Research Articles Published in International Scientific Journals

By

Kafrelsheikh University Staff Members

3rd Anuual Edition

2010/ 2011

Contents

Dear Staff Members

It is of our pleasure to congratulate the winners by the university prizes for this year and I invite them to continue their scientific contributions and conduct a useful and valuable research. I am proud to present to all staff members the 3rd edition of "The Researchers Awarded the University Prizes and Research Articles Published in International Scientific Journals". We are waiting from you to exert more efforts and achievements in order to satisfy our faculties the quality standards in education and research and our university occupies a remaekable position among the world wide universities. Special thanks for all persons, who prepared this Handbook and I wish for all staff members great success.

Prof. Fawzy Aly Torkey

President of Kafrelsheikh University

Dear Colleague

Iam very pleasure to prepare and proud to present to all colleague the 3rd annual edition of the handbook "The Researchers Awarded the University Prizes and Research Articles Published in International Scientific Journals". This Handbook is the outcomes of the postgraduate and research sector and foucuses on the research articles for the Scientific Contributions of Kafrelsheikh University Researchers and staff members who are awarded the encouragement and discriminative university prizes. Congratulation of the reward of the Uuniversity for their valuable contributions and I promise all that our effort will be foucused to support and encourage yours for further publication in international journals. Kafrelsheikh University is proud of its distinguishable researchers who are awarded the encouragement and discriminative university prizes from 2006 to 2009 and wishes the success for all, so that by you our university will be remarkable, ambitious and be ranked among highly distinguishable universities world wide.

Prof.Dr. Ibrahim M. Aman

Vice President for Postgraduate and Research

1-Kafrelsheikh University staff members who are awarded theEncouragement and Discriminative University prizes during the period from

2006 to 2009

1.1-University staff members who are awarded the encouragement prizes.

1- Dr. YAHYA ZAKARIA EID

YAHYA ZAKARIA ***Ph.D .***

Associate Professor

Department of Poultry Production, Faculty of Agriculture, Kafrelsheikh University

Email: yahyaze@gmail.com Web Page: http://yahyaze.googlepages.com

Date of Birth	Nationality	Marital Status
20/03/1971	EGYPTIAN	Married

APPOINTMENT HISTORY:

Visiting professor and Research Associate, 1/2009 – 1/2011

Department of Biochemical sciences and Biotechnology

Faculty of Agriculture, Kagoshima University, JAPAN

Associate Professor*, *12/2008* - *present

Department of Poultry Production

Faculty of Agriculture, Kafrelsheikh University, EGYPT

Visiting Researcher, 7/2007 – 10/2007

Department of Food Science

Faculty of Agriculture, Bologna University, ITALY

Assistant Professor*, *12/2003 – 12/2008

Department of Poultry Production

Faculty of Agriculture, Kafrelsheikh University, EGYPT

Assistant Lecturer, 1997 - 2003

Department of Poultry Production

Kafrelsheikh Faculty of Agriculture, Tanta University, EGYPT

Teaching and Research Assistant, 1993 - 1997

Department of Poultry Production

Kafrelsheikh Faculty of Agriculture, Tanta University, EGYPT

ACADEMIC CERTIFICATES:

Ph.D. United Graduate School of Agricultural Sciences, Kagoshima University, JAPAN, 2003

Concentrations: Poultry Physiology, Biochemical Sciences and Biotechnology,

Dissertation: *Roles of Polyphenols as Anti-Stress Factors in Broiler Chickens*.

M.Sc. Kafr El-Sheikh Faculty of Agriculture, Tanta University, EGYPT, 1995

Concentrations: Poultry Physiology, Toxicology and production

Thesis: *Physiological and Toxicological studies on Japanese Quail (Coturnix japonica) Fed rations Polluted with Stored Products Pesticides*.

B.Sc. Kafr El-Sheikh Faculty of Agriculture, Tanta University, EGYPT, 1992

Concentrations: Poultry production (Graduation Rate Very Good)

AWARDS:

- Distinguished Academic Publishing Award 2009, Kafrelsheikh University, Egypt
- Distinguished Academic Publishing Award 2008, Kafrelsheikh University, Egypt
- Incentive University Award in Agricultural Sciences 2008. Kafrelsheikh University, Egypt
- Outstanding Research Award, 4th International poultry conference, 27-30 March, Sharm El-Sheikh – Egypt, 2007.
- Outstanding Research Award, 3rd International poultry conference, 4-7 April, Hurghada – Egypt, 2005.

Grants:

- World Poultry science association, 2009 The Netherlands (Invited Speaker grant)
- World Poultry science association, 2008 The Netherlands (travel grant)
- International Centre for Advanced Mediterranean Agronomic Studies, 2007 Spain (course grant)
- Ministry of Higher Education and State for Scientific research, 2007 Egypt (Research grant).
- World Poultry science association, 2006 The Netherlands (travel grant)
- Foundation for promoting poultry science, 2005 The Netherlands (travel grant)

Peer-Reviewer:

- Reviewer in African Journal of Food Science. (http://www.academicjournals.org/ajfs/)
- Topic editor and author in *Encyclopedia of Earth (http://www.eoearth.org/by/Topiceditor/Yahya.eid)*
- Member in the consultants board of "Network of Animal Production and Fisheries Sciences", Kingdom of Saudi Arabia. (http://www.afps.ws/)

Coordination of international conventions and conferences:

- Scientific coordinator of The 3rd Mediterranean Summit of WPSA, and 6th International Poultry Conference, March 2012, Porto Marina, Alexandria – Egypt.
- Scientific coordinator of the World Poultry Science Association (WPSA) Network in the Mediterranean area.
- Member in the organizing committee of the 5th International poultry conference, 10 - 13 March 2009, Taba – Egypt.
- Member in the scientific committee of The 2nd Mediterranean Summit of WPSA, 4- 7 October 2009, Antalya – Turkey.
- Coordinator of the cultural exchange program between the Kafrelsheikh University - Egypt and the Bologna University, Italy.

PROFESSIONAL MEMBERSHIPS:

- Egyptian Poultry Science Association
- British Animal Science Society.
- World Poultry Science Association
- Combined Workshop on Fundamental Physiology and Prenatal Development in Poultry, World Poultry Science Association.
- Administrative Board Member in World Poultry Science Association Egyptian Branch.

SOCIAL MEMBERSHIPS:

- Distinguish friend of Kagoshima city, Kagoshima prefecture, JAPAN.
- Egyptian Association of Friends of Bibliotheca Alexandrina, Alexandria, EGYPT
- Executive Committee member in Satsuma Islamic Culture Center, Kagoshima prefecture, JAPAN.

International Research Projects:

- Co-Investigator in research project (Eco-feed production for animal nutrition) Kagoshima University Japan, 2009 – present.

Area of expertise:

Biochemistry – Nutritional biochemistry – Physiology - Animal science – Biotechnology

2- Prof. Dr. Maged Abdeltawab El-Kemary

Personal Data

- **Name** : Maged Abdeltawab El-Kemary
- **Date of Birth** : May 23, 1959
- **Marital Status**: Married
- **Tel.**: +20-47-3215176 (work), **Fax:** +20-47-3215175
  - +20-100 297 421 (mobile).
- **E-mail** : elkemary@yahoo.com
- **Current Address** Department of Chemistry, Faculty of Science, Kafrelsheikh University, 33516 Kafr ElSheikh, EGYPT

Research Interest

- Photochemistry, Photophysics, photobiology and photomedicine of photoactive materials.
- Synthesis, photophysics and spectroscopic characterization of nanocavities caged drug.
- Interaction between drugs and proteins**.**
- Photoprocess at the surface of nanoparticles and their applications.
- Characterization of nanoparticles for drug delivery applications.
- Photocatalytic degradation of Organic pollutants by photo-nano-catalyst.

Professional Appointments

- **JSPS Invitation Fellowship Award**, Graduate School of Material Science, University of Hyogo, Hyogo, Japan (1st May 2009-31 June 2009).
- **Visiting Professor**, FemtoChemistry Lab., Department of Physical Chemistry, University of Castilla-La Mancha, Toledo, Spain (September 2005 –August 2006).
- **Visiting Researcher**, Humboldt University, Berlin, Germany, Professor W. Rettig (May 2003-August 2003).
- **JSPS Invitation Fellowship Award**, Institute of Physical and Chemical Research (RIKEN), Wako, Japan (1st November 2002-31 December 2002).
- **Visiting Researcher**, Photoreaction Control Research Center, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan (COE project), with Prof. Shigeo MURATA (January - June 2001).
- **Postdoctoral Researcher** with Prof. Osamu Ito, Tohoku University, Sendai, Japan (January - June 1998).

- **Training** on operation and service activity of Single Photon Counting machine, Edinburgh Instruments Ltd, Scotland, 1997.

SCIENTIFIC PROJECTS

- Excited-state Relaxation Properties of Donor-Acceptor Systems. May 28, 2002 to May, 2004. Egyptian-German bilateral cooperation.
  Humboldt University, Berlin, Institute für Chemie: Prof. W. Rettig

  Tanta University, Faculty of Education, Chemistry Dept.: Prof. Maged El-Kemary
- Effect of Cyclodextrins on the Photostability of drugs, from October 1, 2002 to September 1, 2005, supported by Tanta University with cooperation with Faculty of Pharmacy, Tanta University, group leader: Maged El-Kemary.
- Photostability of drugs, 2 September – 30 August 2006. by cooperation with Prof. Dr. A. Douhal, Castilla La Mancha University, Toledo, Spain.

Committee Membership

- Egyptian society of advanced materials and nanotechnology
- Arab Materials Science and Nanotechnology Network
- Membership in New York Academy of Science.
- Membership in the American Association for the Advancement of Science

3- Prof. Dr. Ibrahim Ibrahim AL-Hawary

Name : Ibrahim Ibrahim AL-Hawary

Date and Place of birth **:** 11/ 6 / 1963 Desouk Kafre EL-Sheikh

Nationality **:** Egyptian

Marital status **:** Married

Permanent address **:** Desouk - Kafr El-Sheikh

Languages **:** Arabic (mother language), English (Good).

Present personal position: Prof. of Milk and Eggs Hygiene, Fac. Vet. Med., Kafrelsheikh university, Egypt.

Field of Specialization **:** Milk Hygiene

Qualifications:

1. B.V.Sc. Med. Assiut Univ. Egypt, 1986.

2. Master Degree of Vet. Med. (M.V.Sc. Milk Hygiene).

Title: Microbial Monitoring of Dairy Plant Milk .

Faculty Council Approval 3 / 5 / 1992.

University Council Approval 26 / 5 / 1992 (Alex. Univ.).

3. Philosophy Doctor Degree (Ph.D. Milk Hygiene).

Title: Microorganisms of Udder and Teats Affecting the Hygiene Quality of Milk and their Prevention.

Faculty Council Approval 13 / 2 / 1996.

University Council Approval 24 / 2 / 1996 (Tanta University).

Employment:

1. Assistant Lecturer of Milk Hygiene 9 / 2 /1993**.**

2- Lecturer of Milk Hygiene 28 / 5 / 1996.

3 - Assistant Prof. of Milk Hygiene 26 / 6 / 2001.

4 - Prof. of Milk Hygiene 26 / 6 / 2001.

4- Prof. DR. Mohamed Ahmed Mahmoud Marey

Name	***:***	Mohamed Ahmed Mahmoud Marey
Nationality	***:***	Egyptian
Date of Birth	***:***	10-2-1961
Place of Birth	***:***	Tanta- Elgarbia
Marital status	***:***	Married + 2
Home address	***:***	Abd Elhalem Mahmoud St.
Home Tel.	***:***	040- 3306898
Mobile	***:***	0105780758
E-mail	***:***	m-geo010@yahoo.com
Work Address	***:***	Egypt, Kafr El-Sheikh university.
Work Tel.	***:***	047/ 3211846
Position	***:***	Vice- Dean for students' affairs

2. Education :

1- First university Degree :

Degree	***:***	BA
Faculty	***:***	Faculty of Arts Tanta University
Major field	***:***	Geography
Date	***:***	May 1982

2- Second university Degree : MA

Degree	***:***	MA in Geography
Faculty	***:***	Faculty of Arts Tanta University
Major field	***:***	Human Geography
Date	***:***	November 1988

3- Third university Degree ***:*** Ph. D

Degree ***:*** Ph. D in Geography

Faculty ***:*** Faculty of Arts Tanta University

Major field ***:*** Human Geography

Miner field ***:*** Economic Geography

Date ***:*** July 1993

4- Employment Record ***:***

Assistant lecturer ***:*** 1988- 1993

Lecturer ***:*** 1993- 2000

Associate professor ***:*** 2000- 2005

Professor ***:*** 2005

Chairman ***:*** Geography Department, Vice Dean for students' affairs

5- Lecturing Experience:

a) Undergraduate courses:

1- Economic Geography	2- Human Geography
3- Urban Geography	4- Cartography
5- Agriculture Geography	6- Industry Geography
7- Population Geography	8- Political Geography
9- Energy Geography	

b) Postgraduate Courses:

1- Rural Geography	2- Political Geography
3- Energy Geography	4- Agriculture Geography
5- Economic Geography	6- Human Geography
7- A Study in Power Geography	8- Applied Geography

5- Prof. DR. Amal Abd El-Samea Baza

Name: Prof. Dr Amal Abd El-Samea Baza.

Date of Birth: 5 / 5 / 1953.

Current Profession: A Professor and a Dean.

Date of Employment: 25 / 9 / 2001.

General Specialization: Psychology.

Specific Specialization: Mental Hygiene.

Home Phone: 040 / 3310313.

Work Phone: 047 / 3223415.

Cell Phone: 0107563635.

Address: Tanta, Tharwat Riyad Street, Society Land.

Personal ID No.: 25305051702182.

Marital Status: Married.

Husband's Name: Kamal Mohamed Alam.

Professional and Academic Experiences in the Field of Development and Training:

- Training the female teachers of Special Education in the schools under the supervision of Education and Instruction.
- Conducting counseling studies at the Eastern Instructional Area for Secondary and Preparatory stage students.
- Giving courses of evaluation and development at the National Centre of Curricula Development and Exams.
- Executing the programs and studies related to students with special needs and Master and Ph. D. candidates, evaluating programs and systems and working at the Human Development Center.
- Evaluating projective tests.

Other Experiences in Training (Research – Training Courses – Conferences – Consultations and Studies):

- 18 Books + 29 Mental Hygiene Standardized Tests + Participating in the Ministry of Youth programs in the University + Educating future youth and female university students + Supervising and training in the fields of special education, educational evaluation and exams + Conferences of developing university instruction and developing faculties of education + Secretary of many conferences and seminars at the faculty.
- Attending and participating by 71 worksheets in 165 local and international conference.
- A member of 9 specialized academic societies.
- A trainer at the FLDP.
- Discussing and Supervising 215 theses and dissertations inside and outside the university in addition to those which have not been discussed yet.
- Equating 15 theses from the Supreme Council of Universities.
- A member of the Permanent Academic Committee of 2008 / 2011 (Current Session).

Training Courses:

(A) Participated as a trainer in FLDP courses since 2004 till now. Such courses include:

- Thinking Skills Development.
- Effective Communication.
- Academic Research Skills.
- Work Stress and Time Management.

(B) Participated in FOEP. Such courses include:

- Educational Research Efficiency.
- Writing Educational Research.

(C) Remedial and psychological counseling in abnormal and multi-handicapped students and development programs of some positive traits of children and adults.

(D) Seminars in the different fields of Mental Hygiene.

6- Prof. Dr. Alaa M. Salem

Prof. Dr. *Alaa M. Salem*

PERSONAL INFORMATION

SURNAME : SALEM **FIRST NAME(S):** ALAA MOHAMED KAMEL
Civil Status: married (2 children: Sarah 18, Mohamed 15)
Languages: Arabic, English, and some Swedish and Deutsch
Affiliation and official address: Professor
Office: Faculty of Science
Kafrelsheikh University
P.O. Box 33516 Kafrelsheikh,
Egypt
Tel: +2047-3215174 // Fax: +2047-3215175
e-mail: alaasalem667@yahoo.com
alaa.salem@sci.kfs.edu.eg
Home: 38 Al-Alphy Street
Tanta 31111, Egypt
Tel: 002040-3340077
Mobile : +2012-2515807
*For correspondence, please use Office Address

Date and place of birth: 27 September, 1960 Tanta, Egypt **Nationality:** EGYPTIAN

Education (*degrees, dates, universities)*

1) Ph.D. Degree, 1995: Sandwich Programme (Tanta University, Egypt and University of Texas at Austin, USA)
2) M.Sc. Degree, 1989: Faculty of Science, Tanta University, Egypt
3) B.Sc. Degree, 1983: Faculty of Science, Tanta University, Egypt

WORK EXPERIENCE

Career/Employment (*employers, positions and dates)*

Feb. 2010-Now: Professor, Kafrelsheikh University
2001- 2010: Associate Professor, Tanta University, Egypt, Now Kafrelsheikh University
1998-2001: Assistant Professor, Tanta University, Egypt
1997-1998: Postdoctoral fellow in Uppsala University, Sweden
1995-1997: Assistant Professor, Tanta University, Egypt
1994-1995: Assistant lecturer, Tanta University, Egypt
1992-1994: Ph.D. Position in the University of Texas at Austin, USA
1989-1992: Assistant lecturer, Tanta University, Egypt

Specialization

(i) main field Sedimentary and Environmental Geology

(ii) other fields Evolution of Oil and Gas Reservoirs – Evolution of Coastal Wetlands

(iii) current research projects (detailed research plans are available upon request)

1. Predictive Siliciclastic Diagenesis in a Sequence Stratigraphic Framework. Evidence from the Early Paleozoic, Fluvio-Tidal Clastic Sediments, Sinai, Egypt – in cooperation with Prof. Brian Turner, Durham University in UK and Prof. Sadoon Morad, Uppsala Univ. in Sweden.
2. A comprehensive study on spatial and temporal distribution of heavy metals in the Nile and Yangtze coastal wetlands: A special reference to ecological safety – in cooperation with Prof. Zhongyuan Chen, East China Normal University in Shanghai, China.

(iv) computer experience: Excellent experience with the following certificates**:**

1. International Computer Driving Licence (ICDL), issued from the UNESCO Cairo Office.
2. Creating www web pages, issued from the University of Durham, UK.
3. Writing accessible web sites, issued from the University of Durham, UK.

Honours and Awards

1. University Encouraging Award in the field of Environmental Sciences, April 2009
2. Soliman's award for the best 1995's Ph.D thesis issued from the Sedimentological Soc. of Egypt
3. Professional Representative (Focal Point) of The European's Seventh Research Framework Programme (FP7, 2007-2013) at Kafrelsheikh University.
4. National Correspondent of the International Association of Sedimentologists (IAS) since 2008

Fellowships, Membership of Professional Societies

1. Post doctoral visit in East China Normal University, China (October-November, 2008).
2. Post doctoral visit in East China Normal University, China (May-June, 2007).
3. Post doctoral visit in Uppsala University, Sweden (June-July, 2006).
4. Post doctoral Fellowship in Durham University, UK (August-October, 2005).
5. Post doctoral Fellowship in Durham University, UK (October-December, 2004).
6. Post doctoral Fellowship in Heidelberg University, Germany (January-March, 2001).
7. Post doctoral visit in Uppsala University, Sweden (August-September, 2000).
8. Post doctoral Fellowship in Uppsala University, Sweden (Sept., 1997 –Aug., 1998).
9. Ph.D. Scholarship to the Univ. of Texas at Austin, USA (Oct., 1992 – Oct., 1994).

Memberships:

1) Geological Society of Egypt
2) Sedimentological Society of Egypt
3) SEPM (Society of Sedimentary Geology), USA
4) AAPG (American Association of Petroleum Geologists), USA

Consultant job (October, 1998 – October 2000)

With PETROBEL (Belayim Petroleum Company) in Egypt about the problem of high water saturation in Abu-Madi gas reservoirs, Nile Delta, Egypt.

Evaluation and Dissemination:

- Abstract, presented in the AAPG international conference, New Orleans, USA, April 16-19, 2000.
- A published article (Salem et al., 2005).

Training Courses

- "Analytical Techniques and Applications in Geological Sciences" taught by: Prof. Douglas Smith in the University of Texas at Austin, USA during the spring semester of 1993.
- "Sedimentary and Petroleum Systems" taught by: Prof. Maurice Tucker in Durham University, UK, October-December, 2004.
- E-learning course on Carbonate sedimentology tutored by Dr. Moyra Wilson in Durham Univesrity, UK, October-December, 2004.

Field Experience

I have done a lot of field work on both clastic and carbonate sequences, and mixed carbonate/clastic sequences in Egypt and elsewhere. Field experiences included analyzing sedimentary structures, recognize facies associations, identifying sequence/parasequence boundaries, record distinguished features, etc.

- In Egypt:
    1. Clastic sedimentary sequences in Sinai and along the Gulf of Suez
    2. Mixed carbonate/clastic sequences and tidal flats along the Red Sea coast
- Other areas in the world:
    1. Mixed carbonate/clastic sequences in Berwick area, Northern England
    2. Tidal flats in Showming Island, Northeastern China
    3. Student-field trips in Texas, USA and China.

Invitation of Foreign Scientists

I have invited the following scientists to present lectures in my university and to initiate joint research proposals: I am currently involved in collaborative research work with them.

1. Professor Zhongyuan Chen from East China Normal University, China:
   Two visits (26th March - 4th April, 2006), (20th February – 2nd March, 2008)

2. Professor Brian Turner from the University of Durham, Uk:
   The visit was from 1st May – 10th May, 2006.

7- Prof. Dr. Belal Elsayed Belal Abdelmonteleb

Personal details

Surname	Belal				
Other names	Elsayed Belal Abdelmonteleb				
Title	Dr.				
Gender	Male				
Address	Dept. of Agric. Botany, Faculty of Agriculture, Kafrelsheikh University				
				Post code	33516
Telephone numbers	0020473232762 0020473258048			Evening	
Mobile	0020103169628			Email	elsayedb@yahoo.com or belal@inmail24.com
Date of birth	Day 11	Mo 6	Yr 1969	Place of birth	Kafr El-Sheikh

Training

Training attended/ Technical skills acquired	**Place**	**Dates (from – to)**
Laboratory Biosafety and BioSecurity	Cairo	3rd to 5th April/ 2007
"Investigations on the biodegradation of polyesters by isolated mesophilic microbes".	Germany	1999 – 2003

Biological control of soil-borne-diseases of some legumes and its relation to symbiotic nitrogen fixation	Faculty of Agriculture, Kafr El-Sheikh, Tanta University	1993 – 1996
Biodegradation of pesticides	Faculty of Agriculture, Kafr El-Sheikh, Tanta University	
Biodegradation of agricultural wastes	Faculty of Agriculture, Kafr El-Sheikh, Kafrelsheikh University	
Production of biogas from agricultural wastes	Faculty of Agriculture, Kafr El-Sheikh, Kafrelsheikh University	
Production of PHB as microbial plastic	Faculty of Agriculture, Kafr El-Sheikh, Kafrelsheikh University	
Protein separation, purification and amino acids content determination	Mubarak City for Scientific Research and Technology	from 27-11 to 1-12/2004

Employment History

Employer	**Position**	**Dates (from – to)**
Demonstrator of Agricultural Microbiology	Agricultural Botany Department Faculty of Agriculture, Kafr El-Sheikh, Tanta University, Egypt	1992 – 1996
Assistant Lecturer of Agricultural Microbiology	Agricultural Botany Department Faculty of Agriculture, Kafr El-Sheikh, Tanta University, Egypt	1996 – 2003
Lecturer of Agricultural Microbiology	Agricultural Botany Department Faculty of Agriculture, Kafrelsheikh, University, Egypt	2003 – 2008
Associate professor of Agricultural Microbiology	Agricultural Botany Department Faculty of Agriculture, Kafrelsheikh, University, Egypt	2009

Membership of professional associations

Professional body	Level of membership	Year of award
The scientific society of environment protection Faculty of Agriculture, Kafrelsheikh Univ.	Establisher member	2007
the gyption society of experimental biology Faculty of Science, Tanta Univ	Member	2006
Arab Society for Biotechnology. Faculty of Agriculture, Alexandria Univ.	Member	2004
society of Applied microbiology (ESAM). Faculty of Agriculture, Ain Shams Univ.	Member	1991
the journal of Agricultural research, Faculty of Agriculture, Kafrelsheikh Univ.	Member	1991

Field of interest

1. Production of the microbial plastic by different microorganisms.
2. Biodegradation of the synthetic and natural plastics by microorganisms and isolation of the synthetic plastic degrading enzymes and using it in industrial application such as detergent.
3. Biodegradation of rice straw by microorganisms and conversion it to beneficial forms.
4. Biodegradation of some pesticides by microorganisms.
5. Biological control of plant pathogens.
6. Purification of wastewater and ground water by microorganisms.
7. Biodegradation of gas oil.
8. Biofertilizers.
9. Recycling of agricultural residues.
10. Production of renewable energy from agricultural residues and other wastes (biogas, bioethanol and biodiesel).
11.

Production of new materials

1. Production of the microbial plastic by different microorganisms.

    1. Production of industrial enzymes (detergents) from environmental wastes such as plastics, agricultural residues and wastepaper materials.

3. Production of bioauxin (IAA).

4. Production of biogas from agricultural wastes.

5. Production of biofuel, silica, lignin, humic acid, fulvic acid, cellulose, paper and lignosulfonate from agricultural wastes.

6. Production of biodiesel from wastes.

7- *Production of beneficial microorganisms.*

8-Single cell Protein.

For more information, please visit the following address, www.kfs.edu.eg

8- Prof. Dr. Magdy Hasanien Al- Gaabary

I. PERSONAL DATA:

1. Full Name:	Magdy	Hasanien	Al- Gaabary
2. Place & Date of Birth:	Farsis, Zefta, Gharbia 03/1/19 61		
3. Nationality:	Egyptian		
4. Marital status:	Married	Children : 4	
5. Permanent address:	Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh, Egypt		
6. Present Address:	Faculty of Veterinary Medicine, Kafr El-Sheikh University, Egypt		
7.Telephone:	Home: +2 (040) 5701564 Mobile: 012 3919530	Office:+2 (047)3231609 Fax: +2 (047) 3231311	
8. Position:	***-Professor of Infectious Diseases, Faculty of Veterinary Medicine, Kafr El-Sheikh University.** ***-Vice Dean for Education and Students Affairs, Fac. Specific Education Kafrelsheikh University.**		

IV. Membership of Cultural, Educational and Professional Societies:

1. Member of: Egyptian Society of Cattle Diseases, Assiut, Egypt.
2. Member of: Society of Camel Diseases, Assiut, Egypt.
3. Member of: Egyptian Veterinary Medical Association.
4. Member of: Egyptian Society of Cattle Diseases**.**
5. Member of: Egyptian Society of Zoology.

V. RESEARCH EXPERIENCE:

1. Experience in the diagnostic procedures that include clinical and laboratory diagnosis of animal diseases
2. Experience in the diagnosis of bacterial, viral and parasitic diseases in different animal species.
3. Special experience in blood parasites (Master and Ph. D. in this subject).

9- Prof. Dr Abdullah Allam Abdu Allam

Vice Dean for Community Service and Environmental Development

Degrees:

• Bachelor of Arts Department of Geography - University of Tanta in 1983.
• Master of Arts (Geography) - University of Tanta in 1987.

• PhD in Arts (Geography normal) First Class Honours - University of Alexandria in 1993

Positions:

1. Getting a scholarship to study master's house, Alexandria University - Faculty of Arts during the period from 1985 to 1989.
2. Assistant Lecturer, Department of Social Sciences – University of Tanta in 1990 - the branch of Kafr El-Sheikh.
3. Natural geography teacher (Geomorphology), Department of Social Sciences Faculty of Education - Kafr el-Sheikh in 1993.
4. Assistant Professor of Physical Geography, Department of Social Sciences in 2002.
5. Assistant Professor of Physical Geography, Department of Geography Faculty of Arts, University of Kafr El-Sheikh in 2006.
6. Faculty of Arts, University of Kafr El-Sheikh. Head of geography and space.
7. Faculty of Education, University of Kafr El-Sheikh. Supervisor of the Division of Geography.
8. Head of Geographical Information Systems GIS - Faculty of Arts, University of Kafr El-Sheikh.
9. Head of Psychology - Faculty of Arts, University of Kafr El-Sheikh.
10. Vice Dean for Community Service and Environmental Development - Faculty of Arts, University of Kafr El-Sheikh.

Universities and colleges that taught by:

1 - Tanta University - Faculty of Education Faculty of Education, Tanta and Kafr El-Sheikh.
2 - Tanta University - Faculty of Arts - Branch Kafr El Sheikh.
3 - Al-Azhar University - Faculty of Education Tvhna supervision
4 - Al-Azhar University - College of Education in Cairo.
5 - Assiut University - Faculty of Education, Assiut.
6 - Assiut University - Faculty of Arts, Assiut.
7 - Assiut University - Faculty of Arts (postgraduate) Pre-Masters.
8 - University of Qar Younes, Libya,
9 - University of the Great March, Libyan Jamahiriya,
10 - Al-Imam Muhammad bin Saud Islamic University, Saudi Arabia.
11 - King Khalid University, Saudi Arabia

Scientific interest to graduate students:

1. Academic coursework in the Faculty of Teacher Education - Department of Geography: the subject matter, in particular, the territory of a special article, article Research Methods, art room search.
2. Teaching of quantitative geography and computer for students Pre-master's Faculty of Arts, Assiut University,
3. Teaching graduate students - University of Kafr El-Sheikh - Faculty of Arts. And materials as follows material natural ways to search, the texts of Article Angelizip (modern European language), Article field work, research material

2.1-1University staff members who won the discriminative prize of the university

1- Prof. Dr. Ahmed El-Sayed Ahmed Salama

Contact Information

Name: Ahmed El-Sayed Ahmed Salama

Address: 16 Shouds station st. Alexandria, Egypt

Telephone: HOME 03/5767495, Mobile**: o113521855**

E-mail Address: Parasatea@yahoo.com

Personal Information

Date of Birth: October 14, 1939

Place of Birth: Alexandria, EGYPT

Gender: Male.

Optional Personal Information

Marital Status: Married.

Children: 2 (male and female).

Employment History

Occupation: Professor of chemistry of pesticides , Pesticides Department, Faculty of Agriculture, Kaferelsheikh University, Egypt.

Education:

1969 Ph. D., Faculty of Agriculture , Alexandria University, Egypt.

1965 M. Sc. Faculty of Agriculture , Alexandria University, Egypt.

1962 B.Sc. Faculty of Agriculture , Alexandria University, Egypt.

Positions and Employment.

August 1st 2000 – till now: Emeritus Professor, Pesticide Department, Faculty of Agriculture, Kaferelsheikh University, Egypt.

1993 – 1999: Head of Pesticide Department, Faculty of Agriculture, Kaferelsheikh, Tanta University, Egypt.

1980 – 1993: Professor of Pesticides, Faculty of Agriculture, Kaferelsheikh, Tanta University, Egypt.

1976 – 1980: Associate Professor, Faculty of Faculty of Agriculture, Kaferelsheikh, Tanta University, Egypt.

1969-1976: Researcher, National Research Center .Dokki, Cairo, Egypt

1965-1969: Assistsnt Researcher, National Research Center. Dokki, Cairo, Egypt

1962-1965: Scholarship, Academy of science, National Research Center .Dokki, Cairo, Egypt.

Awards: Honorary Award of Kaferelsheikh University, 2007/ 2008.

Academic Activities:

1- Established a well- known school in chemistry of pesticides, insect toxicology and pesticides resistance in arthropods.
2- Ten of my former research students are now Full and Associate professors, leading research in different aspects of pest control management and insect toxicology in the faculty of Agriculture, Kaferelsheikh University and research centers ,Ministry of Agriculture Published 78 scientific papers in International and Egyptian journals.

Member of the committee of the Egyptian Universities Promotion Committees in the field of plant protection from 1993-1999.

3- Chairman of the Egyptian Universities Promotion Committee in the field of protection and plant diseases from 2008- 2011.
4- Member of the committee to recognize outstanding Young Life Scientists and reward their research in the field of pesticides, Alex. University.
5- Publishing 2 scientific books
6- Member of the Examiners Committee for master and ph.D. degree

2- Prof. Dr. Fattouh, EL-S. M.

Professor and head of Department of Theriogenology

Faculty of Veterinary Medicine

1- Personal Data:

- First name :El-Sayed
- Middle name :Mohammed
- Family name :Fattouh
- Date of birth :March 23, 1951
- Place of birth :Kafr EL-Sheikh
- Marital status :Married
- Nationality :Egyptian
- Address :Amr Ebn Elas tour, El-Gomhoria St., Kafr EL-Sheikh.
- Phone number :Work : 0473231311

  :Mobile: 0166196111
- E. mail :elsayedfettouh@yahoo.com

2-Academic degrees:

Degree	University	Faculty
1974 Bachelor (B.V.Sc)	Cairo University	Veterinary Medicine
1978 Master (M.D.V.Sc)	Cairo University	Vet. Med. Theriogenology
1981 Doctorate (Ph.D.V.Sc)	Cairo University	Vet. Med. Theriogenology

3-Stages of University education:

Degree	University	Faculty
1969-1974 Bachelor (B.V.Sc)	Cairo University	Veterinary Medicine

1975-1978 Master (M.D.V.Sc)	Cairo University	Vet. Med. Theriogenology
1978-1981 Doctorate (Ph.D.V.Sc)	Cairo University	Vet. Med. Theriogenology

4-Professional background:

-Demonstrator in Theriogenology Dept., Fac. Vet. Med. Cairo Univ., 1975

- Ass. Lecturer of Theriogenology Fac. Vet. Med. Cairo Univ.,1978
- Lecturer of Theriogenology Fac Vet. Med. Cairo Univ., 1981
- Ass. Professor of Theriogenology Fac Vet. Med. Cairo Univ., 1986
- Professor of Theriogenology Fac. Of Vet. Med. Cairo Univ., 1991
- Moved to Fac. Vet. Med. Kafr EL-Sheikh , Tanta University., 1992
- Chairman of Theriogenology Dept. Fac. Vet. Med. Kafr EL-Sheikh , Tanta University., 1994
- Vice Dean of Fac. Vet. Med. for community and environmental affairs, 1995
- Dean of Fac. Vet. Med. Kafr EL-Sheikh, Tanta University. 1995-1998.
- Dean of Fac. Vet. Med. Kafr EL-Sheikh, Tanta University, 1998-2001.
- Chairman of Theriogenology Dept. Fac. Vet. Med. Kafr EL-Sheikh , Tanta University, 2005-2008.
- Chairman of Theriogenology Dept. Fac. Vet. Med. Kafr EL-Sheikh University, 2005.

5-Periods of research and visiting abroad:

-American peace fellow in the Dept. of Theriogenology Illinois University, **U.S.A.**, 983-1984

During this fellowship:

-Attendance of a field trip to Ohio and Indiana States for visiting the international center for A.I. and several dairy farms.

- Attendance of several scientific meetings in Chicago and Illinois concerned with improvement of animal reproduction.

: A field visit to Faculties of Agriculture and Vet. Med. Ankara University, **Turkey**, 1996.

: Training on the theories and uses of sonography, **England**, 1997

: Visiting professor to the Dept. of Reproductive Biology at the Research Institute of Biology in farm animals, Dumerstorf- rostock, **Germany**. Sponsored by DAAD,

1998.

: Attendance of the 4th meeting of Arabian Deans of Faculties of Veterinary Medicine held in Fac. Vet. Med. King Faisel University, AL-Ahsa, **K.S.A., 2000.**

: Attendance of the 5th meeting of Arabian Deans of Faculties of Veterinary Medicine held in Fac. Vet. Med. Jordan University of Science and Technology, Irbid, **Jordan**, 2001.

: Visiting professor to the Dept. of Reproductive Biology at the Research Institute of Biology in farm animals, Dumerstorf- rostock, **Germany**. Sponsored by DAAD, 2002.

: Attendance of the XXV Jubilee world Buiatrics Congress, Budapes, **Hungary, 2008**.

: Visiting professor to the Dept. of Reproductive Biology at the Research Institute of Biology in farm animals, Dumerstorf- rostock, **Germany, 2009**.

2- Kafrelsheikh University staff members who are published their Articles in international scientific journals 2009/2010

No	Paper Title	Authors	Journal	Impact Factor
Faculty of Agriculture				
1	Sorption and lability of cadmium and lead in different soils from Egypt and Greece	**Sabry Mohamed Shaheen**	Geoderma (2009) 153 : 61–68	2.068
2	Concentration of Lead in Soils and Some Vegetable Plants in North Nile Delta as affected by Soil Type and Irrigation Water	**Sabry M. Shaheen** and Christos D. Tsadilas	Communications in Soil Science and Plant Analysis (2009), 40: 327–344	0.357
3	Effect Of Common Ions On Phosphorus Sorption And Lability In Greek Alfisols With Different pH	**Sabry M. Shaheen**, Christos D. Tsadilas, and Kent M. Eskridge	Soil Science (2009) :174: 21-26	1.037
4	Distribution Coefficient of Copper in Different Soils from Egypt and Greece	**Sabry M. Shaheen**, C. D. Tsadilas, T. Mitsibonas, and M. Tzouvalekas	Communications in Soil Science and Plant Analysis (2009), 40: 214–226	0.357
5	Influence of Fly Ash Application on Copper and Zinc Sorption by Acidic Soil amended with Sewage Sludge	Christos Tsadilas, **Sabry M. Shaheen**, Vasilios Samaras, Dimitrios Gizas, and Zhenqi Hu	Communications in Soil Science and Plant Analysis, (2009) 40: 273–284	0.357
6	Growth parameters and tissue lipid profiles of C57PL/6N mice fed roselle seed oil	**M. Zommara**, M. Hung, K. Imaizumi, M. Atta	Acta Alimentaria (2009) Volume 38, Number 1:035-43	0.441
7	A review of renewable energy technologies integrated with desalination systems	**Mohamed A. Eltawil**, Zhao Zhengming , Liqiang Yuan	Renewable and Sustainable Energy Reviews (2009), 13: 2245–2262	4.075
8	Performance Evaluation of Switch Devices Equipped in High-Power Three-Level Inverters	Liqiang Yuan, Zhengming Zhao, Senior Member, IEEE, Mohamed	IEEE Ransactions On Industrial Electronics, Vol(2007). 54, No. 6, December	5,468

		Eltawil, Rong Yi, and Hua Bai		
9	Wind turbine-inclined still collector integration with solar still for brackish water desalination	**Mohamed A. Eltawil**, Zhao Zhengming	Desalination (2009) 249 : 490–497	1.155
10	Organic selenium enhances the antioxidative status and quality of cockerel semen under high ambient temperature	**Tarek A. Ebeid**	British Poultry Science (2009), 50:641-647	1.346
11	Influences Of Pre-Sowing Seed Treatments On Germination Of The Cancer Bush (Sutherlandia Frutescens), A Reputed Medicinal Plant In Arid Environments	S. Shaik, Y.H. **Dewir** N. Singh And A. Nicholas	Shaik, S., Dewir, Y.H., Singh, N. And Nicholas, A. , Seed Sci. Technol(2008)., **36**, 795-801	0,66
12	Hydrogen Peroxide Has A Key Role In Resistance To Leaf Rust (Puccinia Triticina) In Several Egyptian And Other Wheat Cultivars	**Yasser M. Hafez**– Zoltán Király – Klára Manninger	Cereal Research Communications (2009), Vol. 37,	1.19
Faculty of Veterinary Medicine				
13	Genetic analysis of antimicrobial resistance in Escherichia coli isolated from diarrheic neonatal calves	**Ashraf M. Ahmed** , Emad E.A. Younis , Salama A. Osman , Yojiro Ishida , Sabry A. El-khodery , Tadashi Shimamoto	Veterinary Microbiology (2009), 136 : 397–402	2.4
14	Genetic Characterization Of Multidrug Resistance In Shigella Spp. From Japan	**Ashraf M. Ahmed**, Kimi Furuta, Kei Shimomura, Yoshio Kasama And Tadashi Shimamoto	Journal Of Medical Microbiology(2006) , 55, 1685–1691	2,2

15	First Characterization And Emergence Of SHV-60 In Raw Milk Of A Healthy Cow In Japan	Ahmed M. Hammad, **Ashraf** M. Ahmed, Yojiro Ishida And Tadashi Shimamoto	J. Vet. Med. Sci(2008). 70(11): 1269–1272,	.,9
16	Genetic basis of multidrug resistance in *Salmonella enterica* serovars Enteritidis and Typhimurium isolated from diarrheic calves in Egypt	**Ashraf M. Ahmed**, Emad E.A. Younis, Yojiro Ishida, Tadashi Shimamoto	Acta Tropica (2009), 111 : 144–149	1.70
17	Molecular characterization of antimicrobial resistance in Salmonella isolated from animals in Japan	**A. M. Ahmed**, Y. Ishida and T. Shimamoto	Journal of Applied Microbiology (2009), 106 : 402–409	2.028
18	Molecular screening and risk factors of enterotoxigenic Escherichia coli and Salmonella spp. in diarrheic neonatal calves in Egypt	Emad E. Younis , Ashraf M. Ahmed , Sabry A. El-Khodery , **Salama A. Osman** , Yasser F.I. El-Naker	Research in Veterinary Science (2009), 87 : 373–379	1.384
19	Cytokine response and clinicopathological findings in *Brucella* infected camels (*Camelus dromedarius*)	M. El-Boshy, H. Abbas, S. El-Khodery, **Salama. Osman**	Veterinarni Medicina (2009), 54: (1): 25–32	0.624
20	Seroprevalence of camel brucellosis (Camelus dromedarius) in Somaliland	**Yasser M. Ghanem** & Sabry A. El-Khodery &Ashraf A. Saad & Ahemd H. Abdelkader & Ahemd Heybe & Yasin A. Musse	Trop Anim Health Prod (2009)	0.559
21	Prevalence and risk factors of caprine arthritis encephalitis virus infection (CAEV) in Northern Somali	**Y.M. Ghanem**, S.A. El-Khodery, Ashraf A. Saadc, S.A. Elragaby, A.H. Abdelkader, A. Heybe	Small Ruminant Research 85 (2009) 142–148	1.193

22	Morphological and glycohistochemical studies on the epididymal region of the Sudani duck (Cairina moschata)	Ahmed Abd-Elmaksoud , Ahmed Sayed-Ahmed , S. Ebada Mohamed , **Kassab Mohamed** , H.E. Marei	Research in Veterinary Science 86 (2009) 7–17	1.384
23	Risk factors for bacteriological quality of bulk tank milk in prince Edward Island dairy herds. part 1: Overall risk factors	**A. M. Elmoslemany**, G. P. Keefe, I. R. Dohoo, And B. M. Jayarao	Journal of Dairy Science (2009), Vol. 92 No. 6:2634-2643	2.486
24	Risk factors for bacteriological quality of bulk tank milk in prince Edward Island dairy herds. part 2: Bacteria count-specific risk factors	**A. M. Elmoslemany**, G. P. Keefe, I. R. Dohoo, And B. M. Jayarao	Journal of Dairy Science (2009), Vol. 92 No. 6: 2644-2652	2.486
25	Microbiological Quality Of Bulk Tank Raw Milk In Prince Edward Island Dairy Herds	**A. M. Elmoslemany** , G. P. Keefe , I. R. Dohoo , And R. T. Dingwell	Journal of Dairy Science (2009), Vol. 92 No. 9:4239-4248.	2.486
26	Measurement Of Ovine Pregnancy-Associated Glycoprotein (PAG) During Early Pregnancy In Lacaune Sheep	B El Amiri,, A **Karen**, J Sulon, N Melo De Sousa, AV Alvarez-Oxiley, Y Cognie´ , O Szenci And JF Beckers	Reprod Dom Anim(2007) 42, 257–262	1,526
27	Sedative and analgesic effects of romifidine in camels (Camelus dromedarius)	**Mohamed Marzok**, MVSc, Sabry El-Khodery	Veterinary Anaesthesia and Analgesia (2009), 36, 352–360	1.250
28	Co-Circulation Of Two Sublineages Of HPAI H5n1virus In The Kingdom Of Saudi Arabia With Unique Molecular Signatures Suggesting Separate Introductions Into The	Isabella Monne, Alice Fusaro, Mohamed Hamad Al-Blowi, **Mahmoud Moussa** Ismail, Owais Ahmed	Journal Of General Virology(2008) , 89, 2691–2697	1,700

	Commercial Poultry And Falconry Sectors	Khan,Gwenae¨ Lle Dauphin, Astrid Tripodi, Annalisa Salviato, Stefano Marangon, Ilaria Capua And Giovanni Cattoli		
29	Isolation And Identification Of Highly Pathogenic Avian Influenza H5N1 Virus From Houbara Bustards (Chlamydotis Undulata Macqueenii) And Contact Falcons	Owais Ahmed Khan1, Mohammad Adam Shuaib, Salah Shaban Abdel Rhman **Mahmoud Moussa** Ismail1,, Yousef Al Hammad, Mansour Hashim Abdel Baky Alice Fusaro, Annalisa Salviato And Giovanni Cattoli	Avian Pathology (2008) , 1_5,	3,092
30	Mutational, inhibitory and microcalorimetric analyses of Plasmodium falciparum TMP kinase. Implications for drug discovery	M. Kandeel, T. Ando, Y.Kitamura, **M. Abdel-Aziz** and Y. Kitade	Parasitology (2009), 136, 11–25.	2.071
31	Caseous lymphadenitis in sheep and goats: Clinical, epidemiological and preventive studies	Magdy H. Al-Gaabary, Salama A. Osman, **Atef F. Oreiby**	Small Ruminant Research (2009) 87 116–121	1.193
Facultuy of Engneering				
32	On fuzzy pre-I-open sets and a decomposition of fuzzy I-continuity	**Arafa A. Nasef** ,, E. Hatir	Chaos, Solitons and Fractals (2009) 40 1185–1189	2.98
33	Recent progress in the theory of faint continuity	**Arafa A. Nasef**	Mathematical and Computer Modelling (2009) 49 536–541	1.032
34	CFD Prediction Of Air–Solid Flow In 180° Curved Duct	Samy M. El-Behery **Mofreh** H. Hamed , M.A. El-Kadi K.A.	Powder Technology(2009) 130- 142	1,766

		Ibrahim		
Faculty of Science				
35	Impact Of Diagenesis On Reservoir-Quality Evolution In Fluvial And Lacustrine-Deltaic Sandstones: Evidence From Jurassic And Triassic Sandstones From The Ordos Basin, China	J.L. Luo, S. Morad, **A. Salem,** J.M. Ketzer, S. Yan, X. L Zhang and J.M. Xue and O. Hlal	Journal of Petroleum Geology, Vol. 32(1), January , pp 79-102 (2009)	0.727
36	Reduction Of The Dimensionality And Comparative Analysis Of Multivariate Radiological Data	M.K. Seddeek , A.M. Kozae , **T. Sharshar** , H.M. Badran	Applied Radiation and Isotopes 67 1721–1728 (2009)	1.114
37	Radioactivity and Fluoride Contamination Derived From A Phosphate Fertilizer Plant In Egypt	N.M. Mourad , **T. Sharshar** , T. Elnimr , M.A. Mousa a	Applied Radiation and Isotopes 67 1259–1268 (2009)	1.114
38	Inter-Comparison Study Of The Population Dose Due To Gamma-Radiation In The Coast Of North Sinai Between Rafah And Bir El-Abd Areas	M. K. Seddeek, **T. Sharshar** and H. M. Badran	Radiation Protection Dosimetry , Vol. 135, No. 4, pp. 261–267 (2009)	0.951
39	Hybrid Nanocomposite Prepared by Graft Copolymerization of 4-Acryloyl morpholine onto Chitosan in the Presence of Organophilic Montmorillonite	**Samia Al-Sigeny** ; Manal F. Abou Taleb ; Nabil A. El-Kelesh	Journal of Macromolecular Science - Part A: Pure and Applied Chemistry (2009) 46, 74–82	0.72
40	Fluorescence modulation and photodegradation characteristics of safranin O dye in the presence of ZnS nanoparticles	**Maged El-Kemary**, Hany El-Shamy	Journal of Photochemistry and Photobiology A: Chemistry 205 (2009) 151–155	2.4
41	The role of capping agent on the interaction of cadmium sulphide nanoparticles with Flufenamic acid drug	**Maged El-Kemarya**,, Hany El-Shamya, M.M. Mosaadb	Materials Chemistry and Physics 118 (2009) 81–85	1.8
42	Synthesis, characterization, and crystal structures of hydrotris(2-mercapto-1-imidazolyl)borate-	**Mohamed M. Ibrahim** , Shaban Y. Shaban	Inorganica Chimica Acta (2009), 362 1471–1477	1.94

	based zinc(II) and copper(I) complexes			
43	Functionalized S4Zn (II) complexes as structural modelling for the active site of thiolate-alkylating enzymes: The crystal structure of [TtiZn–SpyH]2_HClO4 [Tti = tris(thioimidazolyl)hydroborate and SpyH = pyridine-2-thiol]	**Mohamed M. Ibrahim**	Journal of Molecular Structure (2009), 937 50–55	1.6
44	Synthesis and Characterization of 2-Mercapto-cyclohexylimidazole-Based Zinc(II) and Cadmium(II) Bromide Complexes: The Crystal Structure of [Zn(Hmimchexyl)(Br)] with N-H…Br Intermolecular Hydrogen Bonding Interactions	**Mohamed M. Ibrahim** ; Salih . Al-Juaid ; . Mohsen	Phosphorus, Sulfur, and Silicon (2009), 184:2324–2332	0.69
45	Exact solutions for variable-thickness inhomogeneous elastic plates under various boundary conditions	**A.M. Zenkour** · D.S. Mashat	Meccanica (2009), 44: 433–447	0.604
46	Bending analysis of a ceramic-metal arched bridge using a mixed first-order theory	**A.M. Zenkour** · D.S. Mashat	Meccanica (2009), 44: 721–731	0.604
47	Utilization of a montmorillonite-Ca-modified carbon paste electrode for the stripping voltammetric determination of diflunisal in its pharmaceutical formulations and human blood	**A. M. Beltagi**	J Appl Electrochem (2009) 39:2375–2384	1.54
48	Determination Of The Anti-Osteoporosis Drug Ipriflavone in Pharmaceutical Formulation By Stripping Voltammetric and Chromatographic Methods	Hanan S. El - Desoky, **Amr M. Beltagi** , Mohamed M. Ghoneim .	Journal Of Aoac International (2009) Vol,92,No.3:806-812	1.22

3-Research articles published in international scientific Journals by Kafrelsheikh University staff members

Geoderma (2009), 153:61-68.

2008_Impact Factor = 2.068

Sorption and lability of cadmium and lead in different soils from Egypt and Greece

Sabry Mohamed Shaheen

Department of Soil Sciences, Faculty of Agriculture, University of Kafrelsheikh, 33 516- Kafr El-Sheikh, Egypt

Abstract

Reactions of heavy metals with soils are important in determining their availability and fate in the environment. Mono-metal sorption and lability of sorbed cadmium (Cd) and lead (Pb) in different representative soils from Egypt and Greece as influenced by their properties were investigated in this study. For this purpose eleven surface soil samples varying widely in their origin and properties were selected. Four of them were from Egypt representing the main soil orders i.e., Entisols and Aridisols and the rest seven from different sites of Greece belonging to the orders Entisols, Alfisols, Vertisols, Mollisols, and Histosols. In these samples sorption isotherms were developed from which sorption parameters, and distribution coefficient (K_d) of Cd and Pb were determined. In addition lability of these metals was estimated by DTPA extraction following their sorption.

The results showed that Freundlich model described satisfactorily sorption of both metals. In all the soils studied K_d values of Pb were higher than that of Cd indicating that this was retained by the soils stronger than Cd. Sorption parameters (k_f , n) and K_d values of Egyptian Entisol developed on lacustrine deposits showed higher affinity for Pb, Greek Histosol for Cd while acidic Alfisols showed the lowest affinity for both metals studied. Permanent charge clayey soils with relatively low Fe, Al and Mn oxides content sorbed more Cd and Pb than the variable charge red soils with higher content of these oxides. In variable charge red

soils with similar sesquioxides content, Pb and Cd sorption was pH dependent. However, in variable charge soils with similar soil pH, no significantly differences recorded for Pb sorption, while Cd sorption capacities differed significantly depended on the active ratios of Fe and Al oxides. Sorption parameters of Cd were correlated to clay content, cation exchange capacity, organic matter content, total free and amorphous aluminum oxides, amorphous iron oxides and $CaCO_3$ content while Pb sorption parameters were correlated with clay content, total free and amorphous silica oxides, and amorphous aluminum oxides content as well as cation exchange capacity.

Lability of the adsorbed Cd was higher than Pb in all the studied soils and may pose more threats to the ground water and plants. The Greek acidic Alfisols (Rhodoxeralf) showed the lowest lability of sorbed Cd, while the alkaline one exhibited the highest Cd lability. The lowest lability of sorbed Pb was in Greek Histosols and the highest in acidic Alfisol (Typic Haploxeralf). Labile Cd was negatively correlated only with $CaCO_3$ content in all the soils studied while labile Pb was negatively correlated with CEC, clay, organic matter, total free aluminum oxides and the amorphous iron and aluminum oxides content.

Soil Science (2009), 174(1): 21-26

2008_Impact Factor = 1.037

Effect of Common Ions and Soil pH on Phosphorus Sorption and Lability in Greek Alfisols

Sabry M. Shaheen[1], Christos D. Tsadilas[2], and Kent M. Eskridge[3]

1: Department of Soil Sciences, Faculty of Agriculture, University of Kafrelsheikh 33 516- Kafr El-Sheikh, Egypt. E-mail:smshaheen1973@yahoo.com

2: National Agricultural Research Foundation, Institute of Soil Mapping and Classification, 1 Theophrastos street, 413 35 Larissa, Greece

3: Department of Statistics, University of Nebraska, Lincoln, NE 68583, USA.

Abstract

Phosphorus (P) mobility in soils is controlled by its interaction with the soil matrix, as well as other nutrients and (amendments. The aim of this study was to test the hypothesis that soils differ in their ability to bind P as influenced by their pH and the common cations and anions. Therefore, this study was conducted to investigate the effect of common fertilizers ions and soil pH on phosphorus sorption and lability characteristics. Phosphorus sorption isotherms were conducted on an acid, neutral and alkaline Alfisol in background solutions containing one of the ions K+, NH4+, Ca2+ , NO3-, HCO3- or SO42-. The equation of Freundlich was adjusted to describe the sorption. Distribution coefficients (Kd) values were obtained for soil and background electrolyte. Lability of the sorbed P was evaluated by NaHCO3 extraction following its sorption.

The Freundlich equation fitted closely to the sorption data. Alkaline soil exhibited greater P sorption than the acid and neutral soils. Both K+ and NH4+ equally decreased P sorption as opposed to Ca2+ and left more P in labile form at all studied soils. Phosphorus sorption was enhanced by HCO3- as compared to SO42- and NO3- at all pH levels. Both NO3- and SO42- increased the labile P compared to HCO3-. Sulphate, however, maintained more P in the labile pool compared to NO3- in acid and neutral soils, while NO3- maintained the highest amount of the labile P form in the alkaline soil. These results have important implications on P management in relation to other nutrients.

Communication in Soil Science and Plant Analyses (2009) 40(1):327-344.

2008_Impact Factor = 0.357

Concentration of lead in soils and some vegetable plants in north Nile Delta as affected by soil type and irrigation water

Sabry M. Shaheen[1] and Christos D. Tsadilas[2]

1: Department of Soil Sciences, Faculty of Agriculture, University of Kafrelsheikh 33 516- Kafr El-Sheikh, Egypt

2: National Agricultural Research Foundation, Institute of Soil Mapping and Classification, 1 Theophrastos street, 413 35 Larissa, Greece

Abstract

Soil pollution by lead (Pb) is of great concern because of its adverse effect to human health. This study was conducted in North Nile Delta, Egypt to investigate the influence of soil type and irrigation water on the total and AB-DTPA-extractable Pb content of soils and growing vegetable plants. Eight soil profiles were selected from the three representative deposits existing in the area i.e. fluvial, lacustrine and marine. Three of them represent the three deposits, which were irrigated with fresh Nile water while the other five represent those irrigated with mixed wastewater. Samples of soils, waters and vegetable plants growing in the area were selected from the studied locations and analyzed for total (HNO_3-HCl-H_2O_2-extractable) and available (AB-DTPA-extractable) Pb (soil samples), Pb concentration (water samples), and total Pb after digestion by using $HClO_4$-H_2SO_4-HNO_3 (plant samples) respectively.

The results of this study showed that the mean values of the total and available Pb differed significantly between the studied soils the higher being in the lacustrine and lower in the marine soils. However, marine soils showed the highest values of Pb availability index. Irrigation with wastewater significantly increased the concentration of the total Pb in fluvial soils compared to those irrigated with Nile water. Total and available Pb concentrations were significantly correlated with clay, silt, organic matter, and equivalent calcium carbonate content, cation exchange capacity and CBD extractable- Fe, Al, and Mn (positively) as well as with sand content and soil pH (negatively). Metal content in leaves was found to be higher than

in fruits for the different plant species but lower than the upper permissible limits. Values of bio-concentration ratio and accumulation factor of Pb of the growing plants in marine soils were higher than those grown in fluvial and lacustrine soils.

Communication in Soil Science and Plant Analyses (2009), 40(1):214-226.

2008_Impact Factor = 0.357

Distribution Coefficient of Copper in different soils from Egypt and Greece

Sabry M. Shaheen[1], C.D. Tsadilas[2], Th. Mitsibonas[2], and M. Tzouvalekas[2]

1: Department of Soil Sciences, Faculty of Agriculture, University of Kafrelsheikh 33 516- Kafr El-Sheikh, Egypt.

2: National Agricultural Research Foundation, Institute of Soil Mapping and Classification, 1 Theophrastos street, 413 35 Larissa, Greece

Abstract

Distribution coefficient (K_d) indicates the capability of a soil to retain a solute and consequently its distribution between solid and liquid phase. The purpose of this study was to determine copper K_d values of different soils, in order to evaluate their ability to retain it and control its mobility and therefore availability. Eleven surface soil samples varying widely in their origin and properties were selected from Egypt and Greece for this study. Four of them were from Egypt representing the main soil orders i.e., Entisols (developed on fluvial, lacustrine and sandy marine deposits) and Aridisols (calcareous deposits). The other seven soils were from Greece belonging to the orders Entisols, Alfisols, Vertisols, Mollisols, and Histisols. Copper distribution coefficient values were obtained by batch equilibrium experiments from which adsorption isotherms were prepared.

The results showed that the Freundlich model satisfactorily described copper (Cu) sorption. Clayey and alkaline soils exhibited extremely greater Cu sorption capacity than the sandy and acid soils. Copper distribution coefficients values differed significantly between the studied soil orders and ranged from 80.9 l kg^{-1} in the acid Greek Alfisol to 7502.4 l kg^{-1} in the Egyptian lacustrine Entisol and were significantly correlated with clay content, cation exchange capacity, organic matter, total free silica and amorphous Fe, Al, Si and Mn oxides. Adsorption of Cu in the studied variable charge red soils was pH dependent. Values of K_d decreased clearly as the concentration of the included cation increased in the test solution.

Communication in Soil Science and Plant Analyses (2009). 40(1):273-284

2008_Impact Factor = 0.357

Influence of fly ash application on copper and zinc sorption by acidic soil amended with sewage sludge

Christos Tsadilas[1], Sabry M. Shaheen[2], Vasilios Samaras[1] Dimitrios Gizas[1], and Zhenqi Hu[3]

1: National Agricultural Research Foundation, Institute of Soil Mapping and Classification, 1 Theophrastos street, 413 35 Larissa, Greece

2: Department of Soil Sciences, Faculty of Agriculture, Kafrelsheikh University33 516- Kafr El-Sheikh, Egypt.

3: China University of Mining and Technology – Department of Surveying and Land Science, D11 Xueyuan Road, PO Box 127, Beijing 100083, China

Abstract

Fly ash (FA) and sewage sludge (SS) are usually used in agriculture as soil amendments creating a risk of heavy metal pollution. However, simultaneous application of these wastes may reduce the mobility of heavy metals in soils. This study investigates the influence of fly ash application on copper (Cu) and zinc (Zn) sorption by an acidic soil amended with SS. An adsorption experiment of Cu and Zn was carried out in a Typic Haploxeralf from Greece amended with various doses of fly ash [0.25 % (FA_1) and 0.5 % (FA_2)]; sewage sludge [0.28 % (SS_1) and 0.56 % (SS_2)] and fly ash + sewage sludge [(FA_1+SS_1) and (FA_1+SS_2)] and incubated for one month under field capacity conditions. Furthermore, sample without any amendment was incubated as a control for comparison. The Freundlich equation was used to describe adsorption of Cu and Zn. Distribution coefficient (K_d), which represents sorption affinity of metals for the solid phase, was obtained for all the treatments applied.

Data showed that, Cu K_d values were obviously higher than Zn in all the treatments applied. Distribution coefficients values for FA_2 treatment were about 10 and 7 times greater than the control for Zn and Cu respectively. Simultaneous application of FA and SS caused a K_d increase of 4.2 and 3.5 times compared to treatment received only SS for Zn and Cu respectively. Distribution coefficients values of Zn and Cu were significantly correlated with soil pH. These results confirm that, alkaline fly ash can be used as an effective amendment for remediation of copper and zinc polluted acidic and sewage sludge amended soils.

Acta Alimentaria (2009) , 38 (1): 35-43

2008_Impact Factor = 0.441

Growth parameters and tissue lipid profiles of C57PL/6N mice fed roselle seed oil

M. Zommara[1], M. Hung[2], K. Imaizumi[3], M. Atta[4]

[1-] Kafrelsheikh University Department of Dairy Science, Faculty of Agriculture Kafrelsheikh 33516 Egypt

[2-] Chia Nan University of Pharmacy and Science Department of Applied Life Science and Health Tainan 70901 Taiwan, ROC

[3]Kyushu University Laboratory of Nutrition Chemistry, Division of Bioresource and Bioenvironmental Sciences, Graduate School Fukuoka 812-8681 Japan

[4-] Tanta University Food Science and Technology Department, Faculty of Agriculture Tanta Gharbia Egypt

Abstract

The effect of diets containing corn, olive, roselle seed oils and ghee (pure milk fat) on growth and tissue lipid profiles of C57PL/6N mice was investigated. No diet had deleterious effect on mice growth; however milk fat significantly increased mice body weight gain. Comparing with ghee, vegetable oils reduced serum cholesterol; whereas corn oil had the superior effect. Serum of mice fed olive oil and ghee held significantly higher levels of HDL cholesterol than the other groups. Among all mice, serum total/HDL cholesterol ratio was significantly lower in corn oil group; however, the olive oil diet significantly reduced serum LDL cholesterol. The ghee group held significantly eminent serum triglycerides (TG) content. Liver cholesterol content of mice fed corn or roselle seed oil was significantly lower than that of the other groups. The weight of adipose tissue and its content of TG were comparable among all groups. The present study demonstrates for the first time the nutritional properties and beneficial effects of roselle seed oil on tissue lipid profiles using experimental animals. The obtained results may support the claim of using roselle seed oil in human nutrition.

Renewable and Sustainable Energy Reviews (2009), 13: 2245–2262
2008_Impact Factor = 4.075

A review of renewable energy technologies integrated with desalination system

Mohamed A. Eltawil [b], Zhao Zhengming [a], Liqiang Yuan[b]

[a] The State Key Laboratory of Power System, Department of Electrical Engineering, Tsinghua University, Beijing, 100084, China

[b] Agricultural Engineering Department, Kafrelsheikh University, box 33516, Egypt

Abstract

Energy is an essential ingredient of socio-economic development and economic growth. Renewable energy provides a variable and environmental friendly option and national energy security at a time when decreasing global reserves of fossil fuels threatens the long-term sustainability of global economy. The integration of renewable resources in desalination and water purification is becoming increasingly attractive. This is justified by the fact that areas of fresh water shortages have plenty of solar energy and these technologies have low operating and maintenance costs. In this paper an attempt has been made to present a review, in brief, work of the highlights that have been achieved during the recent years worldwide and the state-of-the-art for most important efforts in the field of desalination by renewable energies, with emphasis on technologies and economics. The review also includes water sources, demand, availability of potable water and purification methods. The classification of distillation units has been done on the basis of literature survey till today. A comparative study between different renewable energy technologies powered desalination systems as well as economics have been done. The real problem in these technologies is the optimum economic design and evaluation of the combined plants in order to be economically viable for remote or arid regions. Wind energy technology is cheaper than the conventional ones, and used extensively around the world. The slow implementation of renewable energy projects especially in the developing countries are mostly due to the governments subsides of conventional fuels products and electricity. The economic analyses carried out so far have not been able to provide a strong basis for comparing economic viability of each desalination technology. The economic performances expressed in terms of cost of water production have been based on different system capacity, system energy source, system component, and water source. These differences make it difficult, if not impossible, to assess the economic performance of a particular technology and compare it with others. Reverse osmosis is becoming the technology of choice with continued advances being made to reduce the total energy consumption and lower the cost of water produced.

Desalination (2009) 249 : 490–497

2008_Impact Factor = 1.155

Wind turbine-inclined still collector integration with solar still for brackish water desalination

Mohamed A. Eltawil [a,b], Zhao Zhengming [a]

[a] The State Key Laboratory of Power System, Department of Electrical Engineering, Tsinghua University, Beijing, 100084, China

[b] Agricultural Engineering Department, Kafrelsheikh University, Box 33516, Egypt

Abstract

This paper presents a new hybrid desalination system that constitutes of wind turbine (WT) and inclined solar water distillation (ISWD) integrated with main solar still (MSS). The new developed system is designed, fabricated and evaluated under actual environmental conditions. A small wind turbine is used to operate a rotating shaft fitted in the MSS to break boundary layer of the basin water surface. Also, an ISWD system which consists of an inclined flat solar absorber plate covered with black-wick medium is attached to the exit of MSS. The system can produce distilled and hot water. The heating and evaporating processes take place in MSS as well as ISWD, and then the water are condensing on the glass covers. The system was tested at different water depths (0.01, 0.02 and 0.03 m), different water flow rates (25.0, 41.7 and 58.3 ml/min) and two modes of operation as due south and tracking the sun. Variation of ambient conditions, and water temperatures and outputs were used to evaluate each parameter. It was found that, increasing water depths at the same flow rate caused a decrease in the distilled water productivity. The amount of fresh water per square meter from the ISWD could be higher than the MSS with a range of 26.55 to 29.17% when the system is due south, while it ranged from 27.1 to 32.93% when the system is tracking the sun. The average daily efficiency of MSS and ISWD ranged from 67.21 to 69.59 and 57.77 to 62.01% when the system was due south, while it ranged from 66.81 to 69.01 and 57.08 to 62.38% when the system was tracking the sun, respectively. The water product cost is found to be 0.662 and 0.552 RMB/l (1US $=7.43RMB) when the system was due south and tracking the sun, respectively. The electricity annual savings is found to be 195.22 RMB/kWh/m^2. The distilled water quality as well as hot remaining water is good enough for domestic usage.

IEEE Transactions On Industrial Electronics(2007), 54(6):2993-3000

2008_Impact Factor = 5.468

Performance Evaluation of Switch Devices Equipped in High-Power Three-Level Inverters

Liqiang Yuan[a], Zhengming Zhao[a], Mohamed Eltawil[a,b], Rong Yi[a], and Hua Bai[a]

[a] The State Key Laboratory of Power System, Department of Electrical Engineering, Tsinghua University, Beijing, 100084, China

[b] Agricultural Engineering Department, Kafrelsheikh University, Box 33516, Egypt

Abstract

The feature of the integrated gate-commutated thyristors (IGCTs) makes them have excellent performance in high-voltage high-current field. The high integration of drives and devices makes it very convenient to use them. In order to examine the dynamic characters of switch devices in high-power three-level inverter, an experimental test for IGCTs and diodes equipped in inverter is proposed and described in detail. The characteristics of switch devices are compared and evaluated experimentally. The relation between the devices' switching behavior and the other elements in the inverter, such as the inverter's structure, the topology position of devices, the stray inductances in commutating loops, etc., are analyzed. Moreover, the busbar structure is improved, and the key pulsewidth-modulation parameter of the inverter is determined. Finally, the advantages of the experiment are summarized in the conclusion.

British Poultry Science (2009), 50, 5: 641—647

2008_Impact Factor = 1.346

Organic selenium enhances the antioxidative status and quality of cockerel semen under high ambient temperature

T.A. EBEID

Department of Poultry Production, Faculty of Agriculture, Kafrelsheikh University, 33516 Kafr El-Sheikh, Egypt

Abstract

The objective was to examine the effect of supplemental dietary organic selenium (Se) on improving semen quality and antioxidative status in male domestic fowls exposed to high ambient temperature.

Thirty-six Egyptian local cross males, 42 weeks old, were housed individually in cages in an open-sided building under 16 h L:8 h D and were provided with commercial feed and water ad libitum. In the house average daily temperature ranged from 33 to 36 C and relative humidity from 60 to 70%. Birds were divided into 4 experimental treatments (n¼9) and were fed the basal diet supplemented with 0 (control), 0.1, 0.2 or 0.3mg organic Se/kg in the form of a yeast source (Sel-Plex_) for 8 weeks.

Under heat stress conditions, inclusion of organic Se in the cockerel diets enhanced the semen quality traits, including the sperm count and motility and reduced the percentage of dead sperms in a dose-dependent manner. In seminal plasma, organic Se supplementation ameliorated some of the adverse effects of heat stress on lipid peroxidation and antioxidative properties. The inclusion of organic Se (0.3 mg/kg) in the cockerel diets doubled seminal plasma glutathione peroxidase (GSH-Px) activity, compared to controls and reduced lipid peroxidation.

In conclusion, supplemental dietary organic Se improved semen quality characteristics when cockerels were subjected to heat stress. It increased both sperm count and motility, reduced the percentage of dead sperm and enhanced the antioxidative status of seminal plasma.

Seed Sci. & Technol. (2008), 36: 795-801

2008_Impact Factor = 0.66

Influences of pre-sowing seed treatments on germination of the cancer bush (Sutherlandia frutescens), a reputed medicinal plant in arid environments

S. SHAIK[1], Y.H. DEWIR[1,2], N. SINGH[1] AND A. NICHOLAS[1]

School of Biological & Conservation Sciences, University of KwaZulu-Natal, Westville Campus, Private bag X54001, Durban 4000, South Africa

2 Department of Horticulture, Faculty of Agriculture, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

Abstract

Cancer bush (Sutherlandia frutescens L.) is a medicinally important perennial legume native to southern Africa. S. frutescens seeds exhibit dormancy like many other legumes. Experiments using physical, mechanical and chemical pre-sowing treatments were conducted to determine the germination response of this species. Among various treatments, soaking the intact seeds for 30 min in concentrated H2SO4 resulted in a high final germination percentage of 97.5% in day 14 of culture. However, seed dormancy was completely broken by mechanical scarification in which 100% germination was obtained in day 2 of culture. The results indicated that S. frutescens seeds possess exogenous dormancy due to the hard seed coat which is the main inhibitor of germination.

Cereal Research Communications (2009), 37: 161-164

Impact Factor 1.2 (2008)

HYDROGEN PEROXIDE HAS A KEY ROLE IN RESISTANCE TO LEAF RUST (PUCCINIA TRITICINA) IN SEVERAL EGYPTIAN AND OTHER WHEAT CULTIVARS

Yasser M. HAFEZ[1] – Zoltán KIRÁLY[2] – Klára MANNINGER[2]

[1] Permanent address: Department of Agricultural Botany (Plant Pathology Branch), Faculty of Agriculture, Kafrelsheikh University, Kafr-El-Sheikh, Egypt, (hafezyasser@gmail.com**)**

[2] Plant Protection Institute, Hungarian Academy of Sciences, Budapest, Hungary

Abstract:

In the resistant infected plants reactive oxygen species (ROS) are produced after inoculation, such as superoxide ($O_2^{\cdot-}$), hydrogen peroxide (H_2O_2), hydroxyl radical (OH·), etc. Wheat leaves of resistant and susceptible cultivars were inoculated with wheat leaf rust, Puccinia triticina. Levels of H_2O_2 were determined applying xylenol orange, 2,7-dichlorofluorescin diacetate (DCFH-DA) and 3,3-diaminobenzidine (DAB). In susceptible host/pathogen combinations accumulation of H_2O_2 did not occur. However, level of H_2O_2 was high in resistant cultivars. We have shown that if we inoculate wheat with an inappropriate barley powdery mildew (*Blumeria graminis* f.sp. *hordei*) creating a non-host type resistance, accumulation of H_2O_2 also occurred very early.

Keywords: Hydrogen peroxide, disease resistance, non-host resistance, wheat leaf rust

Veterinary Microbiology (2009), 136: 397–402

2008_Impact Factor = 2.4

Genetic analysis of antimicrobial resistance in Escherichia coli isolated from diarrheic neonatal calves

Ashraf M. Ahmed [a,*], Emad E.A. Younis [b], Salama A. Osman [c], Yojiro Ishida [d], Sabry A. El-khodery [b], Tadashi Shimamoto [d]

[a] Department of Bacteriology, Mycology and Immunology, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

[b] Department of Internal Medicine, Infectious and Fish Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

[c] Department of Animal Medicine, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

[d] Laboratory of Food Microbiology and Hygiene, Graduate School of Biosphere Science, Hiroshima University, Higashi-Hiroshima 739-8528, Japan

Abstract

This study was carried out to screen and analyze the genetic basis of antimicrobial resistance in Escherichia coli strains isolated from neonatal calf diarrhea in Egypt. A total of 182 isolates of E. coli recovered from 91 diarrheic neonatal calves were analyzed for antimicrobial susceptibilities, the presence of class 1 and class 2 integrons and antimicrobial resistance genes. Nineteen isolates (10.4%) showed multidrug resistance phenotypes and harbored at least three antimicrobial esistance genes. PCR screening detected class 1 integrons in 19 isolates (10.4%) and class 2 integrons in 2 isolates (1.1%).

The identified antimicrobial resistance genes within class 1 integrons were dihydrofolate reductase types: dfrA1, dfrA12, dfrA15 and dfrA17, which confer resistance to trimethoprim; minoglycoside adenyltransferase types: aadA1, aadA2, aadA5, aadA7 and aadA23, which confer resistance to streptomycin and spectinomycin; and aminoglycoside acetyltransferase gene, aac(3)-Id, which confers resistance to gentamicin and sisomicin. Furthermore, many b-lactamases encoding genes, plasmid-mediated quinolone resistance genes and florfenicol resistance gene were identified in this study. To the best of our knowledge, this is the first report for molecular characterization of antimicrobial resistance in E. coli isolated from diarrheic neonatal calves in Africa.

Acta Tropica (2009), 111 : 144–149

2008_Impact Factor = 1.70

Genetic basis of multidrug resistance in Salmonella enterica serovars Enteritidis and Typhimurium isolated from diarrheic calves in Egypt

Ashraf M. Ahmed[a], Emad E.A. Younis[b], Yojiro Ishida[c], Tadashi Shimamoto[c],

[a] Department of Bacteriology, Mycology and Immunology, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

[b] Department of Internal Medicine, Infectious and Fish Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

[c] Laboratory of Food Microbiology and Hygiene, Graduate School of Biosphere Science, Hiroshima University, Higashi-Hiroshima 739-8528, Japan

Abstract

Up to this date, nothing is known about the molecular basis of antimicrobial resistance in Salmonella isolated fromanimals in Africa. Therefore, this studywas carried out to screen the incidence of multidrugresistant (MDR) strains of Salmonella from neonatal calf diarrhea in Egypt and also to characterize the molecular basis of this resistance. Nine unique Salmonella isolates were obtained from 220 fecal samples, and six of these showed multidrug resistance phenotypes and harbored at least two antimicrobial resistance genes. Four were Salmonella enterica serovar Typhimurium and two were S. enterica serovar Enteritidis. Class 1 integrons were identified in all MDR Salmonella isolates. The identified gene cassettes within class 1 integrons were as follows; aminoglycoside adenyltransferase type A (aadA1, aadA2 and aadA5), which confer resistance to streptomycin and spectinomycin, and dihydrofolate reductase gene cassettes (dfrA1, dfrA15 and dfrA15), which confer resistance to trimethoprim. A class 2 integron containing dfrA1-sat2-aadA1 gene cassettes was identified in only one isolate of S. enterica serovar Enteritidis. The _-lactamase-encoding gene, blaTEM-1, was identified in five isolates and the extended-spectrum _- lactamase-encoding genes, blaCMY-2 and blaSHV-12, were identified in S. enterica serovar Typhimurium. Furthermore, the plasmid-mediated quinolone resistance genes, qnrB, qnrS and aac(6_)-Ib-cr, were also identified. To the best of our knowledge, this is the first report of qnrS in S. enterica serovar Enteritidis, qnrB in S. enterica serovar Typhimurium, and aac(6_)-Ib-cr in Salmonella of animal origin. Also, this is the first report of the molecular characterization of antimicrobial resistance in Salmonella isolated from animals in Africa.

Journal of Medical Microbiology (2006), 55: 1685–1691

2008_Impact Factor = 2.2

Genetic characterization of multidrug resistance in Shigella spp. from Japan

Ashraf M. Ahmed [1, 3] ,Kimi Furuta [2] ,Kei Shimomura[2] ,Yoshio Kasama[2] and Tadashi Shimamoto[1]

[1-] Laboratory of Food Microbiology and Hygiene, Graduate School of Biosphere Science, Hiroshima University, Higashi-Hiroshima 739-8528, Japan

[2]- Division of Biological Science, Hiroshima City Institute of Public Health, Hiroshima 733-8650, Japan

[3-] Department of Microbiology, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

Abstract

This study characterized the genetic basis of antimicrobial resistance of a number of Shigella spp. isolated from humans from 2000 to 2004 in Hiroshima prefecture, Japan. A total of 26 isolates of Shigella spp. were included in this study. Antimicrobial susceptibility tests revealed high levels of resistance, especially to ampicillin, streptomycin, trimethoprim, tetracycline, nalidixic acid and ciprofloxacin. PCR and DNA sequencing were used for screening and characterization of antibiotic-resistance determinants. PCR sequencing analysis revealed the presence of only one type of class 1 integron in one isolate of Shigella sonnei. This class 1 integron was 1904 bp and contained two gene cassettes: a probable esterase/lipase (estX) and aadA1, which confers resistance to streptomycin and spectinomycin. Two types of class 2 integron were identified in this study. One was the classic type (2158 bp) and carried the three conserved resistance gene cassettes of the class 2 integron, dfrA1, sat1 and aadA1, which confer resistance to trimethoprim, streptothricin and streptomycin/spectinomycin, respectively.

This type was detected in both Shigella sonnei (14 isolates) and Shigella flexneri (five isolates). The other type was shorter (1313 bp) and carried only two gene cassettes, dfrA1 and sat1. This integron was detected in a single isolate of Shigella sonnei. PFGE patterns showed limited diversity within clusters of the same species. Furthermore, an extended-spectrum b-lactamase gene, blaOXA-30, which confers resistance to ampicillin, was characterized in all isolates of Shigella flexneri except the oldest strain, which was isolated in 2000. Southern blot hybridization and conjugation experiments showed that blaOXA-30 was located in the chromosome.

J. Vet. Med. Sci (2008), 70(11): 1269–1272

2008_Impact Factor = 0.9

First Characterization and Emergence of SHV-60 in Raw Milk of a Healthy Cow in Japan

Ahmed M. HAMMAD[1,2], Ashraf M. AHMED[1] Yojiro ISHIDA[1] and Tadashi SHIMAMOTO[1]

[1]Laboratory of Food Microbiology and Hygiene, Graduate School of Biosphere Science, Hiroshima University, 1–4–4 Kagamiyama

[2]Department of Microbiology, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

Abstract

During monitoring of raw milk samples from healthy cows for the presence of antibiotic resistant bacteria, one isolate of Klebsiella pneumoniae strain HUF-100 was found to be resistant to oxyimino-cephalosporins and aztreonam. It was found to carry a chromosomally-encoded extended-spectrum β-lactamase that has not been described previously, namely SHV-60. Thus, it must be expected that this strain will spread further among food-producing animals and thereby constitute a reservoir of this resistant strain and resistance gene that can transfer to and cause treatment problems for humans. The present study confirms the hypothesis that some of novel multiple antibiotic resistant zoonotic bacterial pathogens may initially emerge from food animals and reports, for the first time, this type of emergence in Japan.

Journal of Applied Microbiology(2009) , 106: 402–409

2008_Impact Factor = 2.028

Molecular characterization of antimicrobial resistance in Salmonella isolated from animals in Japan

A.M. Ahmed[1,2], Y. Ishida[1] and T. Shimamoto[1]

[1] Laboratory of Food Microbiology and Hygiene, Graduate School of Biosphere Science, Hiroshima University, Higashi-Hiroshima, Japan

[2] Department of Bacteriology, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh, Egypt

Abstract

Aims: To investigate the prevalence of integrons and antimicrobial resistance genes in Salmonella ecovered from animals in Japan Methods and Results: Forty-eight out of ninety-four (51ىئ1%) Salmonella isolates showed multidrug resistance phenotypes and harboured at least one antimicrobial resistance gene. Twenty-two out of forty-seven (46ىئ8%) Salmonella enterica serovar Typhimurium that were multidrug-resistant were of definitive phage type DT104. Class 1 integrons were identified in 34 ⁄ 94 isolates (36ىئ2%): 21 isolates containing two gene cassettes, aadA2 and blaPSE–1, and 13 containing one gene cassette, aadA1, aadA2 or blaPSE–1. Class 2 integrons containing estX-sat2-aadA1 gene cassettes were only identified in Salmonella Enteritidis. The b-lactamase-encoding gene, blaTEM, was only detected in S. Typhimurium. The plasmid-mediated quinolone resistance gene, qnrS1, was identified in S. Typhimurium and almonella Thompson. Conclusions: Our results characterized integrons and antimicrobial resistance genes in salmonella of animal origin. To the best of our knowledge, this is the first report of qnrS in Salmonella from Japan and also the first report of qnrS in S. Thompson. Significance and Impact of the Study: Little is known about the molecular basis of antimicrobial resistance in Salmonella isolated from animals. This study provides useful data on the incidence of integrons and resistance genes in Salmonella of animal origin.

Veterinarni Medicina (2009), 54, (1): 25–32

2008_Impact Factor = 0.624

Cytokine response and clinicopathological findings in *Brucella* infected camels (*Camelus dromedarius*)

M. El-Boshy[1], H. Abbas[2], S. El-Khodery[1], S. Osman[3]

[1] Faculty of Veterinary Medicine, Mansoura University, Mansoura, Egypt

[2] Animal Health Research Institute, Cairo, Egypt

[3] Faculty of Veterinary Medicine, Kafrelsheikh University, Kafr El-Sheikh, Egypt

Abstract

The present study had the aim of assessing the cytokine response and selected clinicopathological findings associated with brucellosis in camels (*Camelus dromedarius*). 340 dromedary camels were examined for brucellosis using agglutination and Complement Fixation tests (CFT). Twenty-five camels (7.35%) were positive by both tests; 14 (4.12%) for *B. abortus* and 11 (3.23%) for *B. melitensis*. IL-1β and IL-10 interleukin levels in both *B. abortus* and *B. melitensis* infected camels showed significant elevations ($P < 0.05$) compared with controls. Moreover, there was significantly larger increase in IL-1β interleukins in camels infected with *B. abortus* compared with *B. melitensis*. TNF-α, IFN-γ and IL-1α levels showed significant decreases ($P < 0.05$) in *Brucella* infected camels compared with non-infected ones; however, there was non-significant changes in IL-6 levels in *Brucella* infected camels compared with controls. Lymphopenia was recorded in infected camels but not in controls. However, normocytic normochromic anemia, hypoproteinemia, *hypoalbuminemia* and hypoglycemia were recorded in the *B. abortus* group only. Sorbitol dehydrogenase (SD), aspartate aminotransferase (AST) and alanine aminotransferase (ALT) showed significant increases ($P < 0.05$) in infected camels compared with controls, and in *B. abortus* infected camels compared with *B. melitensis* infected animals. This is the first report that describes changes in selected cytokines and various haematological and biochemical parameters associated with brucellosios in dromedary camels. Emphasis should be placed on multidisciplinary research to elucidate the immunomodulatory features of camel brucellosis.

Veterinary Science (2009), 87: 373–379

2008_Impact Factor = 1.384

Molecular screening and risk factors of enterotoxigenic Escherichia coli and Salmonella spp. in diarrheic neonatal calves in Egypt

Emad E. Younis [a], Ashraf M. Ahmed [b], Sabry A. El-Khodery [a], Salama A. Osman [c], Yasser F.I. El-Naker [d]

[a] Department of Internal Medicine and Infectious Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

[b] Department of Bacteriology, Mycology and Immunology, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh. 33516, Egypt

[c] Department of Animal Medicine, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh. 33516, Egypt

[d] Veterinary Teaching Hospital, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

Abstract

The aim of the present study was to carry out molecular epidemiological investigation on enterotoxigenic Escherichia coli (ETEC) K99 and Salmonella spp. in diarrheic neonatal calves. Fecal samples were obtained from 220 diarrheic calves at 9 farms related to four governorates in central and northern Egypt. E. coli and Salmonella spp. isolates were examined for E. coli K99 and Salmonella spp. using PCR. ETEC K99 was recovered from 20 (10.36 %) out of 193 isolates, whereas Salmonella spp. was recovered from nine calves (4.09%).

Multivariable logistic regression was used to evaluate the risk factors associated with both infections. ETEC K99 was significantly affected by age ($P < 0.01$; OR: 1.812; CI 95%: 0.566–1.769), colostrum feeding practice ($P < 0.01$; OR: 5.525; CI 95%: 2.025–15.076), rotavirus infection ($P < 0.001$; OR: 2.220; CI 95%: 0.273–1.251), vaccination of pregnant dams with combined vaccine against rotavirus, coronavirus and E. coli (K99) ($P < 0.001$; OR: 4.753; CI 95%: 2.124–10.641), and vitamin E and selenium administration to the pregnant dam ($P < 0.01$; OR: 3.933; CI 95%: 0.703–1.248).

Infection with Salmonella spp. was found to be significantly affected by the animal age ($P < 0.05$; OR: 0.376; CI 95%: 0.511–1.369), Hygiene ($P < 0.05$; OR: 0.628; CI 95%: 1.729–5.612), and region ($P < 0.01$; OR: 0.970; CI 95%: 0.841–1.624).

The results of the present study indicate the importance of PCR as rapid, effective and reliable tool for screening of ETEC and Salmonella spp. when confronted with cases of undifferentiated calf diarrhea. Moreover, identification of the risk factors associated with the spreading of bacteria causing diarrhea may be helpful for construction of suitable methods for prevention and control.

Trop Anim Health Prod (2009)

2008_Impact Factor = 0.559

Seroprevalence of camel brucellosis (Camelus dromedarius) in Somaliland

Yasser M. Ghanem[1,3] & Sabry A. El-Khodery[2] & Ashraf A. Saad[3] & Ahemd H. Abdelkader[4] & Ahemd Heybe[4] & Yasin A. Musse[5]

[1]Department of Animal Medicine, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

[2]Department of Internal Medicine and Infectious Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

[3]Laboratory of the Gulf Veterinary International Quarantine Management Company, Buroa Elsheikh Area, Berbera, Somaliland, Somalia

[4]Ministry of Livestock and Animal Health,Somaliland, Somalia

[5]Department of Infection Biology and Food Safety, Norwegian School of Veterinary Science, Oslo, Norway

Abstract

The present study was delineated to investigate the prevalence and risk factors of camel brucellosis in Northern Somalia (Somaliland). The study was carried out at three main districts of camelrearing regions of Somaliland (Awdal, Waqoyi Galbed and Togdheer) in the period from July to November, 2008. A total of 1246 camel blood sera were randomly collected from 42 sporadic small scale camel herds. Two serological tests were used to screen all serum samples, Rose Bengal Plate Test (RBPT) and indirect ELISA (I-ELISA). Multivariate logistic regression was constructed to study the risk factors associated with Brucella seropositive cases.

The overall prevalence of camel brucellosis in districts under investigation was 3.9% by RBPT and 3.1% by (I-ELISA). Multivariate logistic regression on animal level showed that locality (P<0.05; OR: 6.254; CI, 1.186–32.976), herd size (P<0.001; OR: 5.493; CI, 2.956-10–207), rearing with other ruminants (P<0.001; OR: 12.433; CI, 3.957–39.060), and contact with other camels (P<0.05; OR: 5.311; CI, 1.093–25.800) were the potential risk factors. However, herd size (P<0.05; OR: 5.425; CI, 1.181– 24.932), and rearing with other ruminants (P<0.05; OR: 20.466; CI, 1.456–28.638) were recorded as risk factors on the herd level. The results of the present investigation indicate that the Brucella spp. Exists within the camel herds in Somaliland. Further studies need to be done on Brucella infection in the other ruminants to determine which measure should be followed for control of brucellosis.

Small Ruminant Research (2009), 85: 142–148

2008_Impact Factor = 1.193

Prevalence and risk factors of caprine arthritis encephalitis virus infection (CAEV) in Northern Somalia

Y.M. Ghanem[a,c],, S.A. El-Khodery[b], Ashraf A. Saad[c], S.A. Elragaby[c], A.H. Abdelkader[d], A. Heybe[d]

[a] Department of Animal Medicine, Faculty of Veterinary Medicine, Kafr El-Sheikh University, Kafr El-Sheikh, Egypt

[b] Department of Internal Medicine and Infectious Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura 35516, Egypt

[c] Laboratory of the Gulf Veterinary International Quarantine Management Company, Berbera, Somaliland, Somalia

[d] Ministry of Livestock and Animal health, Somaliland, Somalia

Abstract

The aim of the present study was to determine seroprevalence and the risk factors associated with caprine arthritis encephalitis virus infection (CAEV) in Northern Somalia (Somaliland). A total of 1198 serum samples were collected from 34 randomly selected goat herds of two major districts of Somaliland namely, Togdheer (Burao) and Waqoyi Galbed (Hergiesa). Serum samples were examined for CAEV antibodies using competitive enzyme linked immunosorbent assay (cELISA). A total of 72 goats were found seropositive with overall seroprevalence of 6.0%.Onanimal level, multivariate logistic regression showed that there was a significant association between CAEV infection and age ($P < 0.01$; OR: 16.282; CI 95%, 5.87–25.17), rearing with sheep ($P < 0.001$; OR: 4.158; CI 95%, 1.47–11.715), and herd size ($P < 0.05$; OR: 1.22; CI 95%, 0.93–2.17). However, on the herd level, herd size ($P < 0.05$; OR: 1.96; CI 95%, 0.51–1.76) and rearing with sheep ($P<0.05$; OR: 13.31; CI 95%, 1.30–13.24) were the risk factors.

The result of the present study indicates that CAEV infection exists in the goat herds in Somaliland. It also provides an overview about the risk factors associated with the disease at the examined localities.

Research in Veterinary Science (2009), 86: 7–17

2008_Impact Factor = 1.384

Morphological and glycohistochemical studies on the epididymal region of the Sudani duck (Cairina moschata)

Ahmed Abd-Elmaksoud [a], Ahmed Sayed-Ahmed [b], S. Ebada ohamed [c], Kassab Mohamed [d], H.E. Marei [a]

[a] Department of Cytology and Histology, Faculty of Veterinary Medicine, Mansoura University, Mansoura, Egypt

[b] Department of Anatomy and Embryology, Faculty of Veterinary Medicine, Alexandria University, Damanhur Branch, Egypt

[c] Department of Anatomy and Embryology, Faculty of Veterinary Medicine, Mansoura University, Mansoura, Egypt

[d] Department of Histology, Faculty of Veterinary Medicine, Kafr El-sheikh University, Kafr El-sheikh, Egypt

Abstract

In this study, the epididymal region of the Sudani duck was investigated using histological and lectin istochemical methods. Morphologically, the epididymal region of the Sudani duck is composed of extratesticular rete testis, roximal and distal efferent ductules, a short connecting duct, and epididymal ducts. Morphometric analysis of the epididymal region of Sudani duck revealed that the efferent ductules predominate in relation to the epididymal ducts. The distribution of sugar moieties within the epididymal region of the Sudani duck was investigated using ten different fluorescein isothiocyanate (FITC) conjugated lectins. In the rete testis epithelium, only PHA-L showed a positive reaction. Efferent ductules in contrary exhibited a wide range of lectin affinity whereas six positive lectins (Con A, LCA, PNA, WGA, PHA-L, PHA-E) were observed. In the connecting and epididymal ducts, four lectins (Con A, WGA, PHA-L, PHA-E) were also detected. GSA-I, UEA-I, and LTA were at all not evident in the epididymal region of the Sudani duck. In conclusion, the correlation between the large areas of the epididymal region occupied by the efferent ductules and the wide range of sugar affinity of this portion may confirm the speculation that efferent ductules might be the primary site of fluid reabsorption in the epididymal region of Sudani duck.

Journal of Dairy Science (2009), 92: 2634-2643

2008_Impact Factor = 2.486

Risk factors for bacteriological quality of bulk tank milk in Prince Edward Island dairy herds. Part 1: Overall risk factors

A.M. Elmoslemany[1,2] ,G. p. Keefe[1,3], I. r. Dohoo[1,4] and B. m. Jayarao[5]

[1]Department of Health Management, University of Prince Edward Island, harlottetown, Prince Edward Island, C1A 4P3, Canada

[2]Faculty of Veterinary Medicine, Kafr El-Sheikh University, PO Box 33516, Egypt

[3]Maritime Quality Milk

[4]Centre for Veterinary Epidemiological research, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3, Canada

[5]Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park 16802

Abstract

The objective of this study was to determine on-farm risk factors for bacteriological quality of bulk tank milk. Bulk tank raw milk quality was evaluated on all Prince Edward Island dairy herds (n = 235) over a 2-yr period (March 2005 to March 2007). Biweekly total bacterial, preliminary incubation, laboratory pasteurization, and coliform counts were conducted using a Petrifilm ulture system. For the assessment of risk factors, a casecontrol study was conducted from January 2006 to May 2007. Case and control herds were defined based on the last 6 analyses of bulk tank acterial counts before on-farm evaluation. Cases were herds that had multiple elevated counts for any of the parameters measured. A total of 69 herds (39 cases and 30 control herds) were evaluated. Data collection included 1) observation and questionnaire on basic hygiene and farm management practices; 2) complete wash analysis of the milking equipment, monitoring the presence of bacterial films on equipment and evaluation of cooling system function; and 3) environmental and cow hygiene scoring. Data were analyzed using multivariable logistic regression.The results of the final model indicated that high alkalinity in the wash water and poor teat-end cleanliness were associated with high bacterial counts in bulk tank milk (odds ratios = 12 and 5.3, respectively). It was also observed that high water temperature of detergent wash and the use of a water softener were associated with low bacterial counts in bulk tank milk (odds ratios = 0.87 and 0.11, respectively). A significant association between udder hair clipping and teat-end cleanliness was also observed. In conclusion, this study highlights the importance of udder hygiene and milking system washing factors on hygienic quality of bulk tank milk.

Journal of Dairy Science (2009), Vol. 92 No. 6: 2644-2652

2008_Impact Factor = 2.486

Risk factors for bacteriological quality of bulk tank milk in Prince Edward Island dairy herds. Part 2: Bacteria count- pecific risk factors

A.M. Elmoslemany[1,2] ,G. p. Keefe[1,3], I. r. Dohoo[1,4] and B. m. Jayarao[5]

[1]Department of Health Management, University of Prince Edward Island, harlottetown, Prince Edward Island, C1A 4P3, Canada

[2]Faculty of Veterinary Medicine, Kafr El-Sheikh University, PO Box 33516, Egypt

[3]Maritime Quality Milk

[4]Centre for Veterinary Epidemiological research, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3, Canada

[5]Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park 16802

Abstract

A case-control study was conducted to identify specific on-farm risk factors that influence bacteriological quality of bulk tank milk in Prince Edward Island dairy herds. Total aerobic (TAC), preliminary incubation (PIC), laboratory pasteurization (LPC), and coliform (CC) counts were used to assess the bacteriological quality of bulk tank milk. Four case-control groups were defined based on the last 6 results of each test before on farm evaluation. A herd was classified as a TAC, PIC, or CC case when the herd had at least 4 high TAC, PIC, or CC counts out of the last 6 analyses for each test, respectively. For the LPC case group, a herd was required to have at least 3 high results out of the last 6 analyses. Control groups had low counts in the last 6 analyses for each test in the corresponding case group (TAC, PIC, CC, and LPC). The results of the study showed that TAC and PIC were mainly associated with cow and stall hygiene: washing the teats with water, not using teat predip, and dirty teats were risk factors.The LPC and CC were related to equipment hygiene, with high counts being associated with low temperature of the cleaning solution, high water-hardness score, and high alkalinity of alkaline detergent wash. Based on the findings of this study it can be concluded that TAC, PIC, LPC, and CC counts are of considerable value in identifying practices that could influence milk quality.

Journal of Dairy Science (2009), Vol. 92 No. 9:4239-4248.

2008_Impact Factor = 2.486

Microbiological quality of bulk tank raw milk in Prince Edward Island dairy herds

A.M. Elmoslemany[1,2] ,G. p. Keefe[1,3], I. r. Dohoo[1,4] and R.T. Dingwell [5]

[1]Department of Health Management, University of Prince Edward Island, harlottetown, Prince Edward Island, C1A 4P3, Canada

[2]Faculty of Veterinary Medicine, Kafr El-Sheikh University, PO Box 33516, Egypt

[3]Maritime Quality Milk

[4]Centre for Veterinary Epidemiological research, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3, Canada

[5]Holdrege Vet Clinic PC, Holdrege, Ne 68949

Abstract

The objectives of this study were to evaluate microbiological quality of bulk tank milk in Prince Edward Island, to evaluate correlation among milk quality criteria, and to determine seasonal effects on milk quality parameters. Bulk tank raw milk quality was evaluated on all Prince Edward Island dairy herds (n = 235) over a 2-yr period (March 2005 to March 2007). Biweekly total aerobic (TAC), preliminary incubation (PIC), laboratory pasteurization, and coliform (CC) counts were determined using a Petrifilm culture system. Additionally, bulk tank somatic cell count was determined weekly. The mean and median values were 12.8 × 103 and 4.9 × 103 cfu/mL for TAC, 29.6 × 103 and 13 × 103 cfu/mL for PIC, 87 and 12 cfu/mL for laboratory pasteurization count, 21 and 5 cfu/mL for CC, and 218 × 103 and 187 × 103 cells/mL for somatic cell count. There was moderate correlation (0.57) between TAC and PIC. All other correlation coefficients were low (<0.26). Correlation results suggest that a single quality parameter could not predict others used in this study. Seasonal data indicate that 1) in general, all counts tended to be low in winter, 2) the CC and somatic cell count were always high in summer, and 3) TAC tended to be high during summer.

Reprod Dom Anim(2007) , 42, 257–262

2008_Impact Factor = 1.526

Measurement of Ovine Pregnancy-Associated Glycoprotein (PAG) During Early Pregnancy in Lacaune Sheep

B E Amiri[1,2], A Karen[3], J Sulon[1], N Melo de Sousa[1], AV Alvarez-Oxiley[1], Y Cognie[4], O Szenci[5] and JF Beckers[1]

[1]Faculty of Veterinary Medicine, University of Liege, Liege, Belgium;

[2]*INRA, Regional Center of Agronomic Research, Settat, Morocco;*

[3]Department of Theriogenology, Faculty of Veterinary Medicine, Kafr El-Sheikh, Egypt; [4]INRA, Nouzilly, Tours, France;

[5]Clinic for Large Animals, Faculty of Veterinary Science, U¨ llo}-Do´ra Major, Hungary

Abstract

This study describes ovine pregnancy-associated glycoprotein (ovPAG) concentrations in 20 Lacaune sheep during early pregnancy. Measurements were performed by using semi-purified ovPAG as standard, tracer and immunogens for antibody production in rabbits. Antisera R780 (against ovPAG57+59kDa) and R805 (against ovPAG58+61kDa) were used respectively in RIA-780 and RIA-805. Blood samples were collected at days 0, 18, 20, 22 and 25 after artificial insemination. From day 18 after breeding onward, the mean ovPAG concentration was significantly higher ($p < 0.001$) in plasma samples from pregnant ewes (n ¼ 17) than in nonpregnant ones (n ¼ 3). The specific activity of the tracer was 11 760 Ci/mmol in RIA-780 and 14 900 Ci/mmol in RIA-805. The minimal detection limits for RIA-780 and RIA-805 were 0.2 ng/ml and 0.3 ng/ml, respectively. The intra-assay CV of samples with low (1.0 ng/ml), medium (2.5 ng/ml) and high (4.0 ng/ml) PAG concentrations were 3%, 6% and 9% for RIA-780 and 8%, 9% and 5% for RIA-805. The inter-assay CV in the same samples was 13%, 12% and 7% for RIA-780 and 13%, 11% and 5% for RIA-805. The recovery was higher than 95% in both assays. No cross-reaction was observed with members of aspartic proteinase family as well as with other tested proteins. In both RIA-780 and RIA-805, inhibition of the binding of the tracer by antisera was parallel between standard curve and serial dilutions of pregnant ewe samples. In conclusion, the two homologous RIA systems are suitable for early quantification of ovPAG concentrations in ewe plasma samples from day 18 after breeding.

Veterinary Anaesthesia and Analgesia (2009), 36: 352–360

2008_Impact Factor = 1.250

Sedative and analgesic effects of romifidine in camels (Camelus dromedarius)

Mohamed Marzok[1] & Sabry El-Khodery[2]

[1]Faculty of Veterinary Medicine, Department of Surgery, Anesthesiology and Radiology, Kafer-Elsheikh University, Egypt

[2]Faculty of Veterinary Medicine, Department of Internal Medicine and Infectious Diseases, Mansoura University, Mansoura, Egypt

Abstract

Objective: To evaluate the clinical effectiveness and the sedative and analgesic effects of intravenous (IV) romifidine in camels. Study design: Randomized prospective study. Animals: Eighteen healthy adult Dromedary camels. Methods Romifidine was administered IV to camels (n = 6) at three different doses (40, 80 or 120 lg kg) 1). Time of onset, degree and duration of sedation and analgesia were recorded immediately after drug administration. Heart rate, respiratory rate, ruminal contractions, muscle relaxation, response to auditory and tactile stimulation, distance between ears, distance from lower lip to the ground, and degree of ataxia were also recorded preadministration and at 5, 15, 30, 45, 60, 90, 120 and 180 minutes post-administration. Plasma glucose, blood urea nitrogen and creatinine were measured. Results Romifidine produced dose dependent sedation and analgesia. Significant decreases in heart rate ($p < 0.001$), ruminal contractions ($p < 0.05$), distance from lower lip to the ground ($p < 0.001$), response to auditory and tactile stimuli ($p < 0.01$), and significant increases in the degree of ataxia ($p < 0.01$), distance between the ear tips ($p < 0.001$) and blood glucose ($p < 0.01$) concentration were recorded after administration of romi- fidine until recovery. However, no significant changes in rectal temperature and respiratory rate were recorded. Conclusions and clinical relevance Intravenous administration of romifidine at three different doses appeared to be an effective sedative and analgesic agent for camels. Bradycardia, ruminal atony, and hyperglycemia were the most important adverse effects after IV administration of romifidine. The IV administration of romifidine at a dose rate of 120 lg kg)1 caused profound sedation and analgesia. Romifidine could be used for chemical restraint for a variety of diagnostic and minor surgical procedures in camels.

Journal of General Virology (2008), 89, 2691–2697

2008_Impact Factor = 1.70

Co-Circulation Of Two Subline ages Of HPAI H5n1virus In The Kingdom Of Saudi Arabia With Unique Molecular Signatures Suggesting Separate Introductions Into The Commercial Poultry And Falconry Sectors

Isabella Monne[1] , Alice Fusaro[1] , Mohamed Hamad Al-Blowi[2] , Mahmoud Moussa Ismail[3] , Owais Ahmed Khan[4] , Gwenaelle Dauphin[5] , Astrid Tripodi[5] , Annalisa Salviato[1] , Stefano Marangon[1] , Ilaria Capua[1] and Giovanni Cattoli[1]

[1]Istituto Zooprofilattico Sperimentale delle Venezie, OIE/FAO and National Reference Laboratory for Newcastle Disease and Avian Influenza, Viale dell'Universita` 10, Legnaro, Padova, Italy

[2]Veterinary Labs Administration, Ministry of Agriculture, Riyadh, Kingdom of Saudi Arabia

[3]Department of Poultry Diseases, College of Veterinary Medicine, Kafr-Elsheikh University, Egypt

[4]Central Veterinary Diagnostic Laboratory, PO Box 15831, Riyadh 11454, Kingdom of Saudi Arabia

[5]Animal Health Service, Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, 00153 Rome, Italy

Abstract

Since early 2007, the Kingdom of Saudi Arabia (KSA) has experienced several highly pathogenic avian influenza (HPAI) H5N1 outbreaks in the falconry and poultry sectors. The public health threat associated with peculiar husbandry systems, requiring close contact between humans and birds of prey, highlights the need of an improved understanding of the epidemiology and of the viral characteristics of H5N1 viruses circulating in the region. Here we report molecular and phylogenetic analyses of H5N1 viruses isolated in the KSA in 2007 in distinct compartments of avian husbandry. From the results of our investigation it appears that two separate introductions into the different sectors occurred. The identification of specific amino acid mutations, which are described as genetic signatures of human influenza A viruses or known to confer resistance to antiviral drugs, raises concerns for the possible human health implications of the KSA H5N1 viruses.

Avian Pathology (2008) , 1-5
2008_Impact Factor = 3,092

Isolation And Identification Of Highly Pathogenic Avian Influenza H5N1 Virus From Houbara Bustards (Chlamydotis Undulata Macqueenii) And Contact Falcons

Owais Ahmed Khan[1], Mohammad Adam Shuaib[1], Salah Shaban Abdel Rhman[2], Mahmoud Moussa Ismail[1,3], Yousef Al Hammad[1], Mansour Hashim Abdel Baky[1], Alice Fusaro[4], Annalisa Salviato[4] and Giovanni Cattoli[4]

[1]Central Veterinary Diagnostic Laboratory, P.O. Riyadh 11454, Kingdom of Saudi Arabia,

[2]Animal Resources Department, Ministry of Agriculture, Riyadh, Kingdom of Saudi Arabia,

[3]Department of Poultry Diseases, College of Veterinary Medicine, Kafrelsheikh University, Egypt,

[4]OIE/FAO and National Reference Laboratory for Newcastle Disease and Avian Influenza, Istituto Zooprofilattico Sperimentale delle Venezie, Viale dell'Universita`, Legnaro, Italy

ABSTRACT

Highly pathogenic influenza virus (HPAIV) H5N1 has caused mortality and morbidity in many species of domestic and wild bird. The Houbara bustard (Chlamydotis undulata macqueenii) is a solitary bird that inhabits semi-desert regions. It is known to be susceptible to avianpox, avian paramyxovirus type 1, and lowpathogenicity avian influenza H9N2. We report an outbreak of H5N1 HPAIV in Houbara bustards, which were introduced into the Kingdom of Saudi Arabia for falconry purposes. Ninety-three per cent mortality (38 out of 41 birds) in the infected Houbara bustard flock and about 62.5% mortality (10 out of 16 birds) in falcons that came in contact with these birds were observed. Pooled cloacal and tracheal swabs from Houbara bustards as well as visceral organ homogenates collected in Houbara bustards and falcons were tested by real-time reverse transcriptase-polymerase chain reaction, and virus isolation was attempted in specific pathogen free hens' eggs. The viruses isolated were characterized as HPAIV H5N1. Phylogenetic

analysis of the haemagglutinating and Neuraminidase (NA) genes revealed that the viruses isolated from Houbara bustards and falcons were closely related to each other and to Kuwaiti H5N1 strains isolated in 2007. Interestingly, they were genetically distinguishable from the co-circulating A/H5N1 viruses in Kingdom of Saudi Arabia causing outbreaks in domestic birds. This case emphasizes the need for surveillance of this endangered species in its natural habitat.

Parasitology (2009) 136: 11–25.

2008_Impact Factor = 2.071

Mutational, inhibitory and microcalorimetric Mutational, inhibitory and microcalorimetric analyses of Plasmodium falciparum TMP kinase. Implications for drug discovery

M. Kandeel[1,5], T. Ando[2], Y.Kitamura[1], M. Abdel-Aziz[5] And Y. Kitade[1,2,3,4]

[1] Department of Biomolecular Science, Faculty of Engineering, Gifu University, Yanagido 1-1, Gifu 501-1193, Japan

[2] Center for Emerging Infectious Diseases, Gifu University, Yanagido 1-1, Gifu 501-1193, Japan

[3] Center for Advanced Drug Research, Gifu University, Yanagido 1-1, Gifu 501-1193, Japan

4 United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, Yanagido 1-1, Gifu 501-1193, Japan

[5] Department of Pharmacology, Faculty of Veterinary Medicine, Kafr El-Shikh University, Kafr El-Shikh, Egypt

Abstract

Plasmodium falciparum thymidylate kinase (PfTMK) can tolerate a range of substrates, which distinguishes it from other thymidylate kinases. The enzyme not only phosphorylates TMP and dUMP but can also tolerate bulkier purines, namely, dGMP, GMP, and dIMP. In order to probe the flexibility of PfTMK in accommodating ligands of various sizes, we developed 6 mutant enzymes and subjected these to thermodynamic, inhibitory and catalytic evaluation. Kinase activity was markedly affected by introducing a larger lysine residue instead of A111. The lack of the hydroxyl group after inducing mutation of Y107F affected enzyme activity, and had a more severe impact on dGMP kinase activity. PfTMK can be inhibited by both purine and pyrimidine nucleosides, raising the possibility of developing highly selective drugs.Thermodynamic analysis revealed that enthalpic forces govern both purine and pyrimidine nucleoside monophosphate binding, and the binding affinity of both substrates was highly comparable. The heat produced due to dGMP binding is lower than that attributable to TMP. This indicates that additional interactions occur with TMP, which may be lost with larger dGMP. Targeting PfTMK not only affects thymidine nucleotide synthesis but may also affect purine nucleotides, and thus the enzyme represents an attractive antimicrobial target. Key words: Plasmodium falciparum, thymidylate kinase, TMP kinase, site-directed mutagenesis, drug targets.

Small Ruminant Research (2009), 87: 116–121

2008_Impact Factor = 1.193

Caseous lymphadenitis in sheep and goats: Clinical, epidemiological and reventive studies

Magdy H. Al-Gaabary, Salama A. Osman, Atef F. Oreiby

Department of Animal Medicine, Faculty of Veterinary Medicine, Kafrelsheikh University, Kafr El-Sheikh 33516, Egypt

Abstract

This study was carried out on 1466 animals (977 sheep and 489 goats) during the period from January 2008 to December 2008 to determine some epidemiological, clinical and preventive measures associated with caseous lymphadenitis (CLA). The prevalence was 19.23% on the basis of clinical examination and 17.32% on the basis of bacteriological examination.The prevalence was 23.33% in sheep and 11.04% in goats on the basis of clinical examination whereas it was 22.10% in sheep and 7.77% in goats on the basis of bacteriological examination.The disease prevalence was significantly higher in females (19.67%) than in males (12.42%). Higher prevalence was recorded in animals of the age group from 1 to 2 yeas (47.36%) followed by animals of the age group over 2 years (18.69%) and lastly of the age group under 1 year (3.07%). The clinical picture appeared in the form of enlargement and abscessation of the superficial lymph nodes. Parotid lymph nodes were the most commonly affected nodes in sheep whereas superficial cervical lymph nodes were the most commonly affected nodes in goats. The superficial lymph nodes of the anterior body half showed the highest infection rate. Corynebacterium seudotuberculosis was detected in 90.07% of the clinically infected cases. The disease was significantly higher in private flocks (45.52%) than in governmental flock (1.59%). Control measures using penicillin at day zero of shearing in addition to disinfection of shearing instrument and wounds greatly reduced the disease occurrence.

Chaos, Solitons and Fractals (2009) 40: 1185–1189

2008_Impact Factor = 2.98

On fuzzy pre-I-open sets and a decomposition of fuzzy I-continuity

Arafa A. Nasef [a], E. Hatir [b]

[a] Department of Physics and Engineering Mathematics, Faculty of Engineering, Kafrelsheikh University, Kafrelsheikh, Egypt

[b] Selcuk Universitesi Evitim Faku¨ ltesi 42090, Meram, Konya, Turkey

Abstract

Recently, El-Naschie has shown that the notion of fuzzy topology may be relevant to quantum particle physics in connection with string theory and *E*-infinity space time theory. In this paper, we introduce and study the notion of fuzzy pre-*I*-open sets, which is properly placed between fuzzy openness and fuzzy pre-openness regardless the fuzzy topological ideal. Moreover, we give a decomposition of fuzzy *I*-continuity by proving that a function ƒ: (X, t, *I*) → (Y, σ) is fuzzy *I*-continuous if and only if it is fuzzy pre-*I*-continuous and fuzzy -*I*-continuous.

Mathematical and Computer Modelling (2009) 49: 536–541

2008_Impact Factor = 1.032

Recent progress in the theory of faint continuity

Arafa A. Nasef

Department of Physics and Engineering Mathematics, Faculty of Engineering, Kafr El-Sheikh University, Kafr El-Sheikh, Egypt

Abstract

In this paper, two classes of functions between topological spaces are introduced under the terminologies strongly faintly α-continuous and strongly faintly γ -continuous functions. Some new characterizations and several fundamental properties of these functions along with their relationships with certain other types of functions are investigated.

Powder Technology (2009):130-142

2008_Impact Factor = 1,766

CFD prediction of air–solid flow in 180° curved duct

Samy M. El-Behery [a], Mofreh H. Hamed [b], M.A. El-Kadi [a], K.A. Ibrahim [a]

a Faculty of Engineering, Menoufiya University, Shebin El-Kom, Egypt

b Faculty of Engineering, Kafrelsheikh University, Kafrelsheikh, Egypt

Abstract

Gas–solid two-phase flow in 180° curved duct is simulated using a two-way coupling Eulerian–Lagrangian approach. Reynolds averaged Navier–Stokes equations (RANS) and four turbulence models namely; standard k–ε model, RNG (Renormalization Group) based k–ε model, Low-Re k–ε model and an extended version of the standard k–ε model are adopted. The effects of particle rotation and lift forces are included in the particle tracking model. The present predictions are compared with published experimental data for single-phase and two-phase flows. The comparisons show that the RNG based k–ε model predicts the flow behaviour better than other models. Furthermore, the particles concentration and velocity are compared very well with published data. The effects of inlet gas velocity, bend geometry, loading ratio and particle size on the flow behaviour and bend pressure drop are also discussed. The results show that the flow behaviour is greatly affected by these parameters.

Powder Technology (2009):130-142

Journal of Petroleum Geology(2009) 32(1): 79-102

2008_Impact Factor = 0.727

Impact of Diagenesis on Reservoir-Quality Evolution in Fluvial and Lacustrine-Deltaic Sandstones: Evidence from Jurassic and Triassic Sandstones from the Ordos Basin, China

J.L. Luo[1], S. Morad[2], A. Salem[3], J.M. Ketzer[4], S. Yan[5], X. L Zhang[5] and J.M. Xue[5] and O. Hlal[6]

[1] Laboratory of Continental Dynamics, Northwest University, Xi'an, 710069, China.

[2] Dept of Petroleum Geosciences, The Petroleum Institute, PO Box 2533, United Arab Emirates; and Dept of Earth Sciences, Uppsala University, 752 36 Uppsala, Sweden.

[3] Faculty of Education, Kafrelsheikh University, 33516 Kafrelsheikh, Egypt.

[4]Instituto de Meio Ambiente, Pontificia Universidade Catelica, Avenida Ipiranga, Porto Alegre, Rio Grande do Sul, Brazil.

[5] Yanchang Bureau of Petroleum Administration, North Shaanxi, China

[6] University of Al-Fateh, Tripoli, Libya.

Abstract

The reservoir quality of Jurassic and Triassic fluvial and lacustrine-deltaic sandstones in the intracratonic Ordos Basin is strongly influenced by depositional facies and various types of diagenetic modifications. The fluvial sandstones have higher average He-porosity and permeability (14.8% and 12.7 mD, respectively) than the deltaic sandstones (9.8% and 5.8 mD, respectively). In addition to extensive mechanical compaction, eodiagenesis (220-97 Ma; depth < 2000 m; T < 70°C) has resulted in dissolution and kaolinitization of detrital silicates in the Jurassic fluvial sandstones, and in smectite infiltration and minor cementation by calcite and siderite in the Triassic fluvial and deltaic sandstones. Pervasive eogenetic carbonate cementation (> 20 vol.%) occurred in Triassic deltaic siltstones and very fine-grained sandstones which are closely associated with organic-rich mudstones. Mesodiagenesis (97-65 Ma), which occurred during rapid subsidence to depths of 3700-4400 m, resulted in the albitization of plagioclase, the conversion of kaolinite into dickite, and cementation by quartz overgrowths, chlorite, illite, ankerite (δ13CVPDB = -2.4‰ to +2.6‰; δ18OVPDB = -21.5‰ to -10‰) and calcite (δ13CVPDB = -4.7‰ to +3.7‰; δ18OVPDB = - 21.8‰ to -13.4‰). Oil

emplacement (95 Ma) retarded cementation by mesogenetic quartz and carbonate but had little influence on dickite, illite and chlorite formation. Retardation of quartz cementation was also due to the presence of chlorite fringes around detrital quartz grains. Dickitization of eogenetic kaolinite together with the short residence time at maximum burial temperatures (105-124°C) has retarded the albitization of K-feldspars and illite formation and hence prevented severe permeability destruction. Telodiagenesis, which occurred after uplift (Eocene to end-Neogene), caused slight dissolution and kaolinitization of feldspars. This study demonstrates that despite complex patterns of diagenetic modifications in the Triassic and Jurassic successions, depositional porosity and permeability are better preserved in fluvial meandering channel sandstones than in deltaic sandstones. These results should be important for modelling of reservoir-quality distribution and exploration risk evaluation in the basin.

Applied Radiation and Isotopes (2009) 67: 1721–1728

2008_Impact Factor = 1.114

Reduction of the dimensionality and comparative analysis of ultivariate radiological data

M.K. Seddeek [a], A.M. Kozae [b,] T. Sharshar [c,e], H.M. Badran [d]

[a] Department of Physics, Faculty of Education, Suez Canal University, Al-Arish, Egypt

[b] Department of Mathematics, Faculty of Science, Tanta University, Tanta 31527, Egypt

[c] Department of Physics and Chemistry, Faculty of Education, Kafr El-Shaikh University, Kafr El-Shaikh, Egypt

[d] Department of Physics, Faculty of Science, Tanta University, Tanta 31527, Egypt

[e] Physics Department, Faculty of Science, Taif University, Taif, 888 Hawiya, Saudi Arabia

a b s t r a c t

Computational methods were used to reduce the dimensionality and to find clusters of multivariate data. The variables were the natural radioactivity contents and the texture characteristics of sand samples. The application of discriminate analysis revealed that samples with high negative values of the former score have the highest contamination with black sand. Principal component analysis (PCA) revealed that radioactivity concentrations alone are sufficient for the classification. Rough set analysis (RSA) showed that the concentration of 238U, 226Ra or 232Th, combined with the concentration of 40K, can specify the clusters and characteristics of the sand. Both PCA and RSA show that 238U, 226Ra and 232Th behave similarly. RSA revealed that one or two of them can be omitted without degrading predictions.

Applied Radiation and Isotopes (2009) 67: 1259–1268

2008_Impact Factor = 1.114

Radioactivity and fluoride contamination derived from a phosphate fertilizer plant in Egypt

N.M. Mourad [a], T. Sharshar [b,c], T. Elnimr d, M.A. Mousa [a]

[a] Chemistry Department, Faculty of Science, Banha University, Banha, Egypt

[b] Physics and Chemistry Department, Faculty of Education, Kafrelsheikh University, Kafr El Sheikh, Egypt

[c] Physics Department, Faculty of Science, Taif University, Taif, 888 Hawiya, Saudi Arabia

[d] Physics Department, Faculty of Science, Tanta University, Tanta 31527, Egypt

Abstract

The environmental pollution caused by the wastewater from a phosphate fertilizer plant in Egypt was .investigated. The concentrations of radionuclides and fluoride in phosphate fertilizer (raw materials, end products and by-products) and other types of fertilizer samples were measured. The concentrations of these elements were also measured in environmental samples (water, sediment and plant) collected the environmental pollution caused by the wastewater from a phosphate fertilizer plant in Egypt was from the proximity of outlet of wastewater discharge pipes of the phosphate fertilizer company. The fluoride concentrationwas ranged from 0.03 to 0.25 mg/g, 0.002 to 0.006 mg/g, 0.42 to 1.88 mg/g and 0.44 to 7.3 mg/l for phosphate fertilizer, other types of fertilizer, sediment and water samples, respectively. The activity concentrations of 226Ra were ranged from 244 to 1312 Bq/kg, 0.6 to 12.1 Bq/kg, 15.4 to 33.8 Bq/kg, 0.06 to 1.3 Bq/l and 8.9 to 17.3 Bq/kg for phosphate fertilizer, other types of fertilizer, sediment, water and plant samples, respectively. The 232Th activity concentrations were ranged from 0.7 to 24 Bq/kg, 0.7 to 14.5 Bq/kg, 10.4 to 19.3 Bq/kg, 0.02 to 0.16 Bq/l and 2.0 to 29.8 Bq/kg for these samples, respectively. Also, the 40K activity concentrations were ranged from 2.1 to 1.4 Bq/kg, 2.1 to 5313 Bq/kg, 128 to 281 Bq/kg, 0.14 to 0.6 Bq/l and 686 to 977 Bq/kg for these samples, respectively. Low content of 137Cs was determined in only two phosphate fertilizer samples (F2 and F3; mean 1.3 Bq/kg) and in most of sediment samples (with range 1.0–2.4 Bq/kg). The radium equivalent, as a radiation hazard index, was ranged from 284 to 1316, 9.6 to 432 and 47 to 70 Bq/kg for phosphate fertilizer, other types of fertilizer and sediment samples, respectively. The results indicated that the wastewater polluted with fluoride produced from the phosphate fertilizer company may be affecting the environment. The radioactivity content measurements indicated that the environment may be slightly affected with low concentrations of 226Ra and 232Th isotopes due to the discharged wastewater from the phosphate fertilizer industry. On the other hand, the results of comparison studies for radioactivity concentrations are also presented and discussed.

Radiation Protection Dosimetry (2009) 135 (4): 261–267

2008_Impact Factor = 0.951

Inter-Comparison Study of The Population Dose Due to Gamma-Radiation in The Coast of North Sinai Between Rafah And Bir El-Abd Areas

M. K. Seddeek[1], T. Sharshar[2,3] and H. M. Badran[4]

[1]Faculty of Education, Department of Physics, Suez Canal University, Al-Arish, Egypt

[2]Faculty of Education, Department of Physics and Chemistry, Kafr El-Shaikh University, Kafr El-Shaikh, Egypt

[3]Faculty of Science, Physics Department, Taif University, Taif, 888 Hawiya, Saudi Arabia

[4]Faculty of Science, Department of Physics, Tanta University, Tanta 31527, Egypt

Abstract

This study compares the external dose due to the gamma-ray emitting radionuclides in various areas in North Sinai, Egypt. The whole area was divided into 10 regions. The average absorbed dose rates were evaluated for each region. It was found that Zaranik-protected area and Al-Massaid have the highest values of 72.7 and 57.2 nGy h21, respectively. The corresponding values of the remaining regions were <23 nGy h21. The mean annual ffective dose equivalents for the four largest cities Rafah, El-Sheikh Zuwaied, Al-Arish and Bir El-Abd were 20.8, 18.8, 57.4 and 14.0 mSv, respectively. The results are compared with those from different areas in Egypt and in various countries.

Journal of Macromolecular Science Part A: Pure and Applied Chemistry (2009) 46, 74–82

2008_Impact Factor = 0.72

Hybrid Nanocomposite Prepared by Graft Copolymerization of 4-Acryloyl morpholine onto Chitosan in the Presence of Organophilic Montmorillonite

Samia Al-Sigeny [a]; Manal F. Abou Taleb [b;] Nabil A. El-Kelesh [b]

[a] Chemistry and Physics Department, Faculty of Education at Kafr El-Sheikh, Kafr El-Sheikh University, Egypt

[b] National Center for Radiation Research and Technology, Nasr City, Cairo, Egypt

Online Publication Date: 01 January 2009

Abstract

Organophilic montmorillonite (OMMT) was synthesized by cationic exchange between Na-MMT and Vinyl benzyl triphenyl phosphonium chloride in an aqueous solution. A new nanocomposite consisting of 4-acryloyl morpholine-chitosan and OMMT was prepared by *γ* -ray irradiation polymerization. The intercalation spacing of these nanocomposites was investigated with X-ray diffraction and its thermal stabilities by adding nanocomposites were characterized by thermal gravimetric analysis. The nanocomposites showed improved resistance to water absorption. The most interesting application of the nanocomposite is its ability for adsorption purification of waste water containing acid dyes.One of the objectives in this study was to develop new and active prepared copolymers which can be examined for their antimicrobial activities. It was found that the copolymer nanocomposite based on phosphonium group and some heavy metal ions in its structure having broad spectrum against pathogenic bacteria such as Staphylococcus aurius, Escherichia coli and Aspergillus flavus fungi.

Journal of Photochemistry and Photobiology A: Chemistry (2009), 205: 151–155

2008_Impact Factor = 2.4

Fluorescence modulation and photodegradation characteristics of safranin O dye in the presence of ZnS nanoparticles

Maged El-Kemary Hany El-Shamy

Chemistry Department, Faculty of Science, Kafrelsheikh University, 33516 Kafr ElSheikh, Egypt

Abstract

ZnS nanoparticles were synthesized using a chemical precipitation method and were haracterized with FTIR, transmission electron microscope (TEM), X-ray diffraction analysis (XRD) and UV–vis absorption. XRD analysis shows that the diameter of the particles is 1.6 nm. The interaction between ZnS nanoparticles and safranin O (SO) dye was studied with UV–vis absorption as well as fluorescence emission and excitation spectra. The results show fluorescence enhancement from dye molecules with anoparticles upon excitation at 325 nm. In contrast, the fluorescence of the dye monitored at 520nm is quenched by ZnS nanoparticles. ZnS nanoparticleswere used as a photocatalyst in order to degrade SO dye. Amaximum degradation efficiency of 51% of the dye has been achieved in the presence of ZnS as a nanophotocatalyst at pH 7. Photodegradation of the dye follows second-order kinetics.

Materials Chemistry and Physics (2009), 118: 81–85

2008_Impact Factor = 1.8

The role of capping agent on the interaction of cadmium sulphide nanoparticles with Flufenamic acid drug

Maged El-Kemary[a], Hany El-Shamy[a], M.M. Mosaad[b]

[a] Chemistry Department, Faculty of Science, Kafrelsheikh University, El-Geish st., 33516 Kafr ElSheikh, Egypt

[b] Physics Department, Faculty of Science, Kafrelsheikh University, 33516 Kafr ElSheikh, Egypt

a b s t r a c t

This work reports the synthesis of CdS nanoparticles (NPs) capped with ammonia and riethylamine by using a precipitation method. The obtained particleswere characterized by using X-ray diffraction (XRD), transmission electron microscope (TEM) and spectroscopic techniques. The particle size for NPs capped with ammonia (6.2 nm) and triethylamine (2.4 nm) was calculated from XRD patterns using Scherrer formula. For ammonia capping, the optical properties are typical of localized surface states. However, the confinement effects play a significant role in the optical properties of triethylamine capping. The emission of CdS NPs is quenched by Flufenamic acid (FLF) drug. At pH 7, the quenching efficiency of triethylamine capped CdS NPs is greater than that of ammonia capping. The interaction between FLF and ammonia capped CdS NPs proceeds via electrostatic mode, whereas for triethylamine capping the interaction might be due to electron ransfer process. In acidic media, the fluorescence quenching of ammonia capped CdS in the presence of FLF was followed by a fluorescence enhancement and blue shift of fluorescence emission. This might be a result of the dissociation of the CdS-ammonia nanosystem, due to protonation of the surface. In such case, removing the capping agent, leads to faster aggregation of the particles.

Inorganica Chimica Acta (2009), 362: 1471–1477

2008_Impact Factor = 1.94

Synthesis, characterization, and crystal structures of hydrotris (2-mercapto-1-imidazolyl)borate-based zinc(II) and copper(I) complexes

Mohamed M. Ibrahim , Shaban Y. Shaban

Chemistry Department, Faculty of Education, Kafrelsheikh University, Kafrelsheikh 33516, Egypt

Abstract

in methanol afforded the mononuclear complex of the type [Tmxylyl–Zn(mimxylyl)]ClO4 (1). Whereas under the same conditions, the reaction with copper (II) perchlorate gives rise to the simultaneous formation of the dinuclear copper (I) complex [TmxylylCu]2 (2). The chemical formulae of the complexes have been characterized by elemental chemical analysis, IR–NMR spectroscopies, and single crystal X-ray methods. In complex 1, the zinc(II) atom displays a distorted tetrahedral environment. While in complex 2, the Tmxylyl ligand bridges the two copper(I) atoms in an asymmetric manner with trigonal geometry. The inverted The reaction of the tripod ligand hydrotris(2-mercapto-1-imidazolyl)borate Tmxylyl with zinc(II) perchlorate conformation of the ligand Tmxylyl at the boron center, allows the B–H units to be directed towards the copper centers. The greater reactivity of the borohydride groups towards metal centers enhances the reduction of Cu (II) to Cu (I). The obtained kinetic results for the methylation reactions of 1 and 2 indicate that these bound thione complexes are less suitable to electrophilic attack than the thiolate ligand.

.

Journal of Molecular Structure (2009), 937: 50–55

2008_Impact Factor = 1.6

Functionalized S_4Zn (II) complexes as structural modelling for the active site of thiolate-alkylating enzymes: The crystal structure of [TtiZn–SpyH]$_2$_$HClO_4$ [Tti = tris (thioimidazolyl) hydroborate and SpyH = pyridine-2-thiol]

Mohamed M. Ibrahim

Chemistry Department, Faculty of Science, Kafrelsheikh University, Kafrelsheikh 33156, Egypt

Abstract

Two new functionalized S_3Zn-bound pyridinethiol complexes [TtiZn–SpyH]$_2$_$HClO_4$ 1 and [TtiZn–py] 2 [Tti = tris (2-mercapto-1-xylyl-imidazolyl) hydroborate, SpyH = pyridine-2-thiol, and Spy = yridine- 4-thiol] were synthesized and characterized. Structural determination of complex 1 howed that the coordination geometry around zinc atom is ideally regular tetrahedral with three thione donors from the ligand Tti and one thiolate donor from the coligand pyridine-2-thiol. The average Zn(1)–S(thione) bond length is 2.349Å and the Zn(1)–S (thiolate) bond length is 2.289Å The eactivity studies of both complexes 1 and 2 as models for the active sites of thiolate-alkylating enzymes toward methylation reactions showed that 1 is much less susceptible to methylation than that of complex 2. This decrease in the nucleophilicity of complex 1 could be explained by lectronic effects of the pyridinum salts as well as the steric hindrance, which is provided by the perchlorate anion.

Phosphorus, Sulfur, and Silicon (2009), 184: 2324–2332

2008_Impact Factor = 0.69

Synthesis and Characterization of 2-Mercapto-1-cyclohexylimidazole–Based Zinc(II) and Cadmium(II) Bromide Complexes: The Crystal Structure of $[Zn(Hmimc^{hexyl})_2(Br)_2]$ with N–H· · ·Br Intermolecular Hydrogen Bonding

Mohamed M. Ibrahim [a,b]; Salih S. Al-Juaid [c], Q. Mohsen [b]

[a] Chemistry Department, Faculty of Science, Kafrelsheik University, Kafrelsheik, Egypt

[b]Chemistry Department, Faculty of Science, Taif University, Taif, Saudi Arabia

[c] Chemistry Department, Faculty of Science, King Abd Al Aziz University, Jeddah, Saudi Arabia

Abstract

Reactions of the ligand 2-mercapto-1-cyclohexylimidazole (Hmimchexyl) with both zinc(II) and cadmium(II) bromides in ethanol solutions afforded 2:1 complexes of the type [M(Hmimchexyl)2(Br)2] (M = Zn 1, and Cd 2) with an MBr2S2 configurations .Spectroscopic evidence (FT-IR and 1H-13C NMR) confirms that the exocyclic thione sulfur atoms are the donors in both complexes. Complex 1 crystallizes in a monoclinic system, space group C2/c, a = 16.180(3), b = 10.817(5), c = 13.602(3); α = 90, β = 106.754(17), γ = 90; Z = 4; R1 = 0.0229, wR2 = 0.0554. The coordination geometry about the zinc(II) atom is distorted tetrahedral with average Zn-S and Zn-Br bond lengths of 3.3418(8) and 2.4017(6) Å, respectively. The bromide ions form intermolecular N–H· · ·Br hydrogen bonding with the thione NH groups of the ligand molecule.

Meccanica (2009), 44: 433–447

2008_Impact Factor = 0.604

Exact solutions for variable-thickness inhomogeneous elastic plates under various boundary conditions

A.M. Zenkour[1,2] and D.S. Mashat[1]

[1]Department of Mathematics, Faculty of Science, King AbdulAziz University, P.O. Box 80203, Jeddah 21589, Saudi Arabia

[2]Department of Mathematics, Faculty of Education, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

Abstract

In this paper, an exact solution to the governing equations of the bending of a variable-thickness inhomogeneous rectangular plate is presented. The procedure is applicable to variable-thickness inhomogeneous rectangular plates with two opposite edges simply supported. The remaining ones subjected to a combination of clamped, simply supported, and free boundary conditions and between these two edges the plate may have varying thickness. The procedure is valuable in view of the fact that tables of deflections and stresses cannot be presented for variable-thickness inhomogeneous orthotropic plates as for uniformthickness homogeneous isotropic plates even for commonly encountered loads because the results depend on the inhomogeneity coefficient and the orthotropic material properties instead of a single flexural rigidity. Numerical results, useful for the validation or otherwise of approximate solutions, are tabulated. The influences of the degree of the inhomogeneity, aspect ratio, thickness parameter and degree of non-uniformity on the deflections and stresses are investigated.

Meccanica (2009), 44: 721–731

2008_Impact Factor = 0.604

Bendng analysis of a ceramic-metal arched bridge using a mixed first-order theory

A.M. Zenkour[1,2] and D.S. Mashat[1]

[1]Department of Mathematics, Faculty of Science, King AbdulAziz University, P.O. Box 80203, Jeddah 21589, Saudi Arabia

[2]Department of Mathematics, Faculty of Education, Kafr El-Sheikh University, Kafr El-Sheikh 33516, Egypt

Abstract

In this research, the bending analysis of an arched bridge is presented based on a mixed first-order thick beam one dimensoinal plate theory. The present arched bridge is considered as a beam with boundary conditions at its edges, which may be simplysupported, and between these two edges, the beam may have quadratic thickness variation. The bridge consists of two layers; the upper flat one is made from an isotropic homogeneous material such as ceramic, and the lower arched layer is made from an isotropic non-homogeneous functionally graded ceramic-metal material. The upper-surface of the arched layer, which represents the interface between the two layers, is ceramic-rich material while the lower-surface of the arched layer is metal-rich material. This structure eliminates interface problem of the arched bridge and thus the stress distributions are smooth. A closed form solution is developed for the static response of such bridge subjected to different distributed loads. The effects of many parameters on the displacements and stresses are investigated. The sample numerical examples presented herein for bending response of the present arched bridge should serve as references for future comparisons.

J Appl Electrochem (2009) 39: 2375–2384

2008_Impact Factor = 1.54

Utilization of a montmorillonite-Ca-modified carbon paste electrode for the stripping voltammetric determination of diflunisal in its pharmaceutical formulations and human blood

A. M. Beltagi

Chemistry & Physics Department, Faculty of Education, Kafr El-Sheikh University, 33616 Kafr El-Sheikh, Egypt

Abstract

A highly sensitive square-wave adsorptive anodic stripping voltammetric method was described for the determination of diflunisal in its formulations and human blood, utilizing a developed montmorillonite-Camodified carbon paste electrode (CPE). The peak current was significantly enhanced due to the strong adsorptive properties of montmorillonite-Ca clay. The optimal procedural parameters were frequency f = 80 Hz, scan increment DEa = 10 mV, pulse-amplitude DEi = 25 mV, and an accumulation potential Eacc of 0.0 V versus Ag/ AgCl/3M KCl in acetate buffer of pH 5.0 using 10% (w/w) MMT-Ca-modified CPE. The described method was successfully applied for assay of diflunisal in different pharmaceutical formulations (Doloban_, Dolozal_, and Maxipan_ tablets) with mean percentage recoveries of 98.72 ± 0.35, 99.24 ± 0.89, and 98.20 ± 1.38, respectively. Furthermore, the method was successfully applied for assay of diflunisal in spiked human serum without the necessity of sample pretreatment or time-consuming extraction prior to the analysis. Mean percentage recovery of diflunisal in human serum was 99.16 ± 1.03 with a limit of detection of 3.0 9 10-9 M (0.75 ng mL-1). Due to this extremely low limit of detection, the proposed method was used to follow up the concentration of drug in blood samples of two male volunteers after oral administration of a single dose of Dolozal_, 500 mg tablet.

Journal Of AOAC International (2009) 92 (3):806-812

2008_Impact Factor = 1.22

Determination Of The Anti-Osteoporosis Drug Ipriflavone In Pharmaceutical Formulation By Stripping Voltammetric And hromatographic Methodes

Hanan S. El – Desoky[1], Amr M. Beltagi[2], Mohamed M. Ghoneim[1]

[1] Chemistry Department, Faculty of Science, Tanta University, 31527 Tanta, Egypt

[2]Chemistry & Physics Department, Faculty of Education, Kafr El-Sheikh University, 33616 Kafr El-Sheikh, Egypt

Abstract

Ipriflavone is a nonhormonal isoflavone derivative currently used as abone- building agent for prevention and treatment of postmenopausal osteoporosis. Ipriflavone was reduced at the hanging mercury drop electrode in buffers of pH 2-11 via the consumption of 2electrons corresponding to the reduction of the C=O double bond in the C4 position of the analyte molecule. A fully validated square- wave adsorptive cathodic stripping (SW- AdCS) Voltammetric method was described for the trace quantification of bulk priflavone. A linear response, with concentrations of bulk Ipriflavone over the rang (5 $x10^{-9}$- $4x10^{-7}$ M) with alimit of detection (1,5 $x10^{-9}$ M) bulk ipriflavone, was obtained . Moreover, an LC-UV detection method was also described for determining ipriflavone. The peak area was proportional to the concentration of bulk ipriflavone over the range ($1x10^{-7}$ -1 x 10^{-4} M) with a limit of detection of ($3x10^{8}$ M). The described SW-AdCS voltammetric and LC methods were successfully applied for the assay of ipriflavone in iprivone tablets without interference from excipients. Accuracy and precision of both methods for determination of ipriflavone in its tablets were studied and discussed.