

## C. V.



- **Name :** Amal Saber Mohamed Owis
- **Date of birth:** 6 / 8 / 1971
- **Current employment:** Deputy Director for Researches.
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**Field of research:** Cotton technology and byproduct utilization.

### EDUCATION:

- Ph.D in Agric. Biochemistry, Faculty of Agriculture, Cairo University (2001). With title "The chemical and physical properties of white and colored Egyptian cottons and their response to dyeing with some natural dyes".
- M.Sc in Agric. Biochemistry, Faculty of Agriculture, Cairo University (1996). With title "Biochemical studies on toxic *Fusarium moniliforme* and *Fusarium roseum* effects on cotton fiber properties".
- B. Sc in Agric. Biochemistry with Final Grad Very Good With Honor, Faculty of Agriculture, Cairo University (1992).
- Academic Certificate in "Organization Development in Management " In cooperation with Northern Illinois University, College of Business (USA) & National Management Institute (Egypt) 2010.

### Awards:

#### National

1. State Encouragement Award in Agricultural science "June 2006".
2. Heliopolis Academy Innovation Award, Theme" Organic Agriculture" December 2008.

#### International

1. Award from the Academy of Science for the Developing World (TWAS) and COMSTECH, Italy, 2009.

### PATENT

1. Egyptian patent granted no. 24549 dated 2010, with title: Dyeing textile materials with natural dyes using low temperature.

2. Egyptian patent granted no. 24943 dated 2010, with title: Extraction and separation the chemical compounds (organic and inorganic) by using controlled and high efficiency system.

### **Projects ( National, International)**

1. Partner in funded FP7-KBBE-2012-6 project "Processing of biowaste for sustainable products in developing countries", ( seventh framework program, **EU**).
2. Principal investigator for the project "Production of ethanol from cotton stalk" as award from The Academy of Science for the Developing World (TWAS) and COMSTECH, **Italy**.
3. Coordinator for the project "recycling of the cotton stalk to bio-compost" Agriculture research Center, Egypt.

### **Publications:**

#### Books published, As main author/Editor

- Writing Book with title: The Cotton (The white gold) Cultivation and its problems and challenges of the future in Egypt, publisher: Egyptian books house, deposit no.16152 / 2009.
- Translating a book from Arabic to English with title " Guide of legislations in the field of Plant Genetic Resources for Food and Agriculture in the Arab World" to The Arab Organization for Agricultural Development, League of Arab States.

#### Published papers (National & International journals):

1. Effect of cotton stalks compost and mineral fertilizers on yield, fiber quality and nutrients uptake of Egyptian cotton Giza 80, Egypt. J. of Appl. Sci., 27 (12B): 996-1011, (2012).
2. Recycling of cotton stalks between importance and application. Alexandria International Cotton Conference, 17-18<sup>th</sup> April (2012).
3. An economical dyeing process for dyeing (cotton, polyester and cotton/ polyester blend fabrics. J. of Textile and Apparel Technology and Management, 6(4): 1-11, (2010).
4. Biochemical studies on some cotton by- products, Part I- Chemical constituents and cellulose extraction of Egyptian cotton stalks. Journal of American Science,6(12):1306-1313, (2010).
5. Recycling of cotton stalks with rice straw to compost as friendly technology to the environment. J. of Agricultural Chemistry and Biotechnology, 1(1): 41-52, (2010).
6. Study on Egyptian naturally colored cotton compared with some conventional uncolored cotton. Journal of Biological Chemistry and Environmental Sciences, 5(2): 289-305, (2010).

7. Seed oil content, yield and fiber quality traits of some promising lines of Egyptian cotton. *Journal of Plant Breeding*, 14 (1): 105-115, (2010).
8. Study of the relationship between fiber properties and dye ability for commercial Egyptian cotton. *Egypt. J. Agric. Res.*, 88 (3): 801 - 814, (2010).
9. Evaluation of some Egyptian cotton varieties for some seed chemical characters. *J. Agric. Res. Kafer El-Sheikh Univ.*, 36 (1): 33-43, (2010).
10. Varietal and seasonal variations in chemical components of cottonseed and fiber of Egyptian cotton, *Journal of Biological Chemistry and Environmental Sciences*, 4 (4), 83-96, (2009).
11. Study on oil and other chemical composition of seeds for some commercial and brown colored Egyptian cotton, *Journal of Biological Chemistry and Environmental Science* 3 (2): 411-422, (2008).
12. Chemical composition of the seeds and meals of some Egyptian cotton varieties and possible contamination with mycotoxin. *Egypt. J. Agric. Res.*, 86(30) : 1069-1079 (2008).
13. Removal of Dye from Textile Wastewater Using Plant Oils under Different pH and Temperature Conditions. *American Journal of Environmental Sciences* 3 (4): 205-218, (2007).
14. Influence of temperature and pH on the stability and colorimetric measurement of textile dyes. *American Journal of Biotechnology and Biochemistry*3(1):33-41, (2007).
15. Treatment of Remazol Brilliant Blue Dye Effluent by Advanced Photo Oxidation Process. *American Journal of Applied Sciences* 4 (12): 1054-1062, (2007).
16. Mechanical properties and stability to light exposure for dyed Egyptian cotton fabrics with natural and synthetic dyes. *Polymer Plastic Technology and Engineering*, (USA), Vol. 44: 1269-1279, (2005).
17. Comparative study on seed cotton yield, oil and protein contents in the seed of some Egyptian cotton cultivars grown at different locations. *J. Agric. Res.* 83(2) (2005).
18. Effect of mercerization treatment on dyeing efficiency of some Egyptian cotton fibers of different maturity levels. *J. Agric. Res.* 83(1) (2005).
19. Effect of alkali metal hydroxides and resin treatments on some properties of Egyptian cotton fabrics. *Journal of Applied Sciences*, 19 (6): 135-149, (2004).
20. Study on naturally brown colored cotton. *Egyptian Journal of Applied Sciences*, 18 (8): 148-157,(2003).
21. Difference in fiber contents of the major chemical constituents due to variety and grade of some Egyptian cotton, *J. Agric. Res.* 81(2) (2003).
22. Effect of Some chemical treatments on dyeing cotton fabrics with a natural dye. *Egypt. J. Agric. Res.* 80 (4) (2002).

23. Study of the response of cotton fabric structure to dyeing with a natural dye (henna) compared to reactive and vat dyestuffs. J. Agric. Res. 80 (3) (2002).

### **Conferences ( National, International)**

1. Recycling of cotton stalks between importance and application. Alexandria International Cotton Conference, 17-18<sup>th</sup> April (2012).
2. Friendly Environmental Textile Materials. The 1<sup>st</sup> Euro-Mediterranean Textile & Clothing Supply Chain Integration Conference 9<sup>th</sup> to 11<sup>th</sup> May (2005).
3. Mechanical properties and stability to light exposure for dyed Egyptian cotton fabrics with natural and synthetic dyes. 3<sup>ed</sup> International conference on Biophysics in Medicine and Biology. October 20-22 (2003).

### **Workshops**

1. 1<sup>st</sup> conjoint Workshop between Society for women in science in developing countries – Egypt & National Research Center , under the theme " towards a safe and healthy woman's life as speaker and presented poster with title " Avoid cotton seeds and its meal from possible contamination with mycotoxin as a cancer promoter".

### **SYMPOSIUM**

Treatment of textile wastewater using vegetable oils, 3<sup>rd</sup> annual Dalhousie university environmental research symposium, Dalhousie University, Halifax, Nova Scotia, **Canada**, November 8, 2006.

### **Steering committees**

1. Organizing of the international training course in field of "improving cotton Breeding, production and technology in OIC countries" February 2012.
2. 4<sup>th</sup> Steering Committee Meeting of INCANA (Inter-regional Network on Cotton in Asia and North Africa), 16-18 December 2010, Cairo, Egypt .

### **SABBATICAL LEAVE**

1. Visitor doctor in biological Engineering dep., Dalhousie University, Halifax, Nova Scotia, **Canada**. From 9/2006 to 6/2007.
2. Scientific mission to CIRAD & INRA – **France**, March 2010.
3. Study tour in **India** as scientific experts in the field of "cotton chemistry and byproduct utilization", January 2011.
4. International Geographical Indication (GI) training course 2011, held from the 6<sup>th</sup> to the 17<sup>th</sup> of June 2011 near Geneva, Switzerland.
5. Traveled to Morocco in the scientific mission of the University of Hassan II in Rabat for a meeting with partners from 16 countries from all over the world to write a project of the EU projects FP7-2011.

6. Traveled to Burkina Faso as a representative of the Cotton Research Institute to attend the International Exhibition of cotton and textile products - and to attend meetings of the Organization of Islamic Conference (OIC) for the development of cotton and textile industries at the member states.
7. Participate in a training course on Senior Management Programme on Managing Research and Technological Organizations (RTOs) , June 17-24, 2012 in Malaysia. Under the auspices of World Association of Industrial and Technological Research Organizations (WAITRO) and SIRIM Berhad.

**List the three most innovative achievements :**

1. Established new research activities in CRI to produce eco-friendly products such as (natural colored cotton and recycling the textile waste water to pure water).
2. Established the cotton byproduct lab and its research activities, in cotton research institute as new activity to increase the national income by recycling the wastes for economic products (such as compost, wood, paper,..... etc), this increases economic income and contribute to resolving the unemployment problem for the people inside the Egyptian villages.
3. Established by cooperation with my breeder colleagues, new breeding program for increasing the cotton seed oil to bridge the food gap in Egypt.

**Professional positions held**

1. Deputy Director for Researches, Cotton Research Institute, Agricultural Research Center (2008 -)
2. Head of Cottonseed Technology and Natural Products Unit (2001- 2008) .
3. Senior researcher "Cotton Fibers and Textile Chemistry Department" (2008).
4. Researcher "Cotton Fibers and Textile Chemistry Department"(2001-).
5. Assistant Researcher "Spinning Research Dep., cotton chemical modification unit" (1996-2000).
6. Researcher Assistant "Spinning Research Dep., cotton chemical modification unit" (1994 -1996).
7. Scholarship at National Research Center, Mycotoxin central lab (1992-1994).
8. Development and enhancement of cotton chemistry performance for research.
9. Establishing new research areas and research teams.
10. Supervision of M.Sc student.

### Special Scales

- Participation in the preparation of Agricultural Research Center strategy for Sustainable Agricultural Development (2030).
- English language scale " TOEFL. ITP " .
- Computer scale : ICDL Certificate
- Hyperion Ltd. training course presented by Dr. Sean MCCaathy, Ireland , Managing director about " How to write a competitive proposal for framework 7". 6 January, 2009.

### International and National Science Judge

1. Judging in Canada Wide Science Faire 2007: University of Ottawa Undergraduate Research scholarship, Award- Senior level.
2. Judging master thesis in titled "Chemical treatment of textile dye house waste water" Department of Environmental Basic Science, Institute of Environmental Studies & Research, Ain Shams University, December 2007.
3. Judging master thesis in titled "Effect of short fiber on lint and yarn quality in some Egyptian cotton grades", Agronomy Department , Benha University, June 2009.
4. Judging scientific paper for King Faisal University, Kingdom of Saudi Arabia.

### MEMBERSHIP OF PROFESSIONAL BODIES:

1. Membership of International Cotton Researchers Association (ICRA).
2. Membership of Inter-regional Network on Cotton in Asia and North Africa (INCANA).
3. Membership of World Association of Industrial and Technological Research Organizations (WAITRO).
4. Membership of The Scientific Society for The Egyptian Cotton Champions
5. Membership of The Association of Research Members of Agricultural Research Center
6. Society for women in science in developing countries (SWSDC – Eg).