug. 2001-Sept. 2001 Visiting Scientist at the Plant Pathology Dept., University of Florida, Gainesville, FL, **USA**.
- July 2005-July 2006 Visiting Professor at Botany & Plant Pathology Dept., Purdue University, West Lafayette, IN, **USA**.

MAJOR RESEARCH INTEREST

Biological control of weeds and plant diseases, and microbial pesticides

MEMBERSHIP IN PROFESSIONAL SOCIETIES

1. American Phytopathological Society (APS)
2. Former committee member in the APS Biological Control Committee (2001-2004).
3. International Society of Plant Pathology
4. International Organization for Biological Control (IOBC) – ex-member
5. The International Parasitic Plant Society (IPPS)
6. Arab Society for Plant Protection (ASPP) - ex-member
7. Egyptian Phytopathological Society
8. Egyptian Mycological Society
9. Agricultural Sciences Society, Mansoura University, Egypt
10. Egyptian Society of State Science Award Winners (ESSSAW)
11. National Professional Association for Agriculturists of Egypt

COMPUTER EXPERIENCE:

- Experienced in using Microsoft Office (Word, PowerPoint, Excel), Word-Perfect, Harvard Graphics, Quattro Pro, and the Statistical Analysis System (SAS).
- Gained experience in designing screens for multimedia presentations, and preparing documents for the worldwide web.
- Attended non-credit, non-graded courses: “Introduction to the internet” and “using the world-wide web and Netscape” at the University of Florida, Summer 1996.

ACADEMIC AWARDS

- 1978-1981 Annually received **Undergraduate Student Awards** (monthly financial support from Mansoura University) for achieving high standing.
- 1983-1987 Mansoura University, Egypt, **M. Sc. Scholarship**.
- 1988-1992 Ministry of Higher Education, Egypt, **Ph. D. Scholarship**
- 1993 Has been awarded the **IFS/KING BAUDOUIN AWARD** (US\$ 1,000) from the International Foundation for Science, Sweden for the best research project.
- 1997 Has been awarded the **Mansoura University Award of Merit** for research of exceptional merit.
- 1998 Has been awarded the **National Prize of Egypt for Distinction for Young Scientists** (LE 10,000 = US\$ 3,000). This award is given to Egyptian young scientists who performed original and excellent research with exceptional scientific value to the nation in the field of agricultural sciences.
- 1998 Has been awarded the **Shoman Prize for the Young Arab Scientists** (Jordanian Dinar 5,000 = US\$ 7,000). Only one award is bestowed to an Arabian scientist under the age of 40 who achieved unique and superior research with excellent academic and social value to the Arab nation in the field of agricultural science.
- 1999 Has been awarded an **Alexander von Humboldt (AvH) Research Fellowship** (18-months research period at Hohenheim University, Stuttgart, **Germany** preceded by a 4-month-scholarship for a German language course).
- 2002 **Has been nominated for the IFS/Jubilee Award**, Sweden.
- 2004 Has been awarded the **Distinguished Scholar Award of the Arab Fund Fellowships Program** (a 12-month research/teaching period in well-reputed universities of the world).

MAJOR GRANTS RECEIVED

Year	Agency	US\$ Amount
1989	International Foundation For Science (IFS), Sweden; a research grant	8,000
1990	Mansoura University, Egypt	7,300
1991	IFS, Sweden; a renewal research grant.	12,000
1992	Univ. California & Florida; back issues of scientific journals	20,000
1993	The Third World Academy of Sciences (TWAS), Italy.	2,000
1994	IFS, Sweden; a renewal research grant.	12,000
1994	IFS, Sweden; a travel grant	3,000
1994	Mansoura University, Egypt; research and travel grant	2,200
1998	IFS, Sweden; a travel grant	2,200
1998	Ministry of Agriculture of Egypt; a research grant	7,500
1998	Mansoura Univ. & Ministry of High Education, Egypt; travel grant	2,000
1998	University of Florida; a travel grant	400
1999	Supreme Council of Egyptian Universities; equipment grant	88,200
1999	Mansoura University, Egypt	6,500
2000	IFS, Sweden; a travel grant	300
2000	University of Hohenheim, Germany; a travel grant	400
2001	DANIDA, Denmark + CABI Bioscience, UK – shared grant	361,138
2001	Alexander von Humboldt Foundation, Germany; a travel grant	1,350
2003	Alexander von Humboldt Foundation, Germany; an equipment grant	30,000
2004	TEMPUS – IMG program, European Commission; a travel grant	3,500
2004	Higher Education Enhancement Project Fund – shared grant	112,455
2004	Ministry of Agriculture of Egypt; a research grant	1,000
2005	Ministry of Agriculture of Egypt; a research grant	1,000
2005	IFS, Sweden; a research grant	<u>12,000</u>
		696,443

COURSES TAUGHT**- Undergraduate Courses**

Has taught 13 undergraduate courses: Botany, Plant Taxonomy, Plant Physiology, Economical Plants, Fundamentals of Plant Pathology, Taxonomy of Fungi, Diseases of Vegetable Crops, Diseases of Field Crops, Diseases of Ornamental Plants, Diseases of Fruit Crops, Management of Plant Diseases, The Relationship between Plant Environment and Plant Diseases, and Research and Discussions.

- Graduate Courses

Has taught 12 graduate courses: Biological Control of Weeds Using Plant Pathogens, Biological Control of Plant Pathogens, Diseases of Greenhouse Crops, Physiology of Plant-Pathogen Interaction, Management of Plant Diseases (advanced), Resistance and Immunity in Plants, Diseases of Vegetable Crops (advanced), The Relationship between Plant Environment and Plant Diseases (advanced), Viral Diseases of Plants, Research Methods, and Bacterial Diseases of Plants.

LEADERSHIP AND CONTRIBUTION IN RESEARCH/EDUCATIONAL PROJECTS

1. Executive member in a Higher Education Enhancement Project to improve learning programs in Plant Production at the Faculty of Agriculture and bring them to the international standards (US\$ 112,455) (2004-2006).
2. Supervising a research project on biological control of *Orobanche crenata* and *O. ramosa* in legumes and solanaceae crops (funded by the International Foundation for Science (IFS) Sweden, 2005-2008)
3. Served as a coordinator and executive member in the International Mycoherbicide Program for *Eichhornia crassipes* Control in Africa (IMPECCA) funded by DANIDA, Denmark and sharing with 5 African countries and CABI Bioscience, UK (US\$ 361,138) (2000-2003).
4. Principal Investigator of a research project on evaluating chemical and biological fungicides for the powdery mildew of pepper, eggplant, and artichoke in Dakahlia Governorate, Egypt (2003-2005).
5. Participated in the research program on the biological control of sunflower broomrape at the University of Hohenheim, Germany (2000-2001).
6. Principal Investigator of a research project on the biological control of waterhyacinth funded by the Ministry of Agriculture (1998 & 1999).
7. Participated in the research programs on the biological control of the aquatic weeds (waterhyacinth and hydrilla) and the land weed (pigweed) at the University of Florida, USA (1989-1991; 1994-1997; 2000; 2001).
8. Principal Investigator of a research project on the biological control of waterhyacinth funded by the International Foundation for Science (IFS), Sweden (US\$ 35000) (1989-1998).
9. Principal Investigator of a research project on the heavy metals dynamics and their impact on biological control of waterhyacinth by a mycoherbicide, funded by the Third World Academy of Sciences (TWAS), Italy (US\$ 2000) (1993).
10. Participated in the National Campaign for Improving the Yield of Maize in Dakahlia Governorate, Egypt (1991-1993).
11. Participated in the National project on surveying the common smut disease of maize in Dakahlia Governorate, funded by the Supreme Council of Egyptian Universities (1984).

SIGNIFICANT SCIENTIFIC ACTIVITIES AT NATIONAL & INTERNATIONAL LEVEL

1. **Co-inventor of two U.S. Patents** and two Egyptian Patents.
2. **Scientific Adviser** for the International Foundation for Science (IFS), **Sweden** since 1998.
3. **Regional Editor** for "**Plant Pathology Journal**", an international journal of ANSInet Publications starting from January 2005.
4. Served as a **member of the APS Biological Control Committee** for a 3-year term (2001-2004).
5. **A co-author for the nomenclature of a new fungal species** (*Phomopsis amaranthicola* Roskopf, Charudattan, Shabana, et Benny, sp. nov.), *Mycologia* 92: 114-122.
6. **Invited speaker**, Biology Dept., University of Patras, 26500 Rion, **Greece**.
7. **Invited consultant** for IMPECCA Program, CABI Bioscience, Silwood Park, Ascot, Berks, **UK**.
8. **Invited trainer** at a Training Workshop for IMPECCA Program, **IITA, Benin**; 8-10 January 2002.
9. **Coordinator & Proceedings Editor**, Egyptian/Sudanese workshop/conference on Biocontrol of Waterhyacinth, Mansoura Univ. 2002.
10. **Peer reviewer** for the International Journals, "Biocontrol Science and Technology", "Biological Control", "BioControl", and "Aquatic Botany".
11. **Peer reviewer** for manuscripts by colleagues at University of Hohenheim, Germany and Mansoura Univ., Egypt.
12. **Referee** of research proposals for the International Foundation for Science, **Sweden** since 1998.
13. Presented lectures and practical sessions to M. Sc. students at the Univ. Hohenheim, **Germany** (2000).
14. Deposited a fungal culture with the American Type Culture Collection (ATCC #201659).
15. Built up a research facility of international importance at Mansoura University. This facility consisted of a modern laboratory of Plant Pathology and Experimental Research Station for aquatic plants.
16. Founded a scientific library for his Department (mostly on an international donation basis).
17. Served as an advisor for 8 graduate students, Plant Pathology Dept., Mansoura University.
18. Contributed in the development of various phytopathology courses for undergraduate & graduate students.
19. Taught more than 20 courses of Plant Pathology and Botany to the undergraduate as well as to graduate students.
20. Served as a member in the committee of the national campaign project for improving the productivity of maize in the Dakahlia Province, Egypt.
21. Joined as an advisor on training courses for undergraduate student in Plant Pathology Dept.
22. Participated in more than 33 international scientific meetings in addition to many of the national meetings.
23. Invited speaker in several training courses for the Ministry of Agriculture institutions, Egypt.
24. Participated in a Training Course on "Production and utilization of microbial biomass", March 7-17, 1999. Sponsored by Ain Shams Univ. (Cairo, Egypt), University of Maryland (USA), Georgia State Univ. (USA), and UNEP UNESCO ROSTAS.
25. Attended non-credit, non-graded course on preparing the university faculties to be ideal members to teach and do research, at the Faculty of Education, Mansoura University.
26. Attended a Training Course on "Modern techniques in genetic engineering", April 4-8, 1999. Alexandria University, Institute of Graduate Studies and Research.
27. Gained a limited experience in digital video image analysis for disease assessment, Univ. Florida, USA.
28. Attended an intensive course: "Boating: safety, skills, and seamanship", USA.

REFERENCES:

- 1. Prof. Dr. R. Charudattan**
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LIST OF PUBLICATIONS

(1) International Refereed Journal Articles:

1. **Shabana, Y.M., Charudattan, R. and Elwakil, M.A. 1995.** "Identification, pathogenicity, and safety of *Alternaria eichhorniae* from Egypt as a bioherbicide agent for waterhyacinth". Biological Control 5: 123-135. **USA.**
2. **Shabana, Y.M., Charudattan, R. and Elwakil, M.A. 1995.** "Evaluation of *Alternaria eichhorniae* as a bioherbicide for waterhyacinth (*Eichhornia crassipes*) in greenhouse trials". Biological Control 5: 136-144. **USA.**
3. **Shabana, Y.M., Charudattan, R. and Elwakil, M.A. 1995.** "First record of *Alternaria eichhorniae* and *Alternaria alternata* on waterhyacinth in Egypt". Plant Disease 79: 319. **USA.**
4. **Shabana, Y.M. and Charudattan, R. 1996.** "Microorganisms associated with hydrilla in ponds and lakes in north Florida". Journal of Aquatic Plant Management 34: 60-68. **USA.**
5. **Shabana, Y.M., Baka, Z.A. 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. **The Netherlands.**
6. **Shabana, Y.M. 1997.** "Formulation of *Alternaria eichhorniae*, a mycoherbicide for waterhyacinth, in invert emulsions averts dew dependence". Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz – J. Plant Diseases and Protection 104: 231-238. **Germany.** (in English)
7. **Shabana, Y.M. 1997.** "Vegetable oil suspension emulsions for formulating a weed pathogen to bypass dew". Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz – J. Plant Diseases and Protection 104: 239-245. **Germany.** (in English)
8. **Shabana, Y.M. and Charudattan, R. 1997.** "Preparation and regeneration of mycelial protoplasts of *Alternaria eichhorniae*". J. Phytopathology 145: 335-338. **Germany.** (in English)
9. **Shabana, Y.M., Charudattan, R., DeValerio, J.T. and Elwakil, M.A. 1997.** "An Evaluation of hydrophilic polymers for formulating the bioherbicide agents *Alternaria cassiae* and *A. eichhorniae*". Weed Technology 11: 212-220. **USA.**
10. **Shabana, Y.M. and Ragab, M.E. 1997.** "*Alternaria infectoria*, a promising biological control agent for the fig wax scale, *Ceroplastes rusci* (Homoptera: Coccidae), in Egypt". Biocontrol Science and Technology 7: 553-563. **UK.**
11. **Shabana, Y.M., M.A. Elwakil, and R. Charudattan. 2000.** "Effect of media, light and pH on growth and spore production by *Alternaria eichhorniae*, a mycoherbicide agent for waterhyacinth". Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz – J. Plant Diseases and Protection 107: 617-626. **Germany.** (in English)

12. Roskopf, E.N., R. Charudattan, Y.M. **Shabana**, and G.L. Benny. **2000**. "*Phomopsis amaranthicola*, a new species from *Amaranthus* sp.". *Mycologia* 92: 114-122. **USA**.
13. **Shabana**, Y.M., M.A. Elwakil, and R. Charudattan. **2001**. "Effect of nutrition and physical factors on mycelial growth and production of pigments and nonchromatic UV-absorbing compounds of *Alternaria eichhorniae*". *J. Phytopathology* 149: 21-27. **Germany**. (in English)
14. Abdel-Fattah, G.M. and Y.M. **Shabana**. **2002**. "Efficacy of the arbuscular mycorrhizal fungus *Glomus clarum* in protection of cowpea plants against root rot pathogen *Rhizoctonia solani*". *J. Plant Diseases and Protection* 109: 207-215. **Germany**. (in English)
15. **Shabana**, Y.M., Müller-Stöver, D., and Sauerborn, J. **2003**. "Granular Pesta formulation of *Fusarium oxysporum* f. sp. *orthoceras* for biological control of sunflower broomrape: efficacy and shelf life". *Biological Control* 26: 95-108. **USA**.
16. **Shabana**, Y.M., Cuda, J.P. and Charudattan, R. **2003**. "Combining plant pathogenic fungi and the leaf-mining fly, *Hydrellia pakistanae*, increases damage to hydrilla". *J. Aquatic Plant Management* 41: 76-81. **USA**.
17. **Shabana**, Y.M., Cuda, J.P. and Charudattan, R. **2003**. "Evaluation of pathogens as potential biocontrol agents of hydrilla". *J. Phytopathology* 151: 607-613. **Germany**. (in English)
18. **Shabana**, Y.M. **2005**. "The use of oil emulsions for improving the efficacy of *Alternaria eichhorniae* as a mycoherbicide on waterhyacinth". *Biological Control* 32: 78-89 **USA**.
19. **Shabana**, Y.M. and Mohamed, Z.A. **2005**. Integrated control of water hyacinth with a mycoherbicide and a phenylpropanoid pathway inhibitor. *Biocontrol Science and Technology*. 15(7): 659-669. **UK**.

(2) Local Refereed Journal Articles:

20. **Shabana**, Y.M. **1996**. "Regeneration of *Alternaria eichhorniae* protoplasts as an effort to develop a high virulent pathogen on waterhyacinth". *J. Agric. Sci. Mansoura Univ.* 21: 643-650. (in English)
21. **Shabana**, Y.M. **1996**. "Effects of culture media on macroconidium morphology and pathogenicity of *Fusarium solani*". *J. Agric. Sci. Mansoura Univ.* 21: 3181-3190. (in English)
22. **Shabana**, Y.M., and Mohamed, Z.A. **2003**. "Integrated control of water hyacinth by using *Alternaria eichhorniae* isolate 5 (Ae5) with a phenylpropanoid pathway inhibitor". *J. Agric. Sci. Mansoura Univ.* 28: 333-342. (in English)
23. Abdel-Fattah, G.M. and Y.M. **Shabana**. **2003**. "The use of *Glomus fasciculatum*, a mycorrhizal fungus to overcome the effect of the industrial wastes on the growth of cowpea". *J. Agric. Sci. Mansoura Univ.* 28: 5387-5403. (in English)

24. Khairat M.D., **Shabana** Y.M., El-Sayed A.F., and El-Sherbiny A.E. **2003**. "Search for antifungal compounds of plant origins for biological control of plant diseases: (A) from aqueous plant extracts & (B) from methanolic plant extracts". J. Agric. Sci. Mansoura Univ. 28: 5317 - 5349. (in English)

(3) Articles in Refereed International Conference Proceedings:

25. Elwakil M.A., E.A. Sadik, E.A. Fayzalla, and Y.M. **Shabana**. **1989**. Biological control of waterhyacinth with fungal plant pathogens in Egypt. In: E.S. Delfosse, ed. Proceedings of the 7th International Symposium on Biological Control of Weeds. Ist. Sper. Patol. Veg. (MAF), Rome, **Italy**, pp. 483-497. (in English)
26. **Shabana**, Y.M.; Elwakil, M.A. and Charudattan, R. **1992**. Aspects of Formulation, Sporulation, and Phytotoxin Production Related to the Bioherbicidal Efficacy of *Alternaria* spp. In "Proceedings of the 8th International Symposium on Biological Control of Weeds". Lincoln University, Canterbury, **New Zealand**. Abst. (in English)
27. Roskopf, E.N., R. Charudattan, Y.M. **Shabana**, and J.T. DeValerio. **1993**. *Phomopsis amaranthicola* n. sp., a potential broad-spectrum bioherbicide for pigweed species. II International Bioherbicides Workshop "Bioherbicides - applying the temperate experience to the tropics", Macdonald College of McGill University, Ste. Anne-de-Bellevue, Quebec, **Canada**, 31 July - 1 August 1993. Abst. (in English)
28. **Shabana**, Y. M., R. Charudattan, and M. A. Elwakil. **1994**. Biological control of waterhyacinth (*Eichhornia crassipes*) by *Alternaria eichhorniae*. Phytopathology 84:1068. **USA**.
29. **Shabana**, Y. M., G. M. Abdel-Fattah, and Z. A. Baka. **1994**. *Alternaria eichhorniae*, a mycoherbicide for waterhyacinth (*Eichhornia crassipes*) in Egypt. The 5th Arab Congress of Plant Protection, Fes, Morocco, Nov. 27 to Dec. 2, 1994. Abst. (in English)
30. **Shabana**, Y.M., R. Charudattan, and J.T. DeValerio. **1995**. Comparison of six media for isolation of microbes associated with hydrilla under natural conditions. Abstracts, Annual Meeting, The Aquatic Plant Management Society 35: 7. Abst. **USA**.
31. Elwakil, M.A., Y.M. **Shabana**, and R. Charudattan. **1995**. Biological Control of waterhyacinth (*Eichhornia crassipes*) by a safe bioherbicide candidate formulated from endogenous host-specific fungus, *Alternaria eichhorniae* in Egypt. Proceedings of the 5th International Conference: Environmental Protection is a Must. pp 514-535, Alexandria, **Egypt**. (in English)
32. **Shabana**, Y. M., R. Charudattan, and J. T. DeValerio. **1996**. Frequencies of microorganisms associated with hydrilla (*Hydrilla verticillata* L. f. Royle) in nature. Weed Sci.36: 50. Abst.
33. Charudattan, R., S. Chandramohan, J.T. DeValerio, J. Kadir, E.N. Roskopf, C. Semer, Y.M. **Shabana**, M. Smither-Kopperl, D.J. Tessmann, and C. Yandoc. **1996**. Evaluation and development of plant pathogens for biological control of weeds. Annu. Meet., S-268, St. Augustin, FL, April 24-26, 1996. **USA**.

34. Charudattan, R., S. Chandramohan, J.T. DeValerio, J. Kadir, R.A. Pitelli, E.N. Roskopf, Y.M. **Shabana**, and D.J. Tessmann. **1996**. Bioherbicides for pigweeds, nutsedges, grasses, and other weeds in niche markets. III International Bioherbicide Workshop, South Africa: 17-18. (in English)
35. **Shabana**, Y.M., R. Charudattan, and J.T. DeValerio. **1997**. Herbicidal activity of microorganisms against hydrilla [*Hydrilla verticillata* (L.f.) Royle]. Weed Sci: 37: 57. Abst. **USA**.
36. **Shabana**, Y.M., R. Charudattan, and J.T. DeValerio. **1997**. Screening of microorganisms for herbicidal activity against hydrilla. Research Review and Aquatic Plant Managers Workshop, Gainesville, FL (March 11-12). **USA**.
37. **Shabana**, Y.M., M.A. Elwakil, and R. Charudattan. **1998**. Status and progress of biological control of water hyacinth, *Eichhornia crassipes* in Egypt. Abstracts, 7th Int. Congr. Plant Pathology, Edinburgh, **Scotland**. Abst. No. 5.2.41.
38. **Shabana**, Y.M., J.P. Cuda, and R. Charudattan. **1998**. Potential for integrated control of hydrilla (*Hydrilla verticillata*) with fungal and insect biocontrol agents. The American Phytopathological Society Annual Meeting, Las Vegas, NV, USA 8-12 November 1998. Phytopathology 88: S80. Abst. **USA**.
39. **Shabana**, Y.M., Elwakil, M.A., and R. Charudattan. **1999**. Development of *Alternaria eichhorniae* Nag Raj & Ponnappa for biological control of water hyacinth in Egypt. In: M.Canard & V.B. Arnaouty, eds. Proceedings of the First Regional Symposium for Applied Biological Control in Mediterranean Countries, Cairo, **Egypt** 25-29 October 1998. pp 211-215. (in English)
40. **Shabana**, Y.M., M.A. Elwakil, and R. Charudattan. **1999**. An overview on the situation of biological control of water hyacinth with *Alternaria eichhorniae* in Egypt. In: M. Hill, M. H. Julien and T. D. Center (eds). Proceedings of the International Organization for Biological Control, First Global Working Group Meeting for Biological and Integrated Control of Water Hyacinth, Harare, Zimbabwe 16-19 November 1998. (in English)
41. **Shabana**, Y.M., R. Charudattan, and M.A. Elwakil. **1999**. Growth and spore production by *Alternaria eichhorniae*. Phytopathology 89 (Suppl.): S71. Abst. **USA**.
42. **Shabana**, Y.M. **2000**. Development of a mycoherbicide for safe, nonpolluting management of the parasitic weed, *Orobancha cumana*. Alexander von Humboldt Foundation Introductory Annual Meeting, Halle, **Germany** 25-27 May 2000. P43. (in English)
43. **Shabana**, Y.M., M.A. Elwakil, and R. Charudattan. **2001**. Biological control of water hyacinth by a mycoherbicide in Egypt. International Organization for Biological Control, 2nd Global Working Group Meeting for Biological and Integrated Control of Water Hyacinth, Beijing, **China** 9-12 October 2000. PP 53-56. (in English)
44. **Shabana**, Y.M., Müller-Stöver, D., and Sauerborn, J. **2001**. Development of a mycoherbicide for the sunflower broomrape, *Orobancha cumana*. Workshop on host-parasite interactions in parasitic flowering plants, University of Hohenheim, Stuttgart, **Germany** 7 February 2001. (in English)

45. **Shabana, Y.M. and Sauerborn, J. 2001.** Evaluation of Pesta-pelletized *Fusarium oxysporum* f. sp. *orthoceras* as a potential mycoherbicide for *Orobanche cumana*. The 7th International Parasitic Weed Symposium, Nantes, **France** 5-8 June 2001. P 296. (in English)
46. **Shabana, Y.M. and Sauerborn, J. 2001.** Pesta-encapsulated *Fusarium oxysporum* f. sp. *orthoceras*, a mycoherbicide for the sunflower broomrape. Phytopathology 91: S81. **USA.**
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50. **Shabana, Y.M., and Mohamed, Z.A. 2003.** Using the enzyme inhibitor, 3,4-methylenedioxy trans-cinnamic acid (MDCA) and a mycoherbicide for integrated management of water hyacinth. The 7th International Conference on Chemistry and Its Role in Development, Mansoura & Sharm El-Sheikh, **Egypt** 14-17 April 2003. (in English).
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52. **Shabana, Y.M., and Hallett, S.G. 2006.** Mass production and formulation of *Microsphaeropsis amaranthi*, a candidate bioherbicide for the control of weedy amaranthaceae. Phytopathology 96: in press. Abst.

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1. Editor of The Manual on The Use of *Alternaria eichhorniae* as a Mycoherbicide for Water Hyacinth. Mansoura University Press, Egypt, **2002**. (In English). pp 28 with 25 color plates.
2. Co-Editor of the Proceedings of the Egyptian-Sudano Workshop on Biological Control of Water Hyacinth, 26-28 October 2002, Mansoura University, El-Mansoura, Egypt. CEDARE Press, Cairo, Egypt. **2003**. (In English). pp 171.

Patents:

1. Charudattan, R, Y.M. **Shabana**, J.T. DeValerio, and E.N. Roskopf. **1995**. A broad-spectrum bioherbicide for controlling pigweed species. **United States Patent No. 5,393,728** dated 28. 2. 1995. **USA**.
2. Charudattan, R, Y.M. **Shabana**, J.T. DeValerio, and E.N. Roskopf. **1996**. *Phomopsis* species fungus useful as a broad-spectrum bioherbicide to control several species of pigweeds. **United States Patent No. 5,510,316** dated 23. 4. 1996. **USA**.
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4. **Shabana**, Y. M. and M. E. Ragab. *Alternaria infectoria*: a novel fungal species effective as a bioinsecticide for the fig wax scale insects in Egypt. To be submitted to the Egyptian National Academy of Science and Technology.

Manuscripts Submitted:

1. Abdel-Fattah, G.M. and Y.M. **Shabana**. **2006**. "The vesicular arbuscular mycorrhizal fungus, *Glomus fasciculatum*, defeats the negative effects of the industrial effluents on the growth of cowpea ". European Journal of Plant Pathology. Submitted.

Manuscripts in Preparation:

1. **Shabana**, Y.M., J. Harrison, and R. Charudattan. Application of correspondence analysis for determination of favorable conditions for biocontrol agents for hydrilla. Phytopathology.
2. **Shabana**, Y.M., and Hallett, S.G. Development of an improved medium for the production of virulent conidia of *Microsphaeropsis amaranthi*, a biocontrol agent for waterhemp. Biological Control.

3. Rashad, Y.M., **Shabana**, Y.M., Abdel-Fattah, G.M. and Ismail, A.E. Biological control of brown spot disease of rice using *Trichoderma harzianum*. (from M. Sc. thesis).
4. Rashad, Y.M., **Shabana**, Y.M., Abdel-Fattah, G.M. and Ismail, A.E. Induced resistance against brown spot disease of rice. (From M. Sc. thesis).
5. El-Hawary, M.M., **Shabana**, Y.M., Nematalla, M. and Serag, M. Biological control of *Orobanche crenata* and *O. ramosa* in Egypt. (From a Ph.D. thesis).

Research in Progress:

1. Biological control of:
 - Waterhemp and redroot pigweed
 - Rice weeds
 - *Orobanche crenata* & *O. ramosa* in legumes and Solanaceae crops
 - Root diseases of sugar beet
 - Soil-borne pathogenic fungi
 - Brown spot disease of rice
 - Brown rot disease of potato
 - Powdery mildew of flax
2. Dynamics of heavy metals (cadmium, copper, and lead) in waterhyacinth plants and their impacts upon the efficacy of *Alternaria eichhorniae* bioherbicide in controlling waterhyacinth.
3. Cytogenetic effects of copper and lead accumulation in waterhyacinth (*Eichhornia crassipes*) and their association to disease incidence induced by *Alternaria eichhorniae* bioherbicide.
4. Ultrastructural localization of polyphenoloxidase, peroxidase, and carbohydrates of waterhyacinth leaves infected with *Alternaria eichhorniae*.
5. Cytogenetical, physiological, and ultrastructural studies on waterhyacinth under the effects of *Alternaria eichhorniae* and cadmium.