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1	<p>The Effects of Processing on the Anti-Nutritional Properties of ‘Oze’ (<i>Bosqueia angolensis</i>) Seeds</p> <p style="text-align: center;"><b>Nwosu, J. N.</b> Department of Food Science and Technology, Federal University of Technology, Owerri P.M.B. 1526, Owerri, Imo State, Nigeria <a href="mailto:ifytina19972003@yahoo.com">ifytina19972003@yahoo.com</a></p> <p><b>Abstract:</b> ‘Oze’ (<i>Bosqueia angolensis</i>) is found in the tropical rain forest and grows in thick humid forest of undisturbed land. It belongs to the family <i>Moracea</i>. Wholesome ‘oze’ (<i>Bosqueia angolensis</i>) seeds were given different treatments, which included blanching, cooking, roasting and malting. The samples obtained from these treatments were analyzed for anti-nutritional properties. The ‘oze’ seeds had up to eleven anti-nutrients with alkaloids (2730 mg/100 g) and Total phenols (2500 mg/100 g) predominating. Except for Total phenols and Trypsin inhibitors (37.3 TIU/100 g) all the other anti-nutrients were found more in the hulls than the edible cotyledons. Also all anti-nutrients except phytates and oxalates were eliminated by malting. [Journal of American Science. 2011;7(1):1-6]. (ISSN: 1545-1003).</p> <p><b>Key words:</b> anti-nutritional factors, malting, blanching</p>	<a href="#">Full Text</a>	1
2	<p>Screening of Leguminous Plants for VAM Association and Their Role in Restoration of Degraded Lands</p> <p style="text-align: center;">Kiran Bargali Department of Botany, DSB Campus, Kumaun University, Nainital, Uttarakhand 263002, India Email: <a href="mailto:kiranbargali@yahoo.co.in">kiranbargali@yahoo.co.in</a></p> <p><b>Abstract:</b> In present study, 50 leguminous plant species were assessed for association of Vesicular-Arbuscular Mycorrhizal fungi. For this, fine roots of these plants were carefully dug out, washed and stained using root clearing methods and observed under microscope. Out of 50 species screened, 5 showed no VAM association, 2 species showed very low level of colonization (&gt; 20%), 17 species showed 20 to 49 % colonization, 24 species showed 50 to 69 % colonization and only 2 species showed very high level of colonization i.e. &lt;70%. Most of the plant showed hyphae with vesicle/arbuscles. However in five species viz. <i>Bahunia retusa</i>, <i>Crotolaria albida</i>, <i>Desmodium elegans</i>, <i>D. heterocarpon</i> and <i>Vicia rigidula</i> only hyphae of mycorrhizal fungi is present. Thus, the legumes with high to very level of VAM colonization can be use in restoration of degraded lands. [Journal of American Science. 2011;7(1):7-11]. (ISSN: 1545-1003).</p> <p><b>Keywords:</b> Legumes, roots, vesicles, arbuscles, colonization</p>	<a href="#">Full Text</a>	2

3	<p style="text-align: center;"><b>Model for Calculating the Concentration of Dissolved Iron Relative to the Final Solution pH and Temperature during Oxalic Acid Leaching of Iron Oxide Ore.</b></p> <p style="text-align: center;">Chukwuka I. Nwoye<sup>1</sup> and Ihuoma E. Mbuka<sup>2</sup></p> <p style="text-align: center;"><sup>1</sup>Department of Materials and Metallurgical Engineering, Nnamdi Azikiwe University P.M.B 5025 Awka, Nigeria</p> <p style="text-align: center;"><sup>2</sup>Department of Materials and Metallurgical Engineering Federal University of Technology, P.M.B 1526 Owerri, Nigeria. chikeyn@yahoo.com</p> <p><b>Abstract:</b> Model for calculating the concentration of dissolved iron (relative to the final solution pH and temperature) during leaching of iron oxide ore in oxalic acid solution has been derived. The model;  <math display="block">\%Fe = 1.1849( /T)^3</math> was found to calculate the concentration of dissolved iron being dependent on the values of the final leaching solution pH and temperature measured during the leaching process. It was observed that the validity of the model is rooted in the expression <math>(\%Fe/N)^{1/3} = /T</math> where both sides of the expression are approximately equal to 0.2. The maximum deviation of the model-predicted concentration of dissolved iron from the corresponding experimental values was found to be less than 18% which is quite within the acceptable range of deviation limit of experimental results. Concentrations of dissolved iron per unit rise in the solution temperature as obtained from experiment and derived model were evaluated as 0.0011 and 0.0015 %/°C respectively, indicating proximate agreement. [Journal of American Science. 2011;7(1):12-18]. (ISSN: 1545-1003).</p> <p><b>Keywords:</b> Model, Dissolved Iron, Solution pH and Temperature, Oxalic Acid, Iron Oxide Ore</p>	<a href="#">Full Text</a>	3
4	<p style="text-align: center;"><b>Cytogenetic effect of Insecticide Telliton and Fungicide Dithane M-45 on Meiotic Cells and Seed Storage Proteins of <i>Vicia faba</i>.</b></p> <p style="text-align: center;">*Atef A. A. Haiba; Nagwa R. Abd El-Hamid; Elham A. A. Abd El-Hady and Abd El-Rahman M.F. Al-Ansary</p> <p style="text-align: center;">Department of Genetics and Cytology, Genetic Engineering Division, National Research Center, Dokki, Giza, Egypt. *<a href="mailto:Atefhaiba@yahoo.com">Atefhaiba@yahoo.com</a></p> <p><b>Abstract:</b> The genotoxic effects of insecticide Telliton and fungicide Dithane M-45 were examined on meiotic cell divisions and changes in the M2 seed storage protein banding pattern of <i>Vicia faba</i> plants. The percentage of abnormal pollen mother cells, (PMCs) increased as the concentration of both pesticides increased. All concentrations and treatment periods of both pesticides, induced a number of chromosomal aberrations in PMCs as stickiness, bridges, laggards, disturbed, micronuclei and multinucleate. A marked change was observed in the M2 <i>V. faba</i> seed storage protein banding pattern. These changes included alterations in band intensity, relative mobilities, disappearance of some bands and appearance of new other ones. These results showed that Telliton has more mutagenic effects than Dithane M-45. [Journal of American Science. 2011;7(1):19-25]. (ISSN: 1545-1003).</p> <p><b>Key words:</b> <i>Vicia faba</i>, chromosomal abnormalities, insecticide, fungicide and SDS -PAGE protein</p>	<a href="#">Full Text</a>	4

5	<p style="text-align: center;"><b>Studies on the uptake of heavy metals by selected plant species growing on coal mine spoils in sub-tropical regions of India</b></p> <p style="text-align: center;">Bandita Deo<sup>1</sup>, Gayatri Nahak<sup>2</sup>, and R.K.Sahu<sup>2</sup>  1. Regional Plant Resource Center, Nayapalli, Bhubaneswar, Orissa, India  2. Department of Botany, B.J.B (A) College, Bhubaneswar-751014, Orissa, India  <a href="mailto:sahurajani@yahoo.co.in">sahurajani@yahoo.co.in</a></p> <p><b>Abstract:</b> The accumulation of heavy metals in naturally occurring plants of herbs, shrubs and trees grown on South Bolanda coal mine overburdens in subtropical region of India were illustrated.. The inter-elemental relationships of different parts of five plant species including herbs, shrubs and trees with the coal mine wastes were studied. From the tree species maximum positive correlation was observed for Cu in stem and leaf of <i>Trema orientalis</i>. The stem and leaf of <i>Haldina cordifolia</i>, <i>Diospyrous melanoxylon</i> and <i>Ixora arborea</i> showed positive correlation for Cr, Fe and Cu respectively. Among the shrubs in <i>Phyllanthus reticulatus</i>, Cr in stem showed a positive correlation with Cr in leaf. Here among five species of annual herbs, the correlation coefficient for inter elemental variable of whole plant and coal mine spoil for chromium was marked in <i>Catharanthus roseus</i>. From the above investigation it was concluded that stabilization of coal mine spoils could be achieved successfully by the plantation of suitable plant species available in native area. [Journal of American Science. 2011;7(1):26-34]. (ISSN: 1545-1003).</p> <p><b>Key words:</b> Coalmine spoils, Heavy metal, Inter-elemental relationship, Overburden Positive correlation</p>	<a href="#">Full Text</a>	5
6	<p style="text-align: center;"><b>Credit and money market of the bank of the central Africa States (BEAC)</b></p> <p style="text-align: center;">Ndjedanem Demtade Nadingar<sup>1</sup>, Chen Shuwang yang<sup>1</sup>  China University of Geosciences (Wuhan)  388 Lumo Road, Wuhan, P.R. China Postcode: 430074. <a href="mailto:alafi2004@yahoo.fr">alafi2004@yahoo.fr</a></p> <p><b>Abstract:</b> In a context of world economic crisis, our article on the credit and money market aim to emphasize the influence of the bank of the States of Africa on the saving in each one of its members in general and on Chad in particular through the service of credit and money market. [Journal of American Science. 2011;7(1):35-39]. (ISSN: 1545-1003).</p> <p><b>Key words:</b> BEAC, Credit, Money Market, Interbank market, obligatory reserves</p>	<a href="#">Full Text</a>	6

### Women's Empowerment for Rural Development

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Abstract: The main objective of this study provides a strategy for women's empowerment for rural development. Empowerment can enable women to participate, as equal citizens, in the economic, political and social sustainable development of the rural communities. The findings outlined in this paper suggest that, designed and implemented in ways that meet rural women's diverse needs, community participation processes that can be important to facilitating social, technological, political and psychological empowerment in terms of rural development. The findings of this investigation can assist rural developers in the implementation of community development strategies based on women's empowerment.  
[Fatemeh Allahdadi. **Women's Empowerment for Rural Development**. Journal of American Science 2010;7(1):40-42]. (ISSN: 1545-1003). <http://www.americanscience.org>.  
**Keywords:** women's empowerment, rural development, local development

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### Inhibitory effects of two indigenous plant extracts (*Zingiber officinale* and *Ocimum gratissimum*) on post harvest yam (*Dioscorea rotundata* Poir) rot, *in vitro*.

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**Abstract:** Cold water and ethanol extracts of two fungicidal plants (*Zingiber officinale* and *Ocimum gratissimum*) were screened for their *in vitro* effects on rot fungi of yam using 60 and 80% aqueous extract and 20 and 30% ethanol extract of each concentration. The two concentrations of aqueous and ethanol extracts were found to have inhibitory effects on all the rot fungi isolated from yam, 80% aqueous extract of *Zingiber officinale* inhibited *Fusarium oxysporum* to 66.70%, 80% aqueous extract of *Ocimum gratissimum* inhibited *Botrydioploidia theobromae* to 60.00% also 73.33% inhibition of *Aspergillus flavus* was recorded using 30% ethanol extract of *Zingiber officinale*, the same concentration of *Ocimum gratissimum* inhibited *Aspergillus niger* to 70.00%. Both aqueous and ethanol extract of *Zingiber officinale* and *Ocimum gratissimum* had potential inhibitory effect on all the rot fungi.  
[Ijato James Yeni. **Inhibitory effects of two indigenous plant extracts (*Zingiber officinale* and *Ocimum gratissimum*) on post harvest yam (*Dioscorea rotundata* Poir) rot, *in vitro***. Journal of American Science 2011;7(1):43-47]. (ISSN: 1545-1003). <http://www.americanscience.org>.  
**Key word** *In vitro*, *Zingiber officinale*, *Ocimum gratissimum*, rot fungi, yam

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Testicular maturation and reproductive cycle in mudskipper, *Periophthalmus papilio* (Bloch and Schneider 1801) from Lagos lagoon, Nigeria

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**Abstract:** A study was carried out on mudskipper, *Periophthalmus papilio* from Lagos lagoon, Nigeria to determine its testicular maturation and reproductive cycle. *P. papilio* is a commercial valued fish in Nigeria as food for man and baits in capture fisheries, making its population in Lagos lagoon to be threatened. Therefore, conservation of its fishery from overfishing and exploitation is urgently required. A total of 796 male individuals were captured with non return valve traps between July 2004 and July 2006 from mangrove swamps of Lagos lagoon. They measured between 37 and 180 (104.83±25.57) mm TL and weighed 1.5 – 60.9 (18.60±10.65) g BW respectively. The testes were morphologically examined by naked eye and processed by standard histological techniques. ICES, BITS and IBTS scales and Bucholtz manuals were employed in the classifications of its maturity and gonadal stages. Seven reproductive stages were encountered in the study viz. immature, immature and developing, ripening, ripe, ripe running, spent and recovering-spent. The reproductive cycle included pre-spawning, spawning and post-spawning phases. The testicular maturation and reproductive cycle in mudskipper, *P. papilio* though with modifications were similar to what obtained in other teleosts. The GSI values ranged between 0.01 and 0.48 (0.132±0.165) i.e. less than 0.48% of the body weight was converted to development of testes. GSI values were at different peaks in July (0.23±0.016) and September (0.30±0.13%) 2004; May (0.198±0.004) and October (0.097±0.009%) 2005; and January (0.865±0.12), April (0.122±0.009) and July (0.145±0.016%) 2006 indicating the species as a multiple and synchronous spawner in Lagos lagoon. The study therefore provides the basic life history information on *P. papilio* through an objective approach in the assignment of maturity stage, using histological technique and macroscopic evaluations of the testes.

[LAWSON, Emmanuel O. Testicular maturation and reproductive cycle in mudskipper, *Periophthalmus papilio* (Bloch and Schneider 1801) from Lagos lagoon, Nigeria. Journal of American Science 2011;7(1):48-59]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Key words:** Gonadosomatic index, spawning, spermatocyte, spermatid, spermatozoon, mudflat

10	<p style="text-align: center;"><b>Application of an Artificial Neural Network Model to Rivers Water Quality Indexes Prediction – A Case Study</b></p> <p style="text-align: center;">Hossein Banejad <sup>1</sup>, Ehsan Olyaie <sup>1</sup></p> <p style="text-align: center;"><sup>1</sup> Department of Water Engineering, Faculty of Agriculture, Bu-Ali Sina University of Hamedan, Iran <a href="mailto:Hossein_banejad@yahoo.com">Hossein_banejad@yahoo.com</a></p> <p><b>Abstract:</b> Taxonomic Recent trends in the management of water supply have increased the need for modeling techniques that can provide reliable, efficient, and accurate representation of the nonlinear dynamics of water quality within water distribution systems. Since artificial neural networks have been widely applied to the nonlinear transfer function approximation, in this study we present an empirical multi layer perceptron neural network to estimate water quality indexes (BOD, Do) in Morad Big River in the western part of Iran. In this paper, the information and data including 10 monthly parameters of water quality in the Hamedan Morad Big River in duration of one year and six stations were used for modeling biological oxygen demanded (BOD) and dissolved oxygen (DO) as indices affecting water quality. To validate the performance of the trained ANN, it was applied to an unseen data set from a station in the region. Performance of the model was evaluated by statistical criteria includes correlation coefficient (r), root mean square error (RMSE) and mean absolute error (MAE). In the optimum structure of neural network correlation coefficient for BOD and DO are 0.986 and 0.969, also root mean square error are 8.42 and 0.84 respectively. The results show the identified ANN’s great potential to simulate water quality variables.</p> <p>[Hossein Banejad, Ehsan Olyaie. Application of an Artificial Neural Network Model to Rivers Water Quality Indexes Prediction – A Case Study. Journal of American Science 2011;7(1):60-65]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Artificial Neural Networks; Predicting; Water Quality Index; BOD; DO</p>	<a href="#">Full Text</a>	10
11	<p style="text-align: center;"><b>Favorable Content of Sustainable Agriculture Extension Programs In Khuzestan Province of Iran</b></p> <p style="text-align: center;">Ahmad Reza Ommani</p> <p style="text-align: center;">Department of Agriculture, Islamic Azad University Shoushtar Branch <a href="mailto:ommani75451@yahoo.com">ommani75451@yahoo.com</a></p> <p><b>Abstract:</b> The purpose of research was identify favorable content of sustainable agriculture extension programs in Khuzestan province of Iran. A sample of 79 respondents was selected through simple random sampling technique. A survey study was applied as a methodology of research work. Data were collected using a structured questionnaire that addressed to evaluate agricultural extension experts’ responses regarding the necessity of attention on each extension system content to accomplish sustainable agriculture in Khuzestan province of Iran. For determining the validity of questionnaire, the face and content validity was used. Cronbach's alpha was used to measure reliability of the instrument, which was 0.80 and showed the instrument reliability. Descriptive findings revealed that “Food security”, “Integrated management”, “Biological control practices”, “Quality of crops” and “Conservation practices” were the first contents for extension system toward sustainability, respectively. According to factor analysis, the contents of extension system for supporting of sustainable agriculture were categorized into three main components, which have been named <i>Natural conservation</i>, <i>Human health and Economic contents</i>. The obtained results from the factor analysis revealed that the three mentioned factors explained 75.231% of the variation of extension content for supporting of sustainable agriculture in agriculture.</p> <p>[Ahmad Reza Ommani. Favorable Content of Sustainable Agriculture Extension Programs In Khuzestan Province of Iran. Journal of American Science 2011;7(1):66-70]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Content of extension; Agricultural Sustainability</p>	<a href="#">Full Text</a>	11

12	[Journal of American Science 2011;7(1):71-79]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a> . 9	<a href="#">Full Text</a>	12
13	<p style="text-align: center;"><b>GC/MS Determination of Bioactive Components of <i>Murraya koenigii</i></b></p> <p style="text-align: center;"><sup>1</sup>Hema R., <sup>2</sup>S. Kumaravel and <sup>3</sup>K. Alagusundaram</p> <p style="text-align: center;"><sup>1</sup>Senior Research Fellow, Department of Food Quality and Testing, IICPT</p> <p style="text-align: center;"><sup>2</sup>Scientist, Department of Food Quality and Testing, IICPT</p> <p style="text-align: center;"><sup>3</sup>Director, Indian Institute of Crop Processing Technology (IICPT), Thanjavur, TamilNadu, India e-mail: <a href="mailto:hema.scientist@gmail.com">hema.scientist@gmail.com</a></p> <p><b>Abstract:</b> In this study, the bioactive components of <i>Murraya koenigii</i> leaves have been evaluated using GC/MS. The chemical compositions of the ethanol extract of <i>Murraya koenigii</i> were investigated using Perkin-Elmer Gas Chromatography–Mass Spectrometry, while the mass spectra of the compounds found in the extract was matched with the National Institute of Standards and Technology (NIST) library. GC/MS analysis of ethanol extract of <i>Murraya koenigii</i> revealed the existence of 1-Methyl-pyrrolidine-2-carboxylic acid (69.00%), Ethyl α-d-glucopyranoside (13.36%), Isolongifolene, 4,5-dehydro- (3.68%), ζ-HIMACHALENE (2.88%), 1,2-Ethenediol, monoacetate (2.79%) 1,2-Benzenedicarboxylic acid, diisooctyl ester (2.55%). The results of this study offer a platform of using <i>Murraya koenigii</i> as herbal alternative for the current synthetic antimicrobial agents.</p> <p>[Hema R., S. Kumaravel and K. Alagusundaram. <b>GC/MS Determination of Bioactive Components of <i>Murraya koenigii</i></b>. Journal of American Science 2011;7(1):80-83]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> <i>Murraya koenigii</i>, GC/MS, Bioactive components</p>	<a href="#">Full Text</a>	13

### **Stainless steel implantation-induced changes in surface characteristics, corrosion resistance and hemato-biochemical parameters of male rat**

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**Abstract:** In this study the physiological solution effect on corrosion resistance and surface characteristics of stainless steel has been studied *in vitro* by electrochemical measurements and microstructure characterization of the surface. All studies were carried out using phosphate buffer saline (PBS) as a simulated physiological solution. Potentiodynamic polarization results indicated a considerable shift of pitting potential of the specimen in the noble direction after 14 days of immersion in PBS. As evidenced by electrochemical impedance spectroscopy (EIS), the effect of long immersion of stainless steel in physiological solution on the passive film stability was proved. The surface structure and composition before and after immersion in PBS were then characterized by means of scanning electron microscopy (SEM) with electron diffraction X-ray analysis (EDX) techniques. The electrochemical measurements and fitting parameters showed that the passive film formed on stainless steel decreased the corrosion currents densities ( $I_{corr}$ ) and the constant phase elements ( $CPE$ ), as simultaneously increased the values of polarization or charge transfer resistance ( $R_{ct}$ ) of stainless steel in simulated physiological solution. The physiological and histological effects of pitting corrosion of stainless steel metal were studied after 14 days of post-implantation in the tibiae of Sprague-Dawley male rats. The stainless steel implantation caused a slightly increased in blood haemoglobin, total erythrocytes count and packed cell volume, and significantly decreased total leukocyte count. All the hepatic enzymes activities of a separate aminotransferase, alanine aminotransferase, alkaline phosphatase and lactate dehydrogenase were significantly decreased. The activity of glutathione S-transferase and the level of lipid peroxidation were significantly increased while hepatic glutathione was significantly decreased. The toxicity of stainless steel in implanted rat could be related to the biodegradation of the alloy and releasing of Fe, Mn, Ni and Cr in the rat tissue as indicated by the *in vitro* study. The bone regeneration was observed at the surface near the stainless steels implants after two weeks of implantation.

[Sahar A.Fadl-allah, Q. Mohsen and Nahla S. El-Shenawy. **Stainless steel implantation-induced changes in surface characteristics, corrosion resistance and hemato-biochemical parameters of male rat.** Journal of American Science 2011;7(1):84-91]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Keywords:** Impedance spectra; Pitting corrosion; Scanning electron microscope (SEM); Electron diffraction X-ray (EDX) analysis; Lipid peroxidation; Glutathione; Toxicity; Bone repair



17	<p style="text-align: center;"><b><i>In-vivo</i> and <i>in-vitro</i> Prediction of the Efficiency of Nano-Synthesized Material in Removal of Lead Nitrate Toxicity</b></p> <p style="text-align: center;"><b>Eman I. Abdel-Gawad<sup>*1</sup> and Sameh A. Awwad<sup>2</sup></b>  <sup>1</sup>Radioisotopes Department, Atomic Energy Authority, <sup>2</sup>Egyptian Army Forces, Egypt  <a href="mailto:dr.eman_57@hotmail.com">dr.eman_57@hotmail.com</a>*</p> <p><b>Abstract:</b> Due to large grain sizes, the biological properties of the conventional hydroxyapatite (HAp) is limited to a great extent. Progresses in nanotechnological approaches now allow the fabrication of nano-HAp. In this study, firstly, the characters of nano-hydroxyapatite gel was described and the interaction performance of the formed gel with lead nitrate Pb(NO<sub>3</sub>)<sub>2</sub> <i>in vitro</i> was identified. Then, the biological efficiency of nano-HAp gel against Pb(NO<sub>3</sub>)<sub>2</sub> toxicity <i>in vivo</i> was introduced. A polymeric matrix route was selected to synthesis nano- composite hydroxyapatite gel. The formed gel characterized using FTIR, XRD, SEM, TEM. Various volumes of the produced nano-HAp gel (10, 20, 30, 40, 50 and 60 µl) was adding to 4 ml of ECS solution. The clear supernatant was separated and analyzed by ICP-MS. The results showed a successful removal of lead ions by formed gel. A single dose of intravenous nano-hydroxyapatite at a level of 150 and 300 mg/kg b.w. was injected to male rats following intraperitoneal 93mg/kg b.w. (LD<sub>50</sub>) of lead nitrate Pb(NO<sub>3</sub>)<sub>2</sub>. The results revealed that nano- HAp composite had the ability to alleviate lead nitrate toxicity, to a great extent, in serum antioxidant status, liver and kidney function as well as corticosterone and calcium levels but phosphorus value was not affected among the all treated groups. However, most successful results were attributed to the treatment with high dose of formed nano-HAp particularly after 48 h more than the treatment with low dose. Histopathological observations confirmed the biochemical results, since nano-HAp into rats evident the recovery of lead nitrate cytotoxicity in liver and kidney cells.</p> <p>[Eman I. Abdel-Gawad<sup>*1</sup> and Sameh A. Awwad. <i>In-vivo</i> and <i>in-vitro</i> Prediction of the Efficiency of Nano-Synthesized Material in Removal of Lead Nitrate Toxicity. Journal of American Science 2011;7(1):105-119]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Nano-HAp, lead nitrate, antioxidant status, liver enzymes, kidney functions , corticosterone</p>	<a href="#">Full Text</a>	17
18	<p style="text-align: center;"><b>Silver nitrate staining improves visual analysis of daily otolith increments</b></p> <p style="text-align: center;">Trika L. Gerard<sup>1</sup> (corresponding Author), and Estrella Malca<sup>2</sup>  <sup>1</sup>NOAA Southeast Fisheries Science Center, 75 Virginia Beach Drive, Miami, FL 33149, USA, 305-361-4493, 305-365-4103 (Fax). <a href="mailto:Trika.Gerard@noaa.gov">Trika.Gerard@noaa.gov</a></p> <p><sup>2</sup>Cooperative Institute for Marine and Atmospheric Studies, University of Miami, 4600 Rickenbacker Cswy, Miami, FL 33149, USA, 305-361-4295, 305-361-4103 (Fax). <a href="mailto:Emalca@rsmas.miami.edu">Emalca@rsmas.miami.edu</a></p> <p><b>Abstract:</b> Sagittal otoliths in juvenile to sub-adult (62mm-150mm standard length) gray snapper (<i>Lutjanus griseus</i>) were analyzed using a modified staining method. Daily growth increments from transversely sectioned otoliths were stained using silver nitrate and fixed using sodium thiosulfate. Stained otoliths showed a noticeable improvement in the resolution of daily increments compared to those not stained. This procedure lends to the enhanced visualization of daily rings and has the potential to be a timely, yet efficient, technique for age and growth analysis of calcium carbonate structures.</p> <p>[Trika L. Gerard, Estrella Malca. Silver nitrate staining improves visual analysis of daily otolith increments. Journal of American Science 2011;7(1):120-124]. <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> silver nitrate, staining, otolith, daily increment, von Kossa</p>	<a href="#">Full Text</a>	18

19	<p style="text-align: right;"><a href="#">Full Text</a></p> <p style="text-align: center;"><b>Arsenic Toxicity in the Irrigation Water-Soil-Plant System: A Significant Environmental Problem</b> Hossein Banejad<sup>1</sup>, Ehsan Olyaie<sup>1</sup></p> <p><sup>1</sup> Department of Water Engineering, Faculty of Agriculture, Bu-Ali Sina University, Hamedan, Iran <a href="mailto:Hossein_banejad@yahoo.com">Hossein_banejad@yahoo.com</a></p> <p><b>Abstract:</b> Environmental pollution is a major global concern. When sources of water pollution are enumerated, agriculture is, with increasing frequency, listed as a major contributor. One of the major factors determining uptake and toxicity to plants is the form of arsenic (As). Naturally occurring arsenic in groundwater of sedimentary aquifer has emerged as a global problem, and issue of major environmental concern. It is released and contaminated in agricultural soil by natural weathering, industrial production and mining. However, the same water resources are used extensively for irrigation purposes throughout the region. The two most important forms, As (V) and As (III), are taken up by completely different mechanisms. Uptake, accumulation and toxicity vary within and between plant species. In general, more As in the soil leads to higher concentrations in plants, but this depends on many factors. It is recommended to initiate an integrated program to quantify the scale of the problem in combination with the development of a water-soil-plant quality monitoring system for land degradation in agro-ecosystems. This should not only include As, but a range of physical, chemical (nutrients and contaminants) and biological parameters. Further, management options to prevent and mitigate As contamination need to be explored. [Hossein Banejad, Ehsan Olyaie. <b>Arsenic Toxicity in the Irrigation Water-Plant Environment: A Significant Environmental Problem.</b> Journal of American Science 2011;7(1):125-131]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Arsenic, Toxicity, Irrigation, Water-Soil-Plant System, Environment</p>		19
20	<p style="text-align: right;"><a href="#">Full Text</a></p> <p style="text-align: center;"><b>Improvement of Oxidation Stability of Mineral Oil using Jojoba Oil</b> <b>Elham A. Eissa*, Renee I. Abdallah and Afaf R. Taman</b></p> <p style="text-align: center;">Egyptian Petroleum Research Institute, Cairo, Egypt <a href="mailto:el_awadi@yahoo.com">el_awadi@yahoo.com</a></p> <p><b>Abstract:</b> The production of insulating mineral oil from naphthenic fraction (b.r. 300-420°C) was carried out by furfural solvent extraction. The refined oil and its binary mixtures with jojoba oil at different concentrations 20, 50, and 80 vol % have been employed as synthetic insulating oil in a wide variety of electrical equipment. The physico-chemical properties of the refined oil as well as the electrical properties of the mixtures were determined. The oxidation stability of original oil, refined mineral oil and its binary mixtures with jojoba oil with different concentrations was studied. The stability of oxidation by adding different concentrations of 2,6,-di-tertiarybutyl phenol inhibitor to binary mixture containing 20 vol % jojoba oil was studied. It is found that the maximum stability is obtained by adding 2 wt % of inhibitor. [Elham A. Eissa, Renee I. Abdallah and Afaf R. Taman. <b>Improvement of Oxidation Stability of Mineral Oil using Jojoba Oil.</b> Journal of American Science 2011;7(1):132-137]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Key Words:</b> Mineral oils, Oxidation stability, Jojoba oil, Inhibitor, Electrical properties</p>		20

21	<p style="text-align: center;"><b>Mapping water quality of Burullus Lagoon using remote sensing and geographic information system</b>  Mohamed E. Hereher; Mahmoud I. Salem and Dina H. Darwish  Department of Environmental Sciences, Faculty of Science at Damietta, Mansoura  University, Egypt. <a href="mailto:dina_200777@yahoo.com">dina_200777@yahoo.com</a></p> <p><b>Abstract:</b> The present study aims to utilize remote sensing and a geographic information system (GIS) for mapping surface conditions of the Burullus Lagoon, Egypt as a proxy to water pollution. Spatial distribution of suspended matter, nitrogen, phosphorous, chlorophyll, dissolved oxygen, water temperature, salinity, depth, lead, copper, cadmium, clay, and sediment organic carbon has been applied. A Landsat image from the Enhanced Thematic Mapper plus (ETM+) sensor acquired in June 2006 was processed based on a band by band as well as band rationing. Cartographic maps were generated depending on the correlation between the measured parameters and the radiance values of the ETM+ image. Parameters not correlated with the satellite image data have been processed through spatial analysis and interpolation technique using GIS. Results showed that the eastern and southern sections of the lagoon, which receive drainage wastewater, are more polluted than the northern and western sections of the lagoon. The study confirms that remote sensing coupled with GIS could afford an integrated scheme for mapping water quality.  [Mohamed E. Hereher; Mahmoud I. Salem and Dina H. Darwish. Mapping water quality of Burullus Lagoon using remote sensing and geographic information system. Journal of American Science 2011;7(1):138-143]. (ISSN: 1545-1003).</p> <p><b>Keywords:</b> Mapping; water quality; Burullus Lagoon; geographic information system</p>	<a href="#">Full Text</a>	21
22	<p style="text-align: center;"><b>Path Analysis of Direct and Indirect Effect of Statistical literacy on Applying Proper Statistical Test (Case Study of agricultural extension and education graduated students)</b></p> <p style="text-align: center;">Sahar Dehyouri <sup>1</sup>, Iraj Malek Mohammadi <sup>2</sup>, Seyed Mahmood Hosseini <sup>2</sup>, Seyed Mehdi Mirdamadi <sup>1</sup></p> <p>1. Department of Agricultural Extension and Education, Science and Research branch, Islamic Azad University, Tehran, Iran, <a href="mailto:dehyouri.s@gmail.com">dehyouri.s@gmail.com</a></p> <p>2. Department of Agricultural Extension and Education, Karaj campus, Tehran University, Karaj, Iran</p> <p><b>Abstract:</b> Research methods, statistical analysis and domination on subject are essential for a rich dissertation and thesis to be developed. The main goal of this study was to obtain the perception of the agricultural extension and education graduated students about their statistical literacy, reasoning and thinking according to standard tests and to trace thematic evolution (content analysis) of dissertations and thesis done by the same graduated students according to sequential statistics analysis approach (SSAA). To this end, the study analyzed 315 thesis and dissertation to understand, how and to what extent, proper and mix statistical methods are applied to achieve realistic outcomes. In the other hand, 115 questionnaires were fulfilled, containing statistical standard tests about statistical literacy, reasoning, thinking, attitude, content knowledge and principal component of statistics learning. According to the path analysis results, the statistical attitude (total effect=0.80) had the most effect (direct and indirect effect) on applying statistical methods.  [Sahar Dehyouri, Iraj Malek Mohammadi, Seyed Mahmood Hosseini, Seyed Mehdi Mirdamadi. <b>Path Analysis of Direct and Indirect Effect of Statistical literacy on Applying Proper Statistical Test (Case Study of agricultural extension and education graduated students)</b>. Journal of American Science 2011;7(1):144-153]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Keywords:</b> statistical literacy, statistical reasoning, statistical thinking, sequential statistical analysis approach</p>	<a href="#">Full Text</a>	22

### **Study of the nutritional value of Persian Gulf squid (*Sepia Arabica*)**

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**Abstract:** Cephalopodan are a group of mollusks that have substantial geographical distribution .Squid have largest fisheries value between Cephalopoda In the world. In the Persian Gulf and Oman Sea are also squid. Due to good taste and friendly meat market, exports this species has three million dollars Currency returns in year1386. Fish meat there are the unique characteristics, including high protein content, unsaturated fatty acids (EPA, DHA), vitamins and minerals thus Fish consumption in the diet is essential. Marine biologists have extracted the new combination of some aquatic that has significant effects in prevent and treat certain illnesses. Information about the Persian Gulf is very limited in this study the nutritional value of squid was investigated. Results showed that this species, with17 percent protein and 8.9 percent fat, having high nutritional value. To protect these stocks should pay more attention to it. [Forough papan, Ashraf Jazayeri, Hussein Motamedi, Soghra mahmoudi asl. **Study of the nutritional value of Persian Gulf squid (*Sepia Arabica*)**. Journal of American Science 2011;7(1):154-157]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>.  
**Keywords:** squid, Persian Gulf, nutritional value, sepia Arabica

24	<p style="text-align: center;"><b>Effect of Some Chemical Compounds on Sedimentation Rate of Different Yeast Strains</b> Laila M. Abdelaty, Wedad E. Eweda, E. M. Ramadan and A. J. Al-Waraquiy. Department of Agric. Microbiology, Fac. Agri Ain Shams University , Shubra El-Khima,Cairo , Egypt. <a href="mailto:rfr2000@live.com">rfr2000@live.com</a></p> <p><b>Abstract:</b> Heavy metal pollution represents an increasing problem in industrialized as well as developing countries. Yeast cells are capable to accumulate these pollutant from different environments. In this investigation, eight baker's yeast strains were collected from different Egyptian markets. The source of these yeast strains were Misr Yeast, Alinson, Vahine professional, Fermipan, Hollandia Saf–instant, H.u.G and Pakamaya. These strains were grown on basal medium or in molasses medium to determine their efficiency in the bioaccumulation of some metals. The sedimentation measurement was carried out at different salt solutions and different times intervals. The results clearly indicated that SnCl<sub>2</sub> followed in descending order by Pb (CH<sub>3</sub>CooH)<sub>2</sub> and AgNO<sub>3</sub> were the most effective compounds in increasing the rate of sedimentation of all the tested yeast strains. In contrast; the lowest Figures were recorded with KH<sub>2</sub>PO<sub>4</sub> ,FeCl<sub>3</sub> , NiSO<sub>4</sub>,Co(NO<sub>3</sub>)<sub>2</sub>,CaSO<sub>4</sub>,MgSO<sub>4</sub> , Zn SO<sub>4</sub>, Al<sub>2</sub>(So)<sub>4</sub> and Co CL 2. Other minerals showed a moderate sedimentation capability. It can be stated that yeast cells have a considerable capability to uptake Zinc and iron from the growing medium whereas, manganese showed moderate capability. The lowest values were observed in2the case of copper and lead. <i>Saccharomyces cerevisiae</i> can be used as a bioremediation agent for removing heavy metals from the surrounding environment due to its high uptake capacity, taking in consideration that it must be economically competitive with existing technologies. [Laila M. Abdelaty, Wedad E. Eweda, E. M. Ramadan and A. J. Al-Waraquiy. <b>Effect of Some Chemical Compounds on Sedimentation Rate of Different Yeast Strains.</b> Journal of American Science 2011;7(1):158-162]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>. <b>Keywords:</b> Effect; Chemical Compound; Sedimentation Rate; Yeast Strain</p>	<a href="#">Full Text</a>	24
25	<p style="text-align: center;"><b>Evaluate Area for Very Large Integrated Digital Systems Based on Bandwidth Variation</b>  Afshin Shaabany<sup>1</sup>, Fatemeh Jamshidi<sup>1</sup> <sup>1</sup> Islamic Azad University, Fars Science and Research Branch, Shiraz, Iran <a href="mailto:afshinshy@yahoo.com">afshinshy@yahoo.com</a>, <a href="mailto:Fjamshidi59@yahoo.com">Fjamshidi59@yahoo.com</a></p> <p><b>Abstract:</b> In this paper, Network on Chip is used as an alternate approach for very large integrated digital systems (System on chip) that is based on bus communications and IP interconnections. This approach has solved some problems like scalability that buses encounter them. One of the basic steps in this approach is correct simulation of NoC implementation; moreover, simulation design operability and perform ability require its synthesizability. Designing and implementation of NoC communication are presented in this work. Finally, bandwidth variation effect on area requirements is evaluated, and area requirements changing due to these alternations will be discussed and explained. [Afshin Shaabany, Fatemeh Jamshidi. Evaluate Area for Very Large Integrated Digital Systems Based on Bandwidth Variation. Journal of American Science 2011;7(1):163-169]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>. <b>Keywords:</b> Network on Chip, IP interconnection, bandwidth variation effect, scalability, perform ability</p>	<a href="#">Full Text</a>	25

26	<p style="text-align: center;"><b>Changing of Self-Care Behavior by Practicing 12-Step Program among Codependents in Iran</b></p> <p style="text-align: center;">Zahra Ajri <sup>1</sup>, Shatar Sabran* <sup>1</sup></p> <p style="text-align: center;"><sup>1</sup> Department of Community Development, Faculty of Human Ecology, University Putra Malaysia, Malaysia  <a href="mailto:z.ajri@yahoo.com">z.ajri@yahoo.com</a>; * <a href="mailto:shatar@putra.upm.edu.my">shatar@putra.upm.edu.my</a></p> <p><b>Abstract:</b> Promoting positive sense of self and taking care of self among people are important factors in order to achieve health promotion in every community. As self-forgetting is special character among codependents, so this study aims to find differences of self-care behavior by comparing families of addicts/alcoholics who practice the "12-step program" and who do not. In other words, this study investigates whether "12-step program" can empower families of addicts/alcoholic to change their self-care style or not. Theory of empowerment is the key theory to conduct this study. The findings of this study indicate that "12-step program" is effectiveness program to enable codependents to having positive self-image. In other words, independent samples t-test reveals that codependents who practice the "12-step program" take care of themselves more than another group who did not practice this program.  [Zahra Ajri, Shatar Sabran. <b>Changing of Self-Care Behavior by Practicing 12-Step Program among Codependents in Iran</b>. Journal of American Science 2011;7(1):170-173]. (ISSN: 1545-1003).  <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Keywords:</b> 12-Step program; Addiction; Al-Anon &amp; Nar-Anon; Codependency; Families of Addict; Self-care</p>	<a href="#">Full Text</a>	26
27	<p style="text-align: center;"><b>Role of <i>Atherina</i> Species in Transmitting some Bacterial Diseases to Human</b></p> <p style="text-align: center;">Mohamed E. M. Mohamed, Maysa A.I. Awadallah*, Magda A. Amin, and Rasha M. M. Abou-Elez  Department of Zoonoses, Faculty of Veterinary Medicine, Zagazig University, Zagazig, Egypt  <a href="mailto:maysavet@hotmail.com">maysavet@hotmail.com</a>*</p> <p><b>Abstract:</b> A total of 530 samples (300 from fresh water marine <i>Atherina</i>), 130 samples from water used for preparation of <i>Atherina</i> fish for selling, and 100 hand swabs from their handlers) were collected from randomly selected markets from 3-localities in Sharkia governorate, Egypt. All samples were examined for the presence of <i>Staphylococcus</i> species and <i>Enterobacteriaceae</i>. Moreover, the effectiveness of freezing, salting, and commercial vinegar (5% acetic acid) treatment on the survivability of <i>Staphylococcus</i> spp. and <i>Enterobacteriaceae</i> in <i>Atherina</i> fish was also evaluated. Results revealed <i>S. aureus</i> were detected in 65.7% of the surface swabs and 35.7% of muscle samples of fresh water <i>Atherina</i> fish. The prevalence of <i>S. aureus</i> in the surface swabs and muscle samples of marine <i>Atherina</i> fish were 62.2% and 25.6%, respectively. <i>Enterobacteriaceae</i> isolated from surface swabs of <i>Atherina</i> fish were; <i>E. coli</i> (5.33%), <i>Kl. Oxytoca</i> (7%), <i>Kl. pneumoniae</i> (5.7%) <i>Ent. cloacae</i> (5%), <i>P. vulgaris</i> (9%), <i>P. mirabilis</i> (6.3%), <i>Sh. sonnei</i> (1.7%), <i>Cit. freundii</i> (5%), <i>Cit. koseri</i> (6%), <i>Pantoea agglomerans</i> (38.3%), <i>Hafnia alvei</i> (1.7%), <i>M. morgani</i> (2.3%), and unidentified spp. (8.7%). The percentages of isolation of the previous species from muscle samples of <i>Atherina</i> fish were 0.7, 2.3, 1.3, 1.7, 5, 3.7, 0.7, 1.7, 2.7, 24.7, 1.3, 1.3, and 3.7, respectively. The prevalence of <i>S. aureus</i> was 53.1% in water samples used for preparation of fish for selling. <i>Enterobacteriaceae</i> isolated from water samples were <i>E. coli</i> (6.15%), <i>P. mirabilis</i> (7.7%), <i>P. vulgaris</i> (11.5%), <i>Ent. Cloacae</i> (7.7%), <i>Cit. freundii</i> (6.15%), <i>Cit. koseri</i> (6.9%), <i>Kl. pneumoniae</i> (7.7%), <i>Kl. oxytoca</i> (9.2%), <i>Pantoea agglomerans</i> (30.7%), <i>Hafnia alvei</i> (2.3%), <i>M. morgani</i> (3.1%), <i>Sh. sonnei</i> (1.5%), and unidentified species (3.8%). <i>S. aureus</i> was isolated from 73 hand swabs. <i>Enterobacteriaceae</i> isolated from hand swabs were <i>E. coli</i> (5%), <i>P. vulgaris</i> (8%), <i>P. mirabilis</i> (5%), <i>Kl. Pneumonia</i> (6%), <i>Kl. Oxytoca</i> (7%), <i>Ent. Cloacae</i> (6%), <i>Cit. freundii</i> (4%), <i>Cit. koseri</i> (5%), <i>Pantoea agglomerans</i> (36%) and unidentified species (18%). Ten representative biochemically identified <i>E. coli</i> isolates (4 from <i>Atherina</i> fish, 3 from water used for preparation of fish for selling, and 3 from hand swabs of fish handlers) were identified as O<sub>128</sub> (2-strains), O<sub>114</sub> (strain), and O<sub>136</sub> (strain) from <i>Atherina</i> fish, O<sub>26</sub> (strain), O<sub>111</sub> (strain) and untyped strain from hand swabs of fish handlers. However, all isolates from water samples were O<sub>128</sub>. The survivability experiment revealed that all muscle samples were negative for all bacteria species growth</p>	<a href="#">Full Text</a>	27

	<p>from the 1<sup>st</sup> week of freezing. After 1<sup>st</sup> week from freezing, all <i>Enterobacteriaceae</i> were continued to isolate (1:4 each) from the surface swabs of the 4 examined samples. On the other hand, <i>S. aureus</i> was continued to isolate at a rate of 4:4 . All <i>Enterobacteriaceae</i> except <i>P. mirabilis</i> (each with 1:4), <i>S. aureus</i> (4:4), Coagulase negative <i>Staphylococcus</i> spp. (1:4) were continued to isolate after the 2<sup>nd</sup> week from freezing. The isolated species after the 3<sup>rd</sup> week of freezing were <i>Kl. oxytoca</i>, <i>Pantoea agglomerans</i>, and un-identified species (1:4 each), and <i>S. aureus</i> (4:4). <i>Pantoea agglomerans</i>, un-identified species and <i>S. aureus</i> were continued to isolate after 4<sup>th</sup> week. The un-identified species (1:4) and <i>S. aureus</i> (4:4) were continued to isolate until the week 13 from freezing. <i>Kl. oxytoca</i>, <i>P. vulgaris</i>, <i>P. mirabilis</i> (1:4, each) were isolated from surface swabs of fresh water <i>Atherina</i> fish salted in NaCl solution (25%). Moreover, <i>Pantoea agglomerans</i> and <i>S. aureus</i> were isolated with ratios of (2:4) and (4:4) of the same samples, respectively. On the other hand, the bacterial spp isolated from the muscle samples of fish salted at NaCl 25% were <i>Kl. oxytoca</i>, <i>Pantoea agglomerans</i> (1:4, each). All samples salted in 50% and 75% NaCl solution were negative for the presence of <i>Enterobacteriaceae</i> from the 1<sup>st</sup> week and for the whole period of the experiment. <i>E. coli</i> was continued to isolate until the 6<sup>th</sup> hours of treatment but stop to grow after 7 hours from vinegar treatment. <i>S. aureus</i> was negative in all treated samples from the 1<sup>st</sup> hour of treatment.</p> <p>[Mohamed E. M. Mohamed, Maysa A.I. Awadallah, Magda A. Amin, and Rasha M. M. Abou-Elez. <b>Role of <i>Atherina</i> Species in Transmitting some Bacterial Diseases to Human.</b> Journal of American Science 2011;7(1):174-185]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a></p>		
28	<p style="text-align: center;"><b>Quality of Life of School Age Thalassemic Children at Zagazig City</b></p> <p style="text-align: center;"><b>Amal M El Dakhakhny<sup>*1</sup>, Mervat A Hesham<sup>2</sup>, Samah E Mohamed<sup>3</sup>, Fawzia N Mohammad<sup>4</sup></b>  Pediatic Nursing Dewpt., Faculty of Nursing<sup>1</sup>, Faculty of Medicine<sup>2</sup>, Pediatic Nursing Dept.<sup>3</sup>, Pediatic Nursing Dept<sup>4</sup>- Zagazig University , Zagazig , Egypt  <a href="mailto:dr_amal2001@yahoo.com">dr_amal2001@yahoo.com</a></p> <p><b>Abstract:</b> Background: The assessment of quality of life in children, especially in those with chronic illness such as Thalassaemia, is particularly important. It differs from other forms of medical assessment in that it focuses on the individuals' own views of their well-being and other aspects of life, giving a more holistic view of well-being. The aim of the present study was to: assess the quality of life of school-age children with Thalassaemia at Zagazig City. Subjects And Methods: A descriptive study was conducted on a sample of 100 school-age thalassemic children at out-patient Hematology clinic at Zagazig University Hospitals in Sharkia Governorate, Egypt. Two tools were used to collect the necessary data. The first was a structured interview questionnaire sheet including socio-demographic data of children and their parents as well as medical history. The second tool was a standardized tool (the Pediatic Quality of Life Inventory<sup>TM</sup> Version 4.0). Results: The results of the present study revealed that the quality of life of school-age children with Thalassaemia Major was affected. There was a significant association between the total quality of life and compliance with blood transfusion in both child and parent report. In addition, there was a significant association between the total quality of life and regular iron chelation therapy. Conclusion: Thalassaemia has a negative impact on perceived physical, emotional, social and school functioning in thalassaemia patients. Recommendations: Suitable programs aiming to increase children's adherence to the treatment regimen should be provided to increase psychosocial support.</p> <p>[Amal M El Dakhakhny, Mervat A Hesham, Samah E Mohamed, Fawzia N Mohammad. <b>Quality of Life of School Age Thalassemic Children at Zagazig City.</b> Journal of American Science 2011;7(1):186-197]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Key words:</b> Quality of life, thalassaemia major, school-age</p>	<a href="#">Full Text</a>	28
29	<p style="text-align: center;"><b><i>Saccharomyces cerevisiae</i> and Probiotic Bacteria Potentially Inhibit Fumonisin B<sub>1</sub> Production in Vitro and in Vivo</b></p> <p style="text-align: center;"><b>Soheir Ahmed Al-Masri<sup>1</sup>, Soha.M.S.El- Safty<sup>2</sup>, Somaia A. Nada<sup>†3</sup> and Hassan A. Amra<sup>4</sup></b>  <sup>1</sup>Collage of Food Scines &amp; Agriculture, King Saud University, Riyadh , Saudi Arabia , <sup>2</sup>Nutrition &amp; food sciences, Home Economics Dept, Faculty of Education ,Suez Canal University, Ismailia.  <sup>3</sup>Pharmacology Dept. and <sup>4</sup>Food Toxicology and Contaminant Dept. National Research Centre, Dokki, Cairo, Egypt  <a href="mailto:somaianada@yahoo.com">somaianada@yahoo.com</a></p>	<a href="#">Full Text</a>	29

	<p>Abstract: The objective of the present study was to evaluate the efficacy of probiotic bacteria: <i>Lactobacillus rhamnosus</i> GG (LGG), <i>Lactobacillus rhamnosus</i> (LC705) and <i>Saccharomyces cerevisiae</i> (<i>S.cerevisiae</i>) to inhibit <i>Fusarium moniliform</i> (<i>F. moniliform</i>) growth <i>in vitro</i> and to eliminate fumonisin B<sub>1</sub> from body of mature rat <i>in vivo</i>. <i>S.cerevisiae</i>, LGG and LC 705 potentially inhibited <i>F. moniliform</i> growth and fumonisin B<sub>1</sub> production in YES liquid media. The biologically active microorganisms (<i>S.cerevisiae</i>, LGG &amp; LC705) had no toxic effects in rats when orally administered single doses of <i>S.cerevisiae</i> (10<sup>11</sup> CFU ml<sup>-1</sup>) and LGG &amp; LC705 (10<sup>9</sup> CFU ml<sup>-1</sup>). Moreover, daily treatments for 15 days with the three microorganisms in saline concomitant with FB1 in corn oil (5 mg/ml FB1), produced by <i>F. moniliform</i>, exhibited significant reduction in serum ALT, AST, GGT, creatinine, and BUN compared with the positive control group (<i>F. moniliform</i>). Blood glutathione (GSH) level significantly increased (P&lt; 0.05) in groups treated with single-treatment of <i>S.cerevisiae</i>, LGG &amp; LC705 or with fumonisin B<sub>1</sub> containing media. However, fumonisin B<sub>1</sub> - treatment severely depleted GSH level than other treatments. The best results found in <i>S.cerevisiae</i> &gt; LGG &gt; LC705 -YES media containing fumonisin B<sub>1</sub>. The tested microorganisms are safely to use as food additives or preservative due to their antioxidant activity. Our study needs further continuation in this respect.</p> <p>[Soheir Ahmed Al-Masri, Soha.M.S.El- Safty, Somaia A. Nada and Hassan A. Amra. <b><i>Saccharomyces cerevisiae</i> and Probiotic Bacteria Potentially Inhibit Fumonisin B<sub>1</sub> Production in Vitro and in Vivo.</b> Journal of American Science 2011;7(1):198-205]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Keywords:</b> <i>Saccharomyces cerevisiae</i>, Probiotic bacteria, Fumonisin B<sub>1</sub>, <i>Fusarium moniliform</i>, rat, ALT, AST, GGT, creatinine, BUN and GSH</p>		
30	<p style="text-align: center;"><b>Correlation between Caregivers' Burnout and Elderly Psychological Abuse</b></p> <p style="text-align: center;"><b>Fatma Mahmoud Mohammed Elemary<sup>*1</sup>, Hanan Aboelgamelen Ebrahim Essa<sup>2</sup> and Hanaa Hamdi Aly<sup>3</sup></b></p> <p style="text-align: center;"><sup>1</sup>Psychiatric&amp; Mental Health Nursing Department, Faculty of Nursing, Ain Shams University. Cairo, Egypt</p> <p style="text-align: center;"><sup>2</sup>Community Health Nursing Department, Faculty of Nursing, Tanta University. Tanta, Egypt</p> <p style="text-align: center;"><sup>3</sup>Psychiatric &amp; Mental Health Nursing Department, Faculty of Nursing, Zagazig University, Zagazig, Egypt</p> <p style="text-align: center;"><a href="mailto:ya7ya_13@yahoo.com">ya7ya_13@yahoo.com</a>*</p> <p><b>Abstract:</b> Psychological abuse of elders is a growing but hidden problem and is often under reported. Aim: this study aims to investigate the correlation between caregivers' burnout and elderly psychological abuse. Design: A descriptive correlational research design was utilized to conduct this study. Sample :It included 150 older person residing Dar El-Deiafaa, Dar El-Salam and Dar El-Zahraa for disabled and elderly people and 50 of caregivers (nurses&amp; elderly sitters) ,who are working in these settings. Tools of data collection: include,1) socio-demographic data sheet concerned with caregivers' personal characteristics,2) Burnout Inventory developed by Maslach (1981),it was modified and translated into Arabic by the researchers and 3) Elder Abuse Screening Instrument developed by Fulmer et al (2004), that was modified and translated into Arabic by the researchers. Results: the study results revealed that, 34% of the studied caregivers their ages ranged from 35 to 40 years, 62% were male,52% their education at secondary stage &amp; only 8% had university degree. Majority of them 64% worked as elderly sitter and 36% were nurses. 62% were unsatisfied with their paid, and 38% were satisfied with their paid. 58% had experience less than 5 years in their working with the elders, but 6% only had experience more than 10 years. Conclusion: There are strong positive associations between levels of caregivers' burnout and levels of elders' psychological abuse. Recommendations: I t is recommended that media coverage of abuse in elders homes has made the public knowledgeable about-and outraged against-abusive treatment in those settings, providing education, appropriate training and counseling for the caregivers to find solutions for their problems and the problems of the elderly and about the risk factors for abuse.</p> <p><b>[Fatma Mahmoud Mohammed Elemary, Hanan Aboelgamelen Ebrahim Essa and Hanaa Hamdi Aly. Correlation between Caregivers' Burnout and Elderly Psychological Abuse.</b> Journal of American Science 2011;7(1):206-214]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a></p>	<a href="#">Full Text</a>	30
31	<p style="text-align: center;"><b>Synthesis and structure-activity relationship of new cephalosporins modified at C-7 and C-4</b></p>	<a href="#">Full Text</a>	31

**H. M. Hassan\*; S. A. Shedid; M. F. Badie and R. M. Eisawy**

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**Abstract:** The synthesis and antimicrobial activity of a series of cefaclor derivatives bearing phthalyl or tosylaminoacyl or dipeptidyl moieties attached to the -amino group of the 7-phenylglycinamido acyl unit, or amino acid residues and their corresponding methyl esters linked to the carbonyl group on C-4 are described. Some compounds of this series were found to possess high activity against pseudomonas aeruginosa and other Gram-negative bacteria.

[H. M. Hassan; S. A. Shedid; M. F. Badie and R. M. Eisawy. **Synthesis and structure-activity relationship of new cephalosporins modified at C-7 and C-4.** Journal of American Science 2011;7(1):215-221]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>.

**Keywords:** Cefaclor, amino acids, antimicrobial activity

Interactive Compromise Stability of Multi-objective Nonlinear Programming problems

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**Abstract:** This paper presents a solution method for multi-objective nonlinear programming (MONLP) problems and stability of this solution. The method, offers a practical solution to MONLP problems by deriving the compromise weights and combining judgment with an automatic optimization technique in fuzzy decision making. This is achieved by using the method and algorithm of compromise programming and the method of compromise weights, and we obtain the stability for the solution in each step of the algorithm. A numerical example illustrates various aspects of the results developed in this paper. A maple procedure for this algorithm is introduced.

[Kassem, M., El-Benna, A., and El-Badry, N., Interactive Compromise Stability of Multi-objective Nonlinear Programming problems. Journal of American Science 2011;7(1):222-229]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>.

**Keywords:** MONLP; Stability; Interactive decision making; Compromise weights; Membership functions.

### Management of Recurrent Pterygia

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**Abstract: PURPOSE:** The objective of this study was to evaluate the postoperative outcomes of different surgical techniques with adjunctive therapy for the management of recurrent pterygia. **MATERIALS and METHODS:** Twenty eyes of twenty patients (7 females and 13 males, mean age 42.3 +/- 9.6 years) operated on for recurrent pterygia at the Research Institute of Ophthalmology, were recruited in this study. Patients were randomized into two groups: In group1, ten eyes of ten patients were done with conjunctival autograft and in group 2, ten eyes of ten patients were done with limbal conjunctival autografting. All eyes received intraoperative mitomycin C 0.01% for 3 minutes applied to the bare sclera at the time of the operation. The site of application of mitomycin C was thoroughly irrigated with balanced salt solution. All eyes were followed up every month for 12 months. **RESULTS:** After a mean postoperative follow up of 12 months, only one eye had a recurrence after 4 months in the limbal conjunctival autograft group and there were two eye with recurrence after 2 and 4 month in the conjunctival autografting group (p = 0.027). No severe side effects appeared during the follow up period. **CONCLUSION:** This study confirms the efficacy of adjunctive therapy in improving the success rate after recurrent pterygium surgical excision. There was no difference between the two surgical procedures in the two groups, we also found no serious complications from using a low concentration (0.01%) of mitomycin C which was effective also in prevention of recurrences.

	<p>[Ahmed A Zaki , Sherif Emerah , Mohamed Ramzy, Hany M Labib. <b>Management of Recurrent Pterygia.</b> Journal of American Science 2011;7(1):230-234]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.  <b>Keywords:</b> Management; Recurrent; Pterygia</p>		
34	<p><b>Prevalence, Risk Assessment and Impacts of Eye Diseases among School Children in Cairo, Egypt</b></p> <p><b>Essam A. El-Moselhy<sup>*1</sup>; Hosam S. Abo-Seif<sup>2</sup>; Eman S. Abd Allah<sup>3</sup> and Ahmed A. Ghandor<sup>1</sup></b>  Department of Community Medicine<sup>1</sup>; Department of Ophthalmology<sup>2</sup> Faculty of Medicine  Al-Azhar University, Cairo, Egypt.  Department of Community Health Nursing<sup>3</sup>, Faculty of Nursing, Zagazig University, Zagazig, Egypt.</p> <p><b>Abstract:</b> Introduction: Eye diseases represent an important public health problem in childhood. Objectives: The aim of this study was to define the prevalence of different types of eye diseases, to assess risk of these diseases, and to determine the disease impacts on scholastic achievement of school students in Cairo, Egypt. Research design: A cross-section, analytical study design was chosen to perform this study. Research setting: The study was conducted in Al-Marg region, east district of Cairo. Four, randomly selected, schools were the field of the present study in this region. These schools were two primary schools (one public and one private) and two preparatory schools (one public and one private). Subjects and methods: The total number of students was 2160. All the students were examined clinically; for each case with eye disease a control case was chosen. The cases and controls were interviewed. Results: The study showed that 28.2% of the students have eye diseases. The most common eye diseases were trachoma (9.3%), errors of refraction (7.1%) and allergic conjunctivitis (6.3%). All eye diseases were more common in public schools. The most important significant socioeconomic and health care behavioral risk factors for eye diseases were the low level of parental occupation (OR=4.79), no early consultation for eye diseases (OR=3.13) and never received eye examination (OR= 2.68). Also, the most important significant personal characteristic risk factors were previous eye diseases (OR=3.35), positive consanguinity of the parents (OR=2.67), sibling(s) with eye diseases (OR=2.19), last birth order child (OR=1.90) and male sex (OR=1.56). Further, age and/or sex were significant risk factors for specific eye diseases; trachoma, errors of refraction, allergic conjunctivitis and muco-purulent conjunctivitis. Also, 37.7% of the students with eye diseases had significant school absenteeism 3-4 days/month (P=0.01) and 21.8% of them had significant results of the first term exam &lt;50.0% (P=0.00). Conclusions: Eye diseases are prevalent among school students, especially in public schools in Cairo, Egypt. Many of the risk factors of eye diseases can be manipulated. So, these diseases and its negative impacts can be prevented. Recommendation: Improving students' and environment's hygiene, health education, regular eye screening and treatment of students as regard eye diseases in Egypt are an important essentiality. Also, eye health component of school health services should be integrated in school health program, and this should be integrated in medical and nursing curriculums. Lastly, further studies on large numbers of students in different rural and urban areas in Egypt are recommended.</p> <p>[Essam A. El-Moselhy; Hosam S. Abo-Seif; Eman S. Abd Allah and Ahmed A. Ghandor. <b>Prevalence, Risk Assessment and Impacts of Eye Diseases among School Children in Cairo, Egypt.</b> Journal of American Science 2011;7(1):235-246]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.  <b>Key words:</b> Eye Diseases, School Children, Impacts</p>	<p><a href="#">Full Text</a></p>	34
35	<p><b>The Effect of Tacit Knowledge Characteristics on Tacit Knowledge Transfer: An Empirical Study within Egyptian Industry</b></p> <p><b>Mamdouh Refaiy</b>  Associate Professor in Business Administration  Business Administration Department, Faculty of Commerce, Ain Shams University, Cairo, Egypt.  <a href="mailto:Mamdouh_Refaiy_17858@Hotmail.com">Mamdouh_Refaiy_17858@Hotmail.com</a></p> <p><b>Abstract:</b> The purpose of this research paper is to examine the effect of tacit knowledge characteristics TKC on success factors to tacit knowledge transfer SFTKT from external sources such as suppliers, buyers, universities, and competitors to the recipient of knowledge. This research paper was based on questionnaire survey of Egyptian Industry Sector (75 companies) to investigate the range of attitude and</p>	<p><a href="#">Full Text</a></p>	35

	<p>their ability to transfer both organisational and technological knowledge. The questionnaire was carried out by two ways; online, and the great majority via interviews questionnaire. In addition to, the empirical evidence collected from the survey confirms that the urgent need to continuous tacit knowledge transfer process in order to achieve a competitive advantage and sustainability. Additional, results suggest a strong positive effect of tacit knowledge characteristics on success factors to tacit knowledge transfer. As well as, empirical study involved the study of the tacit knowledge and classifying it into organisational and technological knowledge depends largely upon functional perspective. This was due to the user diversity.</p> <p><b>[Mamdouh Refaiy. The Effect of Tacit Knowledge Characteristics on Tacit Knowledge Transfer: An Empirical Study within Egyptian Industry. Journal of American Science 2011;7(1):247-263]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</b></p> <p><b>Key words:</b> tacit knowledge, tacit characteristics, organisational knowledge, technological knowledge, transfer factors, transfer barriers, Egyptian Industries Union</p>		
36	<p style="text-align: center;"><b>Evaluation of an experimental zinc phosphate cement powder</b>  <b>Safwat EM<sup>1</sup>, Saniour SH<sup>2</sup>, Zaki DY<sup>1</sup>, El-Batran MM<sup>3</sup>, Mousa IM<sup>2</sup></b></p> <p><sup>1</sup>Restorative and Dental Material Research Department, National Research Centre. Cairo, Egypt  <sup>2</sup>Biomaterials Department. Faculty of Oral and Dental Medicine. Cairo University.  <sup>3</sup>Basic Dental Science Department. National Research Centre. Cairo, Egypt.</p> <p style="text-align: center;"><b>Corresponding author:</b> Engie_safwat@hotmail.com</p> <p><b>Abstract:</b> The aim of this study was to evaluate the properties of an experimentally prepared zinc phosphate cement powder. The working time, setting time, film thickness, compressive strength and solubility were tested for the experimental cement powder and compared with one of the commercially available zinc phosphate cement. Testing was done according to the ANSI/ADA specification No. (8) for zinc phosphate cement and No. (96) for dental water-based cements. Results revealed that the experimental cement produced working time, setting time, film thickness and solubility comparable with that specified by the ADA specification No. (8) and (96), and with that of the commercial cement, however the compressive strength (42.09 MPa) was significantly lower than that specified by the ADA No.(96) (70 MPa) but was not significantly different than that of the commercial cement (49.6 MPa).</p> <p><b>[Safwat EM, Saniour SH, Zaki DY, El-Batran MM, Mousa IM. Evaluation of an experimental zinc phosphate cement powder. Journal of American Science 2011;7(1):264-268]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</b></p> <p><b>Key words:</b> zinc phosphate cement, ANSI/ADA specification No.(8) and No.(96), working time, setting time, film thickness, compressive strength, solubility, disintegration</p>	<a href="#">Full Text</a>	36
37	<p style="text-align: center;"><b>Assessment of Egyptian buffaloes crossing with Pakistani and Italian buffaloes for some production traits</b></p> <p style="text-align: center;">Fooda, T. A.; Elbeltagi , A. R.; Laila R. Hassan and SetEl-habaeib S. Awad  Animal Production Research Institute-Buffalo Breeding Research Department- Dooki- Giza – Egypt  <a href="mailto:Tarek_Fooda@yahoo.com">Tarek_Fooda@yahoo.com</a>; <a href="mailto:Ahmed_elbeltagi@yahoo.com">Ahmed_elbeltagi@yahoo.com</a>; <a href="mailto:lailarashad@hotmail.com">lailarashad@hotmail.com</a>;  <a href="mailto:dr_habaeb@yahoo.com">dr_habaeb@yahoo.com</a></p> <p><b>Abstract:</b> Egyptian buffaloes are considered one of the most important dual purpose farm animals that represent 44% of dairy animals in Egypt. In 1980, the Animal Production Research Institute (APRI) imported 93 Pakistani semen straws for crossbreeding to improve milk productivities. In 2003, Ministry of Agriculture (MoA) allowed the commercial importation of Italian buffalo semen, which spread in large scale buffalo farms. The study aims to evaluate the Egyptian buffalo crosses with both Pakistani and Italian buffaloes for some productive traits to assess the crossing trials. For the first trial of the study, 180 records (85 pure Egyptian buffaloes (E), 22 record ½Egyptian (E)½ Pakistani (Pa) buffaloes and 52 record ¾E ¼Pa buffaloes and 21 record 7/8E 1/8Pa) through the period from 1980 to 1998 were used for the evaluation of Egyptian (E) Pakistani (PA) crossbred. Data for the second trial, concerned with the evaluation of the Egyptian (E) Italian (I) crosses, was collected from two private farms. A total 138 records; 64 record from Ganat Elreda farm (32 record E and 32 record ½E ½I) and 74 records from "United Group farm" (26 record E and 48 record ½E ½I buffaloes) was utilized. Utilized record covers the period from 2005 to 2009. Average for total milk yield was nearly the same for Egyptian and its cross with Pakistani buffaloes. In trial 1, Milk yield generally tended to increase with the advancement of parities till</p>	<a href="#">Full Text</a>	37

	<p>the 7 parity. Egyptian buffaloes showed the highest values for all growth traits measures. In trial 2, significant difference in milk productivity between the Egyptian and its Italian crossbred, which was significantly higher (<math>P \leq 0.001</math>) in farm 2 than it is in farm 1 (<math>P \leq 0.01</math>), was observed. The same trend in difference was detected for the parity effect. Italian crosses showed higher least square means (LSM) estimates for total milk yield (TMY) than the Egyptian buffaloes, which also increase with the advancement of the parity, in the two farms. LSM data reveal increase of 27 and 15% in 1/2E1/2I crossbred milk production than the Egyptian in farm 1 and farm 2, respectively. Difference between the highest and lowest breeding value (BV) in the Egyptian population is larger than it is in the crossbred population. More studies are recommended for the assessment of productive, reproductive and genetic diversity of crossbred populations before the enhancement of crossbreeding activities on national level.</p> <p>[Foda, T. A.; Elbeltagi, A. R.; Laila R. Hassan and SetEl-habaeib S. Awad. <b>Assessment of Egyptian buffaloes crossing with Pakistani and Italian buffaloes for some production traits.</b> Journal of American Science 2011;7(1):269-276]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Keywords:</b> Egyptian, Pakistani and Italian buffaloes, crossing, production traits, breeding value</p>		
38	<p><b>Effect of Early versus Late removal of Urinary Catheter on Urinary Outcome after Hysterectomy</b></p> <p style="text-align: center;"><b>Nahed F., Khedr.</b> Maternity and Gynecology Nursing, Faculty of Nursing,- Mansoura University</p> <p><b>Abstract:</b> Aim of the study: this study aims to explore the effect of early versus late removal of urinary catheter on urinary outcome after hysterectomy. Setting:_This study was conducted in the gynecology department of Mansoura University Hospital. Study Design: quasi experimental design. Sample Type:-purposive sample. The study comprised of 100 gynecologic women, they were chosen according to the following criteria:-Complained from symptoms of uterine prolapse, undergoing hysterectomy, their age ranged from 40 -&gt;60 years old and free from any other gynecological problems. They were categorized into two groups: 1) early group, had early removal of urinary catheter 12 – 24 hours after surgery. 2) late group had late removal of urinary catheter after surgery by 48 – 72 hr,s. Results: Urinary symptoms " retention of urine, frequency, burning micturation and UTI were significantly higher in late urinary catheter elimination group as compared to early removal group . Conclusion: Short duration of postoperative catheterization "12-24" hour's is preferred than long duration in which it lead to less urinary problems. Also age of women, degree and duration of uterine prolapse don't play a major role in development of post catheter removal urinary symptoms. Pre existing of postoperative UTI had a main role in the development of these symptoms. Thus it was recommended that ideal time of removal of urinary catheter is from 12-24 hour hysterectomy.</p> <p>[Nahed F., Khedr. <b>Effect of Early versus Late removal of Urinary Catheter on Urinary Outcome after Hysterectomy.</b> Journal of American Science 2011;7(1):277-281]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Key Words:</b> Urinary Catheter, Urinary Outcome, hysterectomy, pyelonephritis, Postoperative</p>	<a href="#">Full Text</a>	38

39	<p style="text-align: center;"><b>Effect of protein feeding system on the quality of milk and its resultant Domiati Cheese</b></p> <p style="text-align: center;"><b>EL-Sheikh, M.M.; S.A.H. Abo EL-Nor; Nadia M. Shahein and N.S. Abd Rabou</b> Dairy Department, National Research Centre, Dokki, Cairo, Egypt <a href="mailto:ns_abdrabou@hotmail.com">ns_abdrabou@hotmail.com</a></p> <p><b>Abstract:</b> The use of Sunflower meal (SFM) and Leucaena leaves (LL) as a source of 30% of protein requirements in the feeding system of dairy buffaloes and its effect on the yield and composition of milk as well as its resultant Domiati cheese was investigated. The yield of fresh cheese was determined and cheese was pickled in salted whey for 4 months. Samples were taken from milk and also from cheese monthly during storage and were analyzed for moisture, fat, lactose, acidity, amino acids and nitrogen fractions. Formol &amp; Schilovich ripening indices and total volatile fatty acids contents of cheese were estimated as well as their organoleptic properties. Using of SFM and LL increased total solids, fat and total protein of milk. However, the mean values of ash content of milk were lower for SFM and LL treatments. LL milk of LL was the highest in the essential amino acids. Satisfactory of fresh cheese yield (32.12%) for LL treatment, which was higher than control (30.25%) and SFM treatment (30.12%). No significant differences were found among all treatments for the gross composition. Domiati cheese made with LL milk showed the highest total nitrogen and the lowest acidity at the end of ripening period SN/TN % was higher with LL during ripening than SMF and control, while TVFA was higher with control than LL and SFM treatments. Ripening indices FRI &amp; SRI shows that the LL ranged the higher values, followed by that made with SFM and control treatments. The total evaluation scores of fresh cheese were almost the same for all treatments. However, Domiati cheese from LL higher scores than control and SFM at the end of storage period. It can be concluded that sunflower meal and Leucaena leaves can be use as a source of 30% of protein requirements in the feeding system of dairy buffaloes and the milk yielded from this buffaloes can be successfully used in the manufacture of more quality of Domiati cheese. [EL-Sheikh, M.M.; S.A.H. Abo EL-Nor; Nadia M. Shahein and N.S. Abd Rabou. <b>Effect of protein feeding system on the quality of milk and its resultant Domiati Cheese</b>. Journal of American Science 2011;7(1):282-290]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>. <b>Key Words:</b> Domiati cheese system, Sunflower meal ,Leucaena leaves</p>	<a href="#">Full Text</a>	39
40	<p style="text-align: center;"><b>Application of Alpha mapping ( -mapping) of SP well-log Image, to obtain lithology and Correlate to evaluate the Reserves of Shan4 Depression of Shahejie formation China</b></p> <p style="text-align: center;">Taiwo Olusoji Lawrence Department Petroleum and Natural Gas Engineering China University of Geosciences 430074 P.R China <a href="mailto:taiwosoji@gmail.com">taiwosoji@gmail.com</a></p> <p><b>Abstract:</b> Deducing geological parameters using SP curves is a very tedious, expensive, and error prone process such as obtaining formation water resistivity and the measurement of small negligible voltage potentials, mud filtrate resistivity and shale volume. This is due to the fact that there are many complex dependent variables surrounding data acquisition using Statistical method of data collection in an SP log image, these variables includes: borehole invasion, shale content, Bed resistivity and the ratio of salt water mud (<math>R_{mf}</math>) and fresh water mud (<math>R_w</math>). We have used Alpha ( ) mapping method of SP-Log considering the shale content of the formation and the maximum possible deflection of Sp that a thick shale free porous and permeable formation can have at a given ratio of <math>R_{mf}</math> and <math>R_w</math> to obtain the lithology of Shan4 depression as well as limit error to the bearest minimum at a low cost of acquiring the petrophysical parameters. Based on the Structure map Shan4 depression in shahejie formation is composed of a complex depositional system of a prograded elongated delta, beach and bar formed under lower current energy of a shore-shallow lake. Hydrocarbon trap is created by an anticline pool separated by numerous oil layered complex faults, Oil and seeps in the depression are found in Tertiary sandstone reservoirs as well as underlying basement located at an approximate depth of 2020m below sea level (-2020m), including the Jurassic sandstone reservoirs and the carboniferous –Permian and Ordovician weathered zone.</p>	<a href="#">Full Text</a>	40

	<p>[Taiwo Olusoji Lawrence. <b>Application of Alpha mapping ( -mapping) of SP well-log Image, to obtain lithology and Correlate to evaluate the Reserves of Shan4 Depression of Shahejie formation China.</b> Journal of American Science 2011;7(1):291-299]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> SP well-log; Shahejie formation; lithology; correlate</p>		
41	<p style="text-align: center;"><b>Simple Novel Spectrophotometric and Spectrofluorimetric Methods for Determination of Some Anti-hypertensive Drugs</b></p> <p style="text-align: center;"><b>M. Farouk<sup>1</sup>, O. Abd EL-Aziz<sup>1*</sup>, A. Hemdan<sup>b</sup>, M. Shehata<sup>2</sup></b></p> <p><sup>1</sup>Analytical Pharmaceutical Chemistry Department, Faculty of Pharmacy, Ain Shams University, African Union, Cairo, Egypt.  <sup>2</sup>Pharmaceutical Chemistry Department, Faculty of Pharmacy, Ahran Canadian University, 6<sup>th</sup> October, Egypt.  <a href="mailto:dr_omarghonim@hotmail.com">dr_omarghonim@hotmail.com</a>*</p> <p><b>Abstract:</b> Accurate, precise and selective spectrophotometric and spectrofluorimetric methods were developed and subsequently validated for determination of Torasemide (I), Irbesartan (II) and Olmesartan medoxomil (III), where (I) could be determined in presence of its acidic-degradate as stability indicating method, utilizing derivative ratio spectrophotometry, also in human plasma it could be determined by spectrofluorimetric method, (II) could be determined in a binary mixture with Hydrochlorothiazide (HCTZ) by simultaneous determination, utilizing ratio subtraction and spectrofluorimetric techniques, while (III) could be determined in presence of its alkaline-degradate as stability indicating method, utilizing derivative ratio and pH-induced difference spectrophotometric technique, also in a binary mixture with Hydrochlorothiazide (HCTZ), it could be determined by simultaneous determination, using ratio subtraction and spectrofluorimetric methods. All the proposed novel methods were validated according to International Conference of Harmonization (ICH) guide lines and successfully applied to determine the mentioned studied drugs in pure form, in laboratory prepared mixtures and in pharmaceutical preparations. The obtained results were statistically compared to the reference methods of analysis [for I, II and III, respectively] and no significant difference were found.  [M. Farouk, O. Abd EL-Aziz, A. Hemdan, M. Shehata. <b>Simple Novel Spectrophotometric and Spectrofluorimetric Methods for Determination of Some Anti-hypertensive Drugs.</b> Journal of American Science 2011;7(1):300-]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.  <b>Keywords:</b> Torasemide, Irbesartan, Olmesartan medoxomil, Derivative Ratio, Ratio subtraction, Difference Spectrophotometry, Spectrofluorimetry, Stability Indicating and Simultaneous Determination Methods</p>	<a href="#">Full Text</a>	41
42	<p style="text-align: center;"><b>Repair Welding Restoration of the Screw Conveyor for Resin Extruder</b></p> <p style="text-align: center;"><b>M. Amin<sup>*1</sup>, S. M. Khafagy<sup>2</sup> and B. Zaghlool<sup>1</sup></b></p> <p><sup>1</sup>CMRDI, Cairo, Egypt, <sup>2</sup>TIMS Cairo, Egypt  <a href="mailto:morsy_abokhala@yahoo.com">morsy_abokhala@yahoo.com</a>*</p> <p><b>Abstract:</b> A screw conveyor was exposed to an extensive wear at the top and the side surfaces of the teeth. The microstructure of the base metal is martensitic structure. Welding procedure specification (WPS) and Process Qualification Record (PQR) were carefully performed using a scraped part from the screw conveyor. The preheating temperature of 300 to 400 °C was applied and the SMAW process was selected as selected as a welding process. Three types of electrodes were selected which mainly wear and corrosion resistance type. Using chromium Carbide electrodes resulted in a significant appearance of cracks at the weld surface that extended to the heat affected zone. However, Using martensitic electrodes resulted in a crack free weld metal with a significant improve of the wear resistance of the base metal. The effect of applying cushion layer between the base metal and hardfacing layer were studied using two kinds of covered electrodes. The hair cracks that observed using the hardfacing electrodes were greatly reduced using these cushion layers. The results were discussed on the basis of microstructure and the wear resistance of the base metal and the hardfacing layers.  [M. Amin, S. M. Khafagy and B. Zaghlool. <b>Repair Welding Restoration of the Screw Conveyor for Resin Extruder.</b> Journal of American Science 2011;7(1):313-320]. (ISSN: 1545-1003).</p>	<a href="#">Full Text</a>	42

	<a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a> . <b>Keywords:</b> Welding; Restoration; Screw; Conveyor; Resin; Extruder		
43	<p align="center"><b>Assessment of Farmers Knowledge Regarding Innovation Management in Farming Cooperatives in Shoushtar Township, Iran</b></p> <p align="center">Ahmad Reza Ommani  Assistant Professor Islamic Azad University Shoushtar Branch, Iran  <a href="mailto:ommani75451@yahoo.com">ommani75451@yahoo.com</a></p> <p><b>Abstract:</b> The purpose of research is assessment of farmer's knowledge regarding innovation management in farming cooperatives in Shoushtar township of Khouzestan province, Iran. The method of research was correlative descriptive and causal relation. A random sample of Shoushtar township farmers of Khouzestan province, (n=105) were selected for participation in the study. According to results knowledge of farmers regarding management of innovation was moderate. Also regression showed that accessing to communication channel, level of education, income, crop yield, size of farm, social participation, level of participation in extension classes may well explain for 53% (<math>R^2=0.534</math>) changes in knowledge of farmers regarding management of innovation.</p> <p>[Ahmad Reza Ommani. <b>Assessment of Farmers Knowledge Regarding Innovation Management in Farming Cooperatives in Shoushtar Township, Iran</b>. Journal of American Science 2011;7(1):321-324]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Innovation Management, Farmers, Shoushtar</p>	<a href="#">Full Text</a>	43
44	<p align="center"><b>Calculate effects of synergism and antagonism of nutrient elements: nitrogen, phosphorus, potassium and sodium in maize</b></p> <p align="center">Tayeb Saki Nejad  Assistant Professor Department of Agronomy Physiology, Islamic Azad University, Ahvaz branch  *<a href="mailto:saki1971@iauahvaz.ac.ir">saki1971@iauahvaz.ac.ir</a>Corresponding Arthur:  <a href="mailto:TayebSaki1350@yahoo.com">TayebSaki1350@yahoo.com</a></p> <p><b>Abstract:</b> Research projects in three consecutive years in 1999-2000 &amp;2000-2001 and 2001-2002 years. Research Station - Research Azad University of Ahvaz were performed every three years in corn research using factorial experiment with a randomized complete block design with base 4 replications and two water stress factor with four levels as the first factor (<math>I_0</math> : Full irrigation point of FC, control, without water stress, <math>I_1</math>: 75% of the amount of irrigation treatments <math>I_0</math>, mild stress, <math>I_2</math>: 50% of the amount of irrigation treatments <math>I_0</math>, severe stress, <math>I_3</math>: 25% of the amount of irrigation treatment <math>I_0</math>, very severe stress and point of PWP) , period of growth with three levels as the second factor (<math>V_1</math>: vegetative period (until the emergence of the first deployment of plant double ring) <math>V_2</math>: reproductive period, <math>V_3</math>: the grain filling period in 3 years (1999-2000 &amp;2000-2001 and 2001-2002) (Research Station, Islamic Azad University of Ahvaz 3 km south of Ahvaz city was designed and executed. Fertilizer amounts given in the first and second year experiment (1999-2000 &amp;2000-2001) the same (<math>N_{180} P_{70} K_0</math>) was the third year of experiment (2001-2002) 20 percent of the amount of nitrogen and phosphorus fertilizers (<math>N_{216} P_{84}</math>) and the amount of 50 kg ha potassium fertilizer (<math>K_2 O</math>) to determine whether increased nutrient concentrations in the environment of plant roots in the same levels of water stress, changes in the process of accumulation of these elements in plant leaves, or not? Test results gathering process cluster to compare nutrient nitrogen, phosphorus, potassium and sodium in Different levels of water stress showed that the process of absorption and accumulation of nitrogen and phosphorus, two elements as well as potassium and sodium exclusively with each other at 1% level were similar. And because this was similar to that imposed different levels of water stress accumulation amount of both nitrogen and phosphorus element in the plant decreased, but the same amount of respect, two elements of <math>K^+</math> Plant showed an increasing trend Regression analysis of variance in nutrient interaction at different levels of water stress, nutrient interaction with nitrogen phosphorus level of 5%, sodium potassium, nitrogen and potassium at 1% level significant effects on the interaction of elements and showed sodium diet with phosphorus, potassium and sodium phosphate with nitrogen did not provide significant effects. P interaction with N elements with correlation coefficient, linear regression fit showed that with increasing accumulation of nitrogen, phosphorus accumulation also increased with exercise and stress levels decrease Nitrogen accumulation was. Phosphorus accumulation process also presented a significant decrease. fit linear regression interaction of sodium with potassium correlation coefficient</p>	<a href="#">Full Text</a>	44

	<p>showed that whatever amount was increased accumulation of potassium, sodium accumulation process of adjustment and provide significant levels Severe water stress that was greater accumulation of K, the process of absorption and accumulation of sodium than the control treatments (water stress) and mild stress (treatments) can be reduced. Increasing the nitrogen element, additive effect on the accumulation process with correlation coefficient K said that the effects on the control treatment (no water stress) was more evident at different levels of water stress by reducing nitrogen absorption, accumulation of ions to a very moderate state control part of his indicate that if the absorption of nitrogen in different treatments of water stress was not reduced, ion accumulation in the treatments than values obtained was estimated.</p> <p>[Tayeb Saki Nejad. <b>Calculate effects of synergism and antagonism of nutrient elements: nitrogen, phosphorus, potassium and sodium in maize.</b> Journal of American Science 2011;7(1):325-333]. (ISSN: 1545-1003). <a href="http://www.jofamericanscience.org">http://www.jofamericanscience.org</a>.</p> <p><b>Key words:</b> synergism &amp; antagonism, nutrient elements, maize</p>		
45	<p style="text-align: center;"><b>Organochlorine pesticides (OCPs) in Breast milk in Hong Kong-Review</b></p> <p style="text-align: center;">Ningombam Linthoingambi Devi<sup>1</sup>, Qi Shihua<sup>1</sup>, Ishwar Chandra Yadav<sup>2</sup></p> <p style="text-align: center;"><sup>1</sup>State key Laboratory of Biogeology and Environmental Geology, School of Environmental Studies, China University of Geosciences, 388, Lumo road, Wuhan 430074, China.</p> <p style="text-align: center;"><sup>2</sup>Center of Advanced Study in Botany, Banaras Hindu University, Varanasi-225001, Uttarpradesh, India <a href="mailto:nldevi.cug@gmail.com">nldevi.cug@gmail.com</a></p> <p><b>Abstract:</b> Organochlorine pesticides (OCPs) contaminant in human breast milk research is an environmental indicator. Because, diet is a major factor that influences breast milk levels of persistent organic pollutants, with patterns in fish consumption playing a particularly significant role. In this paper review available data on levels of organochlorine pesticides (OCPs), polychlorinated dibenzodioxins (PCDDs) in breast milk of Hong Kong. After reviewing all available data demonstrated that organochlorine pesticides consumption in Hong Kong is decreasing according to time trend.</p> <p>[Ningombam Linthoingambi Devi, Qi Shihua, Ishwar Chandra Yadav. <b>Organochlorine pesticides (OCPs) in Breast milk in Hong Kong-Review.</b> Journal of American Science 2011;7(1):334-340]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key Words:</b> Organochlorine pesticides; Human milk; Hong Kong</p>	<a href="#">Full Text</a>	45
46	<p style="text-align: center;"><b>Customer Complaints Management: Concepts and Applications</b></p> <p style="text-align: center;">Mohammad Taleghani</p> <p style="text-align: center;">Department of Management, Islamic Azad University, Rasht Branch, Iran <a href="mailto:Taleghani@iaurasht.ac.ir">Taleghani@iaurasht.ac.ir</a></p> <p><b>ABSTRACT -</b> In this paper, Customer Complaints Management (CCM) and its associated key challenges were studied as essentials for achieving customer retention and loyalty. Some models illustrating the process of CCM were also demonstrated and discussed. A complaint intensity framework is presented, in which the joint distribution of complaint intensity and outcome satisfaction scores are conceptualized in four resulting quadrants with each quadrant suggesting a different CCM strategy. In empowering CCM, suggestions are proposed and Return on Complaint Management (ROCM) is described as a performance indicator for complaint management profitability. Major findings indicate that effective complaints management requires a cultural change in organization's atmosphere, as well as a systematic approach; different levels should be considered in complaints management; employees participating in teams play an important role in succeeding the complaints handling processes; and CCM empowerment should include strategy, processes, and analysis.</p> <p>[Customer Complaints Management: Concepts and Applications. <b>Customer Complaints Management: Concepts and Applications.</b> Journal of American Science 2011;7(1):341-347]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Customer, Satisfaction, Complaints, Management, Handling, Empowerment</p>	<a href="#">Full Text</a>	46
47	<p style="text-align: center;"><b>Characterization of ZnS Quantum dot (q-dot) by Ultraviolet Visible (UV-VIS) Absorption Spectrum Studies &amp; Comparison with CuO Nanocrystal</b></p> <p><b>Mamun Mohanty<sup>1</sup>, Aurobinda Acharya<sup>2</sup>, Bairagicharan Panda<sup>3</sup>, Selvaraju Balamurgan<sup>4</sup>, Subhendu</b></p>	<a href="#">Full Text</a>	47

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**ABSTRACT:** Ultrasize ZnS quantum dots have been synthesized with (3-Mercatopropyl) trimethoxysilane as the capping agent by the all-aqueous procedure. The size of quantum dot by this method is in the range 4 nm to 10 nm. These quantum dots have been characterized by UV-Visible absorption spectrum. The absorption spectrum of synthesized quantum dots indicate a blue shift with decrease of size of quantum dot. Further UV-Visible absorption spectrum of quantum dot has been compared with that CuO nanocrystal.

[Mamun Mohanty, Aurobinda Acharya, Bairagicharan Panda, Selvaraju Balamurgan, Subhendu Pattnaik, Gourisankar Roy. **Characterization of ZnS Quantum dot (q-dot) by Ultraviolet Visible (UV-VIS) Absorption Spectrum Studies & Comparison with CuO Nanocrystal.** Journal of American Science 2011;7(1):348-351]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Keywords:** Quantum dots, UV-Visible spectrum, Blue shift

**Therapeutic and Protective Effects of Biphenyl Dimethyl Dicarboxylate (DDB) and Silymarin in Human Infected with HCV and in Carbon Tetrachloride Induced Hepatitis in Rats**

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**Abstract:** This investigation aimed to evaluate the therapeutic activity of pure and commercial products of Biphenyl Dimethyl Dicarboxylate (DDB) and Silymarin in humans suffering from HCV and therapeutic and protective effects of Carbon tetrachloride (CCL4) induced liver damage in rats. *Humans* were divided into two groups: Group I: Normal controls (N=20), and group II: Patients suffering from chronic HCV infection; which were subdivided into two subgroups: A, ten patients received Silymarin 140 mg twice daily for one month and B, twenty patients received DDB 10 pilules (15 mg) twice daily for one month. Samples from control and treated groups were collected and obtained serum was analyzed for Aspartate aminotransaminase (AST), Alanine aminotransaminase (ALT), Alkaline phosphatase (ALP or Alk.ph.), Gamma Glutamic transaminase (GGT) and Serum bilirubin (total and direct). In addition, the effect of DDB or Silymarin administration on the mentioned biochemical parameters was measured. Other experiment was conducted in which rats were divided into nine groups, each group comprising of six rats. All rats except the control group were subjected to administration of Silymarin or DDB in pure and commercial products, before and after treatment with CCL4. All serum samples of rats were subjected to liver function tests including: (AST), (ALT), (ALP.) and serum bilirubin as well as kidney functions tests including: blood urea and serum creatinine. Histopathological examination of liver tissues was also performed. The results revealed that DDB improved liver functions in patients suffering from HCV infection, while Silymarin showed insignificant alteration for the same parameters. The raw and commercial products of Silymarin or DDB were significantly improved liver, kidney functions and the histopathological changes after induction of CCL4 toxic hepatitis in rats. Administration of DDB (commercial) for one month to patients suffering from chronic viral hepatitis resulted in a rapid decrease in serum transaminases, especially ALT. Treatment of rats by pure and commercial DDB for 7 days showed improvement in acute hepatocellular necrosis or hepatitis-associated hepatocellular damage caused by

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	<p>carbon tetrachloride. Administration of commercial Silymarin for one month was largely ineffective in patients suffering from viral hepatitis. The results of 7 days treatment by pure and commercial products of Silymarin in rats showed protection of liver tissue. Silymarin has an antioxidant effect. In rats Silymarin increased the level of total protein which indicates hepatoprotective activity as results of accelerate of regeneration process and production of liver cells. Obtained histopathological study confirmed the results of biochemical studies. It is concluded that a superiority and efficacy of DDB over Silymarin in normalizing the liver enzymes and serum bilirubin (total and direct) levels were achieved after treatment of humans suffering from HCV.</p> <p>[Wassfy A. A., Ellaiithy H. M., Hamza Y. E., Arbid M. S., Osman A.H., and Kandil S. M. <b>Therapeutic and Protective Effects of Biphenyl Dimethyl Dicarboxylate (DDB) and Silymarin in Human Infected with HCV and in Carbon Tetrachloride Induced Hepatitis in Rats.</b> Journal of American Science 2011;7(1):352-364]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> DDB, Silymarin, humans, HCV, Rats, CCL4, hepatotoxicity</p>		
49	<p><b>Design and Manufacturing of Parabolic Trough Solar Collector System for a Developing Country Pakistan</b></p> <p>Nusrat Kamal Raja <sup>1</sup>, M. Shahid Khalil <sup>2</sup>, Syed Athar Masood <sup>3</sup>, Muhammad Shaheen<sup>4</sup>  <sup>1,2</sup> Dept of Mechanical Engineering, UET Taxila, Pakistan  <sup>3</sup> Dept of Engineering Management, NUST College of E &amp; ME, Rawalpindi Pakistan  <sup>4</sup> Dept of Computer Science &amp; Engg, UET Lahore, Pakistan  <sup>1</sup> <a href="mailto:kamalraja62@yahoo.com">kamalraja62@yahoo.com</a>, <sup>2</sup> <a href="mailto:shahid.khalil@uettaxila.edu.pk">shahid.khalil@uettaxila.edu.pk</a>, <sup>3</sup> <a href="mailto:atharmasood2000@hotmail.com">atharmasood2000@hotmail.com</a>, <sup>4</sup> <a href="mailto:shaheen@uet.edu.pk">shaheen@uet.edu.pk</a></p> <p><b>Abstract:</b> Pakistan's thirst for electric power has been constantly rising over the years because of population growth, increase in industrial activity and failure of other resources for producing enough energy to meet its growing energy demand, particularly in the remote areas where energy is most needed. Pakistan is basically an energy deficient society and now going towards extreme energy crisis. Moreover, with current demand growth at 8 % annually, Pakistan will have to add 4000 MW to its existing capacity by the year 2018. Pakistan is rich in renewable energy resources; particularly solar energy has a special relevance in Pakistan due to high availability of Sun radiations at an average rate of 4.5-6 kwh / m<sup>2</sup> / day. The purpose of this research is to reduce the cost of conventional power plant by focusing on simplifying the design of collector structure to achieve a high reflecting quality and tracking precision, using available cost effective components, minimizing field construction requirements, and by utilizing the advantages of design engineering and equipment specifications as per environmental impact at feasible locations in most remote and energy starved areas of Pakistan. Most of the area of Pakistan lies in sunny belt of the earth with the sun shine of 6 – 8.5 hours daily having the greatest amount of radiant energy more than 90% of solar radiation, which comes as direct radiation because of the limited cloud coverage and clear sunny weather is experienced 250 to 300 days a year. Different concentrating technologies have been developed or are currently under development for various applications. The Parabolic Trough Solar Collectors system will undoubtedly provide within next decade a significant contribution to efficient, economical, sustainable renewable and clean energy supply to developing countries with positive effect on environmental activities. The collector materials will be used considering conversion efficiency, abundance of the material, low cost structures, ease of application, expected lifetime, and the availability of space at the collection site. Available sites in Pakistan desert can theoretically cover the whole electricity demand of the country. A small configuration system like 25KW can lead to 100MW by scale up as sub unit of larger power plants. This will be the first step to fulfill the energy demand of Pakistan, which has become essential for our economic revival.</p> <p>[Nusrat Kamal Raja, M. Shahid Khalil, Syed Athar Masood, Muhammad Shaheen. <b>Design and Manufacturing of Parabolic Trough Solar Collector System for a Developing Country Pakistan.</b> Nusrat Kamal Raja, M. Shahid Khalil, S. Athar Masood, M. Shaheen. Design and Manufacturing of Parabolic Trough Solar Collector System for a Developing Country Pakistan. Journal of American Science 2011;7(1):365-372]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Species richness; beta-diversity; taxonomic diversity; forest</p>	<a href="#">Full Text</a>	49
50	<p><b>Influence Of Choline Chloride On Quality And Storability Of Peach Fruits Cv. Earligrande.</b></p>	<a href="#">Full Text</a>	50

	<p style="text-align: center;"><b>Wahdan, M. T. * and Faten, H. M. Ismaeil **</b></p> <p style="text-align: center;">*Hort. Dep. Fac. of Agric. Suez Chanel Univ. <a href="mailto:Wahdan2020@yahoo.com">Wahdan2020@yahoo.com</a>  ** Agric. Botany. Dep. Fac. of Agric. Benha Univ. <a href="mailto:fatenismaeil@yahoo.com">fatenismaeil@yahoo.com</a></p> <p><b>ABSTRACT:</b> The effects of preharvest foliar application of Choline Chloride (CC) on fruit quality of "EarliGrande" peaches at harvest and during cold storage at 1°C temperature was investigated. CC was sprayed at concentrations of 0, 500, 1000, 1500 and 2000 mg/L at 30 days preharvest time (DPH). Fruit weight was increased by 500, 1000 and 1500 mg/L CC. At the same concentrations SSC/TA ratio was increased while, fruit acidity was decreased. Sugar, phenol and vitamin C content tended to increase by CC at harvest time. The combination of CC treatments at 1000 and 500 or 1000 mg/L and cold storage at 1°C resulted in a reduction of weight loss (%) in two seasons, respectively. CC in combination with storage resulted in higher fruit firmness, SSC, SSC/acidity and total sugar and a reduction in fruit acidity in both seasons.</p> <p>[Wahdan, M. T. and Faten, H. M. Ismaeil. <b>Influence Of Choline Chloride On Quality And Storability Of Peach Fruits Cv. Earligrande</b>. Journal of American Science 2011;7(1):373-381]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> peaches, EarliGrande, Choline Chloride, fruit quality, storability</p>		
51	<p style="text-align: center;"><b>The Preparation of Paddy Map by Digital Numbers of IRS images and GIS</b></p> <p style="text-align: center;">Mohammadi Torkashvand A.  Department of Horticulture, Agriculture Faculty, Islamic Azad University-Rasht Branch, Rasht, Iran  <a href="mailto:Torkashvand@iaurasht.ac.ir">Torkashvand@iaurasht.ac.ir</a>, <a href="mailto:m.torkashvand54@yahoo.com">m.torkashvand54@yahoo.com</a></p> <p><b>Abstract:</b> Preparing updated map of paddy is an important map in the management and region agricultural planning. In this research, surveying of paddy investigated using IRS Satellite images in the Roudbar region, Guilan, Iran. The mean and standard deviation of training and auxiliary pixels of paddy was calculated. Upper and lower limits of DN-olive orchards were distinguished by the adding standard deviation to mean or diminishing of that. After rounding the upper/lower limits of paddy spectrum reflexes, 22-25, 40-98 and 24-136 of spectrum reflexes limits had been considered for bands 1, 2 and 3 with paddy class. In each band, Paddy limits introduced to software and slicing method used to prepare paddy map. Final map of paddy obtained from crossing of these three maps. The paddy map has been crossed by training point map to calculate the accuracy of method. The results indicate that in classification of images with spectrum reflex statistics, more than 73% of training points had again paddy class in the paddy fields classified map.</p> <p>[Ali Mohammadi Torkashvand, The Preparation of Paddy Map by Digital Numbers of IRS images and GIS. Journal of American Science 2011;7(1):382-385]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Species richness; beta-diversity; taxonomic diversity; forest</p>	<a href="#">Full Text</a>	51
52	<p><b>Study of Some Chemical Pollutant Residues in Catfish at Sharkia Governorate, Egypt</b></p> <p style="text-align: center;"><b>Salah El- Dien, W.M. and Hend, A. Mahmoud*</b></p> <p style="text-align: center;">Animal Health Research Institute, Dept. of Food Hygiene, Zagazig Provincial Lab., Egypt  *Pesticide Residue Dept., Central Pesticide Lab., Agricultural Research Center, Egypt.</p> <p><b>ABSTRACT:</b> Thirty samples of African catfish (<i>Clarias gariepinus</i>) were collected from the markets in Sharkia Governorate for detection and determination of 13 organochlorine pesticides ( BHC, BHC, BHC, heptachlor, heptachlor epoxide, aldrin, dieldrin, endrin, chlordane, endosulfan, pp DDE, pp DDD and pp DDT), 5 organophosphorus pesticides (diazinon, chlorpyrifos, chlorpyrifos methyl, profenophos and disyston) and 11 polychlorinated biphenyls (PCBs) congeners (PCB28, PCB44, PCB70, PCB101, PCB105, PCB138, PCB152, PCB153, PCB180, PCB192, and PCB194). All the tested organochlorine pesticides were detected with the frequency ranged between 30% for BHC and 76.66% for aldrin + dieldrin. Their mean concentrations varied from 1.9 ppb for aldrin to 122.2 ppb for BHC. Meanwhile all the tested PCBs were detected except PCB105 with the frequency lies between 10% for PCB28 and 53.3% for PCB152, while; the mean concentrations varied from 3.0 to 89.16 ppb for PCB194 and PCB152 respectively. All the estimated organochlorine pesticides and PCBs were below the</p>	<a href="#">Full Text</a>	52

	<p>permissible limits in all the examined samples. Meanwhile, the tested organophosphorus compounds were not detected in all the examined samples. The relatively high frequency and levels of organochlorine pesticides and PCBs may be explained by the nature of catfish habits and feeding as exhibited in this study.</p> <p>[Salah El- Dien, W.M. and Hend, A. Mahmoud. <b>Study of Some Chemical Pollutant Residues in Catfish at Sharkia Governorate, Egypt.</b> Journal of American Science 2011;7(1):386-393]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Chemical Pollutant; Residue; Catfish; Sharkia; Governorate; Egypt</p>		
53	<p style="text-align: center;"><b>Surface Morphology of the Tongue of the Hoopoe (<i>Upupa Epops</i>)</b></p> <p style="text-align: center;"><b>Neveen E.R. El-Bakary</b> Department of Zoology, Faculty of Science, Damietta Branch, Mansoura University, New Damietta, Egypt. <a href="mailto:elbakaryneveen@yahoo.com">elbakaryneveen@yahoo.com</a></p> <p><b>Abstract:</b> The tongue of birds fills the oral cavity and has a beak- like shape. The hoopoe's beak is long, slender and slightly down curved, however, the hoopoe's tongue is reduced in the buccal cavity. Several studies have shown morphological differences among the tongue of bird species. The aims of this study was to examine the dorsal lingual surface of hoopoe's tongue using scanning electron microscopy and to compare the present results with those reported in other avian species. The Hoopoe's tongue occupy 2/3 length of the beak. The morphological features observed in the lingual surface are follows; the epithelium of the apex is thickly keratinized, large conical papillae are located at the border between lingual apex and body, small conical papillae are located between lingual body and root and numerous lingual glands are located in the anterior part of the lingual body and in the clefts of the lingual root. The observations of the three dimensional structure of the subepithelial connective tissue revealed the presence of a system of laminae or smaller interconnected ridges, depending on the area of the tongue. We have indicated the possibility that the differences in the structures of the avian tongue related to the differences in the feeding habits.</p> <p>[Neveen E.R. El-Bakary. <b>Surface Morphology of the Tongue of the Hoopoe (<i>Upupa Epops</i>).</b> Journal of American Science 2011;7(1):394-399]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> tongue, birds, hoopoe, scanning electron microscopy</p>	<a href="#">Full Text</a>	53
54	<p style="text-align: center;"><b>Chronic Asthmatic Chest Troubles and Their Effects on Cognitive Functions, Psychosocial Behaviour and Academic Achievement among Children in Egypt</b></p> <p style="text-align: center;">Samuel S*, Safwat M*, Morcos W**, Salem S**, El-Adly T*and Mohammed A. *Department of Paediatrics, Faculty of Medicine, Cairo University **Department of childhealth, National Research center <a href="mailto:samarmsalem@hotmail.co.uk">samarmsalem@hotmail.co.uk</a></p> <p><b>Abstract:</b> Chronic illness is clearly an important factor affecting psychosocial state of children and adolescents. This case-control study is an effort to clarify the effect of chronic asthmatic chest troubles as a chronic illness on the cognition and psychological aspects of such chronically ill children. This was a case control study conducted at the Chest Clinic of the Abou El-Reesh Children's Hospital, Cairo University. It included 23 children suffering from chronic asthmatic chest troubles (13 boys and 10 girls) with an age range of 6-15 years and a mean age of 9.6±2.67(± SD). Twenty three age and sex matched healthy children and living under the same socioeconomic conditions were taken as controls. The Arabic Version of the Revised Wechsler Intelligence Scale for Children (WISC-R) and Pediatric Symptom Checklist (PSCL) were used to assess the cognitive and psychosocial adjustment among children while the mid-year scores for Mathematics and Arabic language were used to evaluate the academic performance. Our results indicated that chronic asthmatic disease has a negative effect on cognitive abilities, psychosocial behavior and academic achievement of such children.</p> <p>[Samuel S, Safwat M, Morcos W, Salem S, El-Adly T and Mohammed A. <b>Chronic Asthmatic Chest Troubles and Their Effects on Cognitive Functions, Psychosocial Behaviour and Academic Achievement among Children in Egypt.</b> Journal of American Science 2011;7(1):400-406]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p>	<a href="#">Full Text</a>	54

	<b>Keywords:</b> Children-chronic, asthma-congitive, function-psychosocial, behavior-academic, achievement		
55	<p><b>Insulin-mimetic activity of vanadium and zinc in diabetic experimental rats</b></p> <p><b>*Nabila, M. Rashwan and **Farida Abdullah Al-Firdous</b>  *Home Economics Dept, Faculty of Education, Suez University, Ismaelia Egypt.  **Department of Nutrition and Food Science , Home Economic , Collage ,Princess Nora Bent Abdul – rahman -University, Riyadh, Saud Arabia</p> <p><b>Abstract:</b> Forty-two adult male albino rats Sprague –Dawley strain were classified into normal control group and five diabetic rat groups which were control (+ve), drug, zinc , vanadium and zinc with vanadium. The diabetic control (+ve) group showed a significant increase in the values of glucose ,glucosylated hemoglobin ,serum alanine and aspartate amino transferase (ALT &amp; AST), alkaline phosphatase (Alk-phos) enzymes, creatinine , urea ,cholesterol, triglyceride (TG), LDL-c, VLDL-c level , cholesterol/ HDL-c ,liver cholesterol, liver total lipid and liver malondialdehyde (MDA) but a significant decrease in final weight, weight gain, FER, insulin, hemoglobin (HB) , packed cell volume ,HDL-c ,liver glycogen, liver glutathione peroxidase (GPX) compared to normal control group. The diabetic rat groups which treated with drug, zinc, vanadium and zinc with vanadium showed a significant decrease in the values of serum glucose , glucosylated hemoglobin, ALT ,AST ,urea, serum cholesterol, triglyceride (TG), LDL-c, VLDL-c level , cholesterol/ HDL-c ,liver cholesterol, liver total lipid and liver malondialdehyde (MDA) but a significant increase in the values of final weight, weight gain percent , FER ,insulin ,packed cell volume (PCV) ,HDL-c ,liver glycogen and glutathione peroxidase (GPX) compared to control (+ve) group.  [Nabila, M. Rashwan and Farida Abdullah Al-Firdous. <b>Insulin-mimetic activity of vanadium and zinc in diabetic experimental rats</b>. Journal of American Science 2011;7(1):407-416]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> vanadium, zinc, diabetes &amp; rat</p>	<a href="#">Full Text</a>	55
56	<p><b>Economic crisis in Guilan textile industry</b></p> <p>Seyed Ali Mirebrahimi ,Hamidreza Alipour  Department of management,economic,collage of management,Islamic Azad University, Rasht Branch, Iran, <a href="mailto:drbehdad_66@yahoo.com">drbehdad_66@yahoo.com</a></p> <p><b>Abstract:</b> Today, industrial development is account as one of means and area for the economic development and improvement of the countries which some of the industrial courses that exist in any country due to relative advantages are account of high priority in industrial development area. textile industry, is account as the most important and oldest industry of the country and Guilan province. It can play a role as the main base of industry and mine sector if there is the required support from producers . But still it is not taken place a remarkable activities as developmental region planning in Guilan and it could not find a scientific and professional figure. So, the main goal of this article is identifying the variables and tensor factors in the Guilan textile industry and turning ways from current situation to modern developmental situation . This research had been attempted to study how turning out of the created crisis aiming to identify the crisis in textile industry and also allocating the optimal resources. The results indicated that the most important and significant problem of textile industry in Guilan is weak in management area .  [Seyed Ali Mirebrahimi and Hamidreza Alipour. Economic crisis in Guilan textile industry. Journal of American Science 2011;7(1):417-421]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>keywords :</b> crisis, economy, textile industry, private sector, technology</p>	<a href="#">Full Text</a>	56
57	<p><b>Effects of Aldosterone Receptor Antagonist on Vascular Calcification and Bone Disorder in Streptozotocin-Induced Diabetic Rat</b></p> <p><b>Shadia A.E. Barakat <sup>1</sup>, Nermine K.M. Saleh <sup>1*</sup>, Sahar S. Thabet <sup>1</sup>, Hanan A. Saleh <sup>2</sup> and Abd El-Hamid A. Mohamed <sup>1</sup></b>  Physiology<sup>1</sup> and Histology <sup>2</sup>Departments, Faculty of Medicine, Ain Shams University, Cairo, Egypt</p>	<a href="#">Full Text</a>	57

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**Abstract:** Background: Vascular calcification and bone disorders are increasingly recognized problems in patients with diabetes due to calcium dyshomeostasis is a major risk factor for cardiovascular morbidity and mortality. Diabetic osteoporosis seems to be dependent on qualitative and quantitative alterations of the bone, as well as microangiopathic complications of diabetes mellitus. Aim: We investigated calcium dyshomeostasis, and bone histological and metabolic abnormalities in Streptozotocin-induced Type 1 Diabetes Mellitus in rats. The possible role of the aldosterone receptor antagonist, spironolactone, in reversing these effects was assessed. Materials and Methods: Adult Female Wistar rats were divided into three groups: Control group, Streptozotocin-induced diabetic group (STZ-D), and Aldosterone-receptor antagonist-supplemented diabetic group (ARA-STZ). Diabetes was induced by a single intraperitoneal injection of streptozotocin, 40 mg/Kg BW. Spironolactone (aldosterone receptor antagonist) was given by oral gavage in a daily dose of 15 mg/kg BW for 4 weeks. At the end of the experiment, serum levels of calcium, phosphate, and alkaline phosphatase were evaluated. Histological examination of the tibia was performed, together with analysis of renal vascular calcification and Immunohistochemistry for inducible nitric oxide synthase (iNOS) in renal tissue specimens. Results: STZ-D rats showed normophosphatemia and significant hypercalcemia with significantly increased serum alkaline phosphatase compared to control group. Bone loss was also observed. Histological examination of the small renal blood vessels showed calcification in the walls, as well as, reduction in iNOS immunostaining. These metabolic and histological abnormalities in STZ-D rats were remarkably corrected by the administration of spironolactone. Conclusion: The current results underscore the important role of aldosterone in promoting vascular calcification and osteoporosis in diabetic rats and the potential role of aldosterone receptor antagonist, spironolactone, in correcting these clinical problems in diabetic rats.

[Shadia A.E. Barakat, Nermin K.M. Saleh, Sahar S. Thabet, Hanan A. Saleh and Abd El-Hamid A. Mohamed. **Effects of Aldosterone Receptor Antagonist on Vascular Calcification and Bone Disorder in Streptozotocin-Induced Diabetic Rat.** Journal of American Science 2011;7(1):422-430]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Key words:** Ca<sup>2+</sup> homeostasis, osteoporosis, vascular calcification, DM, Aldosterone.

### The effects of peer education on health behaviors in girls with dysmenorrhea

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**Abstract:** This study was conducted to compare the effect of peer-led VS health-provider-led self-care education on dysmenorrheic girls' knowledge, attitude, and menstrual symptoms of primary dysmenorrhea at dormitories of Ferdowsi University in Mashhad, Iran. In this randomized clinical trial, 165 girls between ages 19-25 who had experienced menstrual cramps three or more times during the last six months were randomly assigned to three groups (peer-led self-care education, health-provider-led self-care education, and control). A Menstrual Knowledge Questionnaire (MKQ), Menstrual Attitude Questionnaire (MAQ), and Menstrual Information Form were the main instruments in this study. Data were collected in the baseline menstrual period and one and two menstrual periods after intervention. One-way ANOVA and Kruskal-Wallis were used to analyze data by SPSS software. Menstrual Knowledge in the peer-led self-care education group increased 2.1 times and 2.5 times in the health-provider-led self-care education groups. Negative concepts of menstrual attitude decreased in the peer-led self-care education group (56.6

	<p>vs. 40.2, p=0.009) more than the health-provider-led self-care education group (56.9 vs. 48.3, p=0.035). There was no significant difference in the measure of decrease in pain score between interventional groups at both the first (p=0.988) and second (p=0.965) menstrual periods after intervention. These findings provide preliminary evidence that peer education can be effective health promotion in primary dysmenorrheic girls.</p> <p>[Zahra Abedian, Maryam Kabirian, Seyed Reza Mazlom, Behroz Mahram, Mehrdad Jalalian. <b>The effects of peer education on health behaviors in girls with dysmenorrheal.</b> Journal of American Science 2011;7(1):431-438]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> peer education; health behaviors; primary dysmenorrhea</p>		
59	<p align="center"><b>Purification, Characterization and Antitumor Activity of L-asparaginase from Chicken liver</b></p> <p align="center">EL-Sayed , M. El-Sayed<sup>1</sup> , Sanaa T. El-Sayed*<sup>2</sup>, Wafaa, G. Shousha<sup>1</sup>, Abeer, N. Shehata<sup>2</sup> and Shima, S.Hanafy<sup>2</sup></p> <p align="center"><sup>1</sup>Biochemistry, Chemistry Department, Faculty of Science, Helwan University, Helwan, Egypt  <sup>2</sup>Biochemistry Department, National Research Center, DoKKi, Giza, Egypt.  <a href="mailto:santsayed@yahoo.com">santsayed@yahoo.com</a>*</p> <p><b>Abstract:</b> The L-asparaginase (E.C.3.5.1.1) produced by chicken liver was isolated and characterized. Different purification steps (including ammonium sulphate fractionation followed by separation on Sephadex G-100 gel filtration and Sephadex G-200 gel filtration) were applied to crude filtrate to obtain a pure enzyme preparation. The enzyme was purified 128.5 ± 0.5 fold and showed a final specific activity of 158.11 ± 5.0 U/mg with a 17.1 ± 8.6 % yield. Sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE) of the purified enzyme revealed it was one peptide chain with M<sub>r</sub> of 33 kDa while by gel filtration appears to be 36 kDa. The enzyme was very specific for L-asparagine and doesn't hydrolyze L-glutamine. A Lineweaver-Burk analysis showed a K<sub>m</sub> value of 1.66 mM toward L-asparagine as substrate and V<sub>max</sub> of 34.47 U. The enzyme showed maximum activity at pH 9.5 when incubated at 60 C for 20 min. The amino acids composition of the purified enzyme was also determined. Antitumor activity was investigated. The enzyme inhibited the growth of the two human cell lines including hepatocellular carcinoma (Hep-G2) and colon carcinoma (Hct-116) with IC<sub>50</sub> value of 8.38µg/ml and 4.67µg/ml, respectively. While IC<sub>50</sub> was greater than 10µg/ well for MCF7 (breast carcinoma) cell line.</p> <p>[EL-Sayed, M. El-Sayed, Sanaa T. El-Sayed, Wafaa, G. Shousha, Abeer, N. Shehata and Shima, S.Hanafy. <b>Purification, Characterization and Antitumor Activity of L-asparaginase from Chicken liver.</b> Journal of American Science 2011;7(1):439-449]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Chicken liver- gel filtration-purification-amino acid composition- human cancer cell line-antitumor activity</p>	<a href="#">Full Text</a>	59
60	<p align="center"><b>Nursing Intervention Program for Early Detection and Prevention of Breast Cancer among Working Women</b></p> <p align="center">Nahla Ahmed Abd El-Aziz*<sup>1</sup>, Fathia Ahmed Mersal<sup>1</sup> and Nadia Mohamed Taha<sup>2</sup></p> <p align="center"><sup>1</sup>Community Health Nursing, Faculty of Nursing, Ain Shams University, Cairo, Egypt  <sup>2</sup>Medical Surgical Nursing, Faculty of Nursing Zagazig University, Zagazig, Egypt  <a href="mailto:nahla_eassawy@yahoo.com">nahla_eassawy@yahoo.com</a>*</p> <p><b>Abstract:</b> Aim: of the study was to assess the impact of a nursing intervention program leading to health decisions for breast cancer screening among working women with the hypothesis that the intervention will improve women knowledge, modify their attitude, and empower them to take informed health decisions for breast cancer screening. Design: This quasi-experimental design Setting: was conducted in 2 pharmaceutical companies, 2 food processing industries, and a textile factory Sample: a convenience sample 520 women working previous settings, Tools: used for data collection included a self-administered assessment questionnaire assessing knowledge, a health beliefs assessment rating scale, an attitude rating scale, a breast self-examination observation checklist, and a mammography card. A nursing intervention program was designed by the researchers based on the results obtained from the study tools and findings of</p>	<a href="#">Full Text</a>	60

	<p>similar research. Results: The mean age of studied women was 43.2 years, and 56.7% of them had secondary education. Only 5.4% of the women had satisfactory knowledge at the pretest. After program implementation, statistically significant improvements were revealed in women's knowledge about breast cancer and early detection methods, as well as in their related health beliefs and attitudes .Also,73.3% and 72.9% women successfully perform BSE at the post and follow-up phases (p&lt;0.001). The practice of mammogram increased from 4.2% at the pre-intervention to 17.7% at the follow-up (p&gt; 0.001). The highest practices were among women working in pharmaceutical companies, those with age 45 of older, and those with positive family history of breast cancer. Conclusion: Working women had deficient knowledge, and negative perceptions related to breast cancer and its early detection; their practice of breast self-examination and mammography was very low. The intervention program had a positive effect on women's knowledge, practice health beliefs and attitude. Recommendations: Continuous workplace educational health programs are recommended. With supportive health insurance. Further research studies with broader range of occupational setting are suggested.</p> <p>[Nahla Ahmed Abd El-Aziz, Fathia Ahmed Mersal and Nadia Mohamed Taha. <b>Nursing Intervention Program for Early Detection and Prevention of Breast Cancer among Working Women.</b> Journal of American Science 2011;7(1):450-459]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Nursing; Intervention; Breast Cancer; Women</p>		
61	<p><b><i>In Vitro</i> Maturation of Camel Oocytes As Affected By Different Media during Breeding and Non-Breeding Seasons</b></p> <p>A.E.B. Zeidan<sup>1</sup>, M.A. El-Harairy<sup>2</sup>, Sh.A. Gabr<sup>3</sup>, M.A. Tag El-Dien<sup>1</sup>, S. A. Abd El-Rahman<sup>4</sup> and A.M. Amer<sup>1</sup></p> <p><sup>1</sup>Animal Production Research Institute, Dokki, Giza, Egypt.  <sup>2</sup>Department of Animal Production, Faculty of Agriculture, Mansoura University, Egypt.  <sup>3</sup>Department of Animal Production, Faculty of Agriculture, Tanta University, Egypt.  <sup>4</sup>Biology Department, Faculty of Science, Al-Mostansiriya University, Iraq.</p> <p><b>Abstract:</b> A total number of 220 clinically healthy she-camel was used in this study. The age of these camels varied from 5 to 10 years and their weights were approximately 500-600 kg. Two experiments were carried out. The first experiment aimed to define the effect of different seasons of the year on follicular fluid components and ovarian activity either in the right or left ovary. The second experiment designed to define the effects of various maturation media (TCM 199, Ham's F-10, Basal and Hank's) on the <i>in vitro</i> maturation of camel oocytes during breeding and non-breeding seasons. In the first experiment, the obtained results showed that ovary weight and number of corpora lutea were significantly (P &lt; 0.05) higher during spring, winter and autumn seasons, than summer season. Numbers of the normal follicles were significantly (P &lt; 0.05) higher during spring, while the atretic follicles were significantly (P &lt; 0.05) higher during summer season than other seasons. Oocytes recovery, compact oocytes complexes (COC's) and partially denuded cumulus oocytes (PDCO) were significantly (P &lt; 0.05) higher during autumn, while expanded cumulus oocytes (ECO) and denuded cumulus oocytes (DCO) were significantly (P &lt; 0.05) higher during spring and winter seasons than other seasons of the year. The highest (P &lt; 0.05) activities of follicular fluid aspartate – aminotransaminase (AST), alanine – aminotransaminase (ALT), alkaline phosphatase (ALP) and acid phosphatase (ACP) enzymes were recorded during summer and the lowest (P &lt; 0.05) activity was recorded during spring season. The highest (P &lt; 0.05) values of follicular fluid potassium and calcium were recorded during winter and the lowest (P &lt; 0.05) values were recorded during summer season. Testosterone concentration was significantly (P&lt;0.05) higher, however cholesterol concentration was significantly (P &lt; 0.05) lower during summer season, meanwhile oestradiol-17 concentration was significantly (P &lt; 0.05) higher during winter season than other seasons of the year. Ovary weight, number of the corpora lutea (CL) and number of the normal follicles in the left were significantly (P&lt;0.05) higher than the right ovary, while the number of the atretic follicles in the right was significantly (P&lt;0.05) higher than the left ovary. Oocyte recovery and oocyte status (COC's, PDCO, ECO and DCO) in the left ovary were significantly (P &lt; 0.05) higher than the right one. In respect to ovary side, AST, ALT, ALP, ACP, sodium and testosterone concentration of follicular fluid in the left ovary were significantly (P &lt; 0.05) lower than the right one. Cholesterol, potassium, calcium, inorganic phosphorus and oestradiol-17 concentrations in the left were significantly (P &lt; 0.05) higher than the right ovary. In the second experiment, results revealed significantly (P&lt;0.05) higher cumulus expansion, meiosis</p>	<p><a href="#">Full Text</a></p>	61

	<p>metaphase I (MI) and metaphase II (MII) than the non-breeding season . When the type of culture media there was no differences in cumulus expansion except with basal medium which produce the lowest incidence in both breeding and non-breeding season. In breeding season, TCM-199 medium showed the highest rate (P&lt;0.05) of MII oocytes, while in non-breeding season, TCM-199 and Ham's F-10 media showed the highest rates (P&lt;0.05) of MII oocytes.</p> <p>[A.E.B. Zeidan, M.A. El-Harairy, Sh.A. Gabr, M.A. Tag El-Dien, S. A. Abd El-Rahman and A.M. Amer. <b><i>In Vitro</i> Maturation of Camel Oocytes As Affected By Different Media during Breeding and Non-Breeding Seasons.</b> Journal of American Science 2011;7(1):460-472]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Camels, season, ovary, follicular fluids, oocytes, <i>in vitro</i> maturation</p>		
62	<p><b>Synthesis And Evaluation Of Novel Cationic Monomers Viscosifiers For Oil Well Drilling Fluids</b></p> <p>A.M., Badwi, M. M., Dardir* and H. M., Ahmed  Egyptian petroleum research institute EPRI, NASR CITY 11727, CAIRO EGYPT  <a href="mailto:monamdardir@yahoo.com">monamdardir@yahoo.com</a></p> <p><b>Abstract:</b> Novel cationic monomers capable of forming viscoelastic fluid were prepared. The monomers were formed through the quaternization reaction of allyl halides with dimethylalkylamines, triethanolamine or N-N dimethyl aniline. The chemical structures of the prepared monomers were conformed using FTIR and <sup>1</sup>H NMR spectroscopy. The result of the spectroscopic analysis indicate that they were prepared through right method they have high purity and there surface properties were studied. The cationic monomer products were evaluated as viscosifiers and filter loss additives for water –base mud because they were capable of forming viscoelastic fluids in high brine solution. Rheological properties, gel strength, filter loss and thermal stability of the water- based mud formulated with the new cationic monomers were studied compared to the commercial viscosifier (reference sample mud). [A.M., Badwi, M. M., Dardir and H. M., SYNTHESIS and EVALUATION of NOVEL CATIONIC MONOMERS VISCOSIFIERS for OIL WELL DRILLING FLUIDS. Journal of American Science 2011;7(1):473-484]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keyword:</b> Drilling fluids-Viscosifier-Rheological properties</p>	<a href="#">Full Text</a>	62
63	<p><b>Effect of ripening conditions on the properties of Blue cheese produced from cow's and goat's milk</b></p> <p>EL-Sheikh, M.M.; M.H. EL-Senaity; Y.B. Youssef and Nadia M. Shahein and N.S. Abd Rabou  Dairy Department, National Research Centre, Dokki, Cairo, Egypt  <a href="mailto:mmorsy57@yahoo.com">mmorsy57@yahoo.com</a></p> <p><b>Abstract:</b> Blue cheese (style Roquefort) was made from cow's and goat's milk. Fresh cheese was ripened at room conditions for 30 days, then resulted cheese were divided into two portions, one was complete ripened at room conditions and the other was complete ripened at refrigerator for another 30 days. Cheese samples were analyzed at 1, 30 and 60 days of ripening period, for moisture, fat, pH, total nitrogen and free amino acids. Tyrosine &amp; Tryptophan and total volatile fatty acids contents as well as their organoleptic properties. No clear differences were observed between both goat's and cow's cheese in their gross composition. Goat's blue cheese ripened for 60 days at room temperature had a higher total free amino acids contents than that in cow's cheese, while their values were higher when cheese ripened at refrigerator than that ripened at room temperature. Blue cheese from goat's milk showed the highest total volatile fatty acids and Tyrosine &amp; Tryptophan contents during ripening, at the end of ripening, the cheese ripened at room temperature gave the higher values than that ripened at refrigerator. Blue cheese from goat's milk ranked a higher score for organoleptic properties during ripening conditions compare with that made from cow's milk. It can be concluded that goat's milk can be successfully used in the manufacture of blue cheese and ripened at room temperature with high quality over than that from cow's milk.</p> <p>[EL-Sheikh, M.M.; M.H. EL-Senaity; Y.B. Youssef and Nadia M. Shahein and N.S. Abd Rabou. <b>Effect of ripening conditions on the properties of Blue cheese produced from cow's and goat's milk.</b> Journal of American Science 2011;7(1):485-490]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Blue cheese, Cow's Goat's milk</p>	<a href="#">Full Text</a>	63

64	<p style="text-align: center;"><b>Manufacture of Cultured Butter Milk Beverage from Whole and Skimmed Goat's Milk</b></p> <p style="text-align: center;">Youssef, B.Y.; M.H. El-Senaity; M.M. El-Sheikh; N.S. Abd-Rabou and Nadia, M. Shahein Dairy department, National Research Centre, Dokki, Cairo, Egypt. <a href="mailto:ns_abdrabou@yahoo.com">ns_abdrabou@yahoo.com</a></p> <p><b>Abstract:</b> The development of high quality cultured butter milk beverage (CBMB) is primarily dependent on a controlled fermentation of the milk constituents. Cultured butter milk beverage was made from either whole or skim goat's milk, using mesophilic L-starters FR 19-8126 (<i>Lactococcus lactis</i> subsp. <i>lactis</i>, Lact. <i>cermohs</i> subsp. <i>cremoris</i> and <i>Leuconostoc cremohs</i>) and DL-starters A-8101 (the same of microorganisms L-starters contain plus Lact. <i>lactis</i> Subs, <i>diacetilactis</i>). Chemical, flavour and organoleptic properties of the resultant four CBMB treatments were compared, when fresh and during 15 days of storage at 7°C. The CBMB made from goat's whole milk cultured with DL-starters had diacetyl and acetaldehyde values which were reported to be necessary for a good flavour balance. Moreover, it received the highest organoleptic scores. Therefore, this CBMB was recommended to be produced commercially in Egypt. [Youssef, B.Y.; M.H. El-Senaity; M.M. El-Sheikh; N.S. Abd-Rabou and Nadia, M. Shahein. <b>Manufacture of Cultured Butter Milk Beverage from Whole and Skimmed Goat's Milk</b>. Journal of American Science 2011;7(1):491-497]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>. <b>Keywords:</b> Cultured butter milk, Goat's milk, L- starter, DL-starter</p>	<a href="#">Full Text</a>	64
65	<p style="text-align: center;"><b>Well Logs Application in Determining the Impact of Mineral Types and Proportions on the Reservoir Performance of Bahariya Formation of Bassel-1x Well, Western Desert, Egypt.</b></p> <p style="text-align: center;">Tarek F. Shazly and Mohamed A. M. Ramadan* Egyptian Petroleum Research Institute, Cairo, Egypt. <a href="mailto:moh_ramadan2222@yahoo.com">moh_ramadan2222@yahoo.com</a>*</p> <p><b>Abstract:</b> The present work dealt with the computerized well log analysis of Bassel – 1X well in the Sherouk Field in the Northern Western Desert of Egypt to determine the mineralogical composition of Lower and Upper Bahariya Formation and to estimate the influence of these minerals on the different petrophysical parameters of Lower and Upper Bahariya Formation. The lithologic and mineralogical compositions were identified qualitatively through the utilizing of crossplots which were established by using the different petrophysical parameters. Also the lithologic and mineralogical compositions were established quantitatively by using the mathematic equations. The matrix components of Lower Bahariya Formation included few percentage of clay minerals (illite and montmorillonite) and high quantity of quartz, calcite and dolomite, while in Upper Bahariya Formation it involves high percentage of clay minerals (illite and montmorillonite) and low quantity of quartz, calcite and dolomite. These minerals were plotted against the different petrophysical parameters to show the effect of these minerals on the effective porosity and the saturation of hydrocarbon. [Tarek F. Shazly and Mohamed A. M. Ramadan. <b>Well Logs Application in Determining the Impact of Mineral Types and Proportions on the Reservoir Performance of Bahariya Formation of Bassel-1x Well, Western Desert, Egypt</b>. Journal of American Science 2011;7(1):498-505]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>. <b>Keywords:</b> Logs; Mineral Type; Reservoir; Bahariya; Western Desert; Egypt</p>	<a href="#">Full Text</a>	65
66	<p style="text-align: center;"><b>Comparison between Molecular and Classical Techniques for Identification of <i>Mycoplasma</i> species Isolated from Mastitic Ruminants.</b></p> <p style="text-align: center;"><sup>1</sup>Hassan, W.H.; <sup>2</sup>Mona, A. El-Shabrawy; <sup>2*</sup>Hakim, A.S.; <sup>2</sup>Azza, S.M. Abuelnaga; <sup>2</sup> Samy A. A and <sup>2</sup>Sadek E. G. <sup>1</sup> Bact. Mycol. and Immuno. Dept. Vet. Med. Beni-Suef University, Beni-Suef, Egypt <sup>2</sup>Microbiol. and Immuno. Dept. National Research Centre, Cairo, Egypt <a href="mailto:migris410@yahoo.com">migris410@yahoo.com</a>*</p> <p><b>Abstract:</b> 165 cows and 19 buffaloes were examined to detect the <i>Mycoplasma</i> mastitis, the result revealed</p>	<a href="#">Full Text</a>	66

	<p>that 114 (69.59%) and 6 (31.57%) were clinically mastitic cows and buffaloes respectively while 51 (30.9%) and 13( 68.42%) were apparently healthy cows and buffaloes respectively .On examining the apparently healthy cows and buffaloes, the result were 67 (32.84%) and 18 ( 34.61%) from subclinically mastitic cows and buffaloes respectively while 137( 67.15%) and 34 (65.38%) fro apparently completely healthy. <i>Mycoplasma</i> were isolated in percentages of 8.9%, 5.5% from subclinically mastitic cow and buffaloes respectively and in percentages of 12.97%, 12.5% from clinically mastitic cows and buffaloes respectively. <i>M. bovis</i> was isolated from 8 (32%) and <i>M. bovis</i> genitalium was in percentage of 7 (28%) and the unidentified <i>Mycoplasma</i> was 10 (40%). Isolation of <i>Mycoplasma</i> from udder tissue in cows and buffaloes were in percentage of 2 (28.5%) in cows while no <i>Mycoplasma</i> isolates were obtained from buffaloes udder tissues. Application of PCR technique on these isolates and some negative samples, these were positive with percentage 100%. On the other hand, 192 sheep and 118 goats were examined. We found that in percentage of 82 (42.7%) and 43 (36.44) from sheep and goats respectively were clinically mastitic. Isolation of <i>Mycoplasma</i> was in percentage of 11 (13.41%) and 17 (39.53%) of sheep and goat respectively. Identification of these isolates revealed 8 (29%) was <i>M. agalactia</i> isolates and 20 (71%) was unidentified <i>Mycoplasma</i> spp. Application of PCR technique on <i>M. agalactia</i> isolates which identified by traditional techniques by use specific primers to <i>M. agalactia</i> revealed negative results but on using the primer specific to <i>M. bovis</i> to the same isolates, it was positive to all isolates 8 (100%).</p> <p>[Hassan, W.H.; Mona, A. El-Shabrawy; Hakim, A.S.; Azza, S.M. Abuelnaga; Samy A. A and Sadek E. G. <b>Comparison between Molecular and Classical Techniques for Identification of <i>Mycoplasma</i> species Isolated from Mastitic Ruminants.</b> Journal of American Science 2011;7(1):506-613]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> <i>Mycoplasma bovis</i>; <i>Mycoplasma agalactia</i>; mastitis; PCR</p>		
67	<p><b>Molecular and Virulence Characterization of <i>Escherichia.coli</i> strains Isolated from Persistent Bovine Mastitis.</b></p> <p><sup>1</sup>Salwa, M. Helmy; <sup>2</sup>Ammar, M. A.; <sup>3</sup>Aisha R. Ali; <sup>4</sup>Mona, A. El-Shabrawy; <sup>4*</sup>Hakim.A.S.; <sup>4</sup> Bakry, M.A.; <sup>4</sup>Azza, S.M. Abuelnaga and<sup>4</sup>Eraqi, M. M.</p> <p><sup>1</sup>Bacteriology, Mycology and Immunology Department Faculty of Veterinary Medicine Kafrelsheikh University,</p> <p><sup>2</sup> Microbiology, Faculty of Veterinary Medicine, Zagazig University, Zagazig , Egypt</p> <p><sup>3</sup> Serology Unit Animal Health Research Institute Dokki, Giza, Egypt</p> <p><sup>4</sup>Microbiology and Immunology National Research Center, Dokki, Giza, Egypt</p> <p><a href="mailto:migris410@yahoo.com">migris410@yahoo.com</a>*</p> <p><b>Abstract:</b> Four hundred and fifty lactating cows were examined according to the clinical observation and the California mastitis test, 181 were clinical mastitis with the percentages of 40.2%, and revealed 57 <i>E.coli</i> isolates, the incidence of clinical mastitis is higher in hind quarters (63.97%) than the fore quarters (36.02%). Serotyping of <i>E.coli</i> revealed 8 different serovars of <i>E.coli</i> according to somatic antigen O55 (19.2%), O111 (15.8%), O124 (12.3%), O119 (12.3%), O114 (10.5%), O26 (7%), O157 (7%) and O44 (3.5%), in addition, (12.2%) of isolated <i>E.coli</i> strains could not be serologically identified by the available antisera. The incidence of recurrent <i>E.coli</i> mastitis, 26.3% (15 of 57) occurred in 5 of 56 quarters 8.9% of 5 cows, the most <i>E.coli</i> serogroups recovered from recurrent <i>E.coli</i> mastitis from 5 quarters of 5 cows were O55, O119, O111, and O157. The adherent and invasive property were the most common factors in <i>E.coli</i> serogroups (O55, O119, O111 and O157) which were isolated from recurrent mastitis and give positive results with (<i>eaeA</i>) gene but it is less in <i>E.coli</i> serogroups(O124, O114, O26 and O44) which give negative results with (<i>eaeA</i>) gene.</p> <p>[Salwa, M. Helmy; Ammar, M. A.; Aisha R. Ali; Mona, A. El-Shabrawy; Hakim.A.S.; Bakry, M.A.; Azza, S.M. Abuelnaga and Eraqi, M. M. <b>Molecular and Virulence Characterization of <i>Escherichia.coli</i> strains Isolated from Persistent Bovine Mastitis.</b> Journal of American Science 2011;7(1):614-624]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Recurrent mastitis- adherent <i>Escherichia coli</i>-intimin</p>	<a href="#">Full Text</a>	67
68	<p><b>Hydrochemistry and levels of some heavy metals in samples of Ibeshe, Lagos Lagoon Complex, Nigeria</b></p> <p>Ladigbolu Ismail Adejare, Balogun Kayode James and Shelle R.O.</p>	<a href="#">Full Text</a>	68

	<p>Nigerian Institute for Oceanography and Marine Research, 3 Wilmot point, Bar beach Victoria Island, Lagos, Nigeria Corresponding Author: <a href="mailto:ladadejare@yahoo.com">ladadejare@yahoo.com</a></p> <p><b>ABSTRACT:</b> The concentration of Iron, Copper, Chromium, Nickel, Lead, Manganese, Arsenic, Cadmium and Zinc were determined in the surface water, sediments and fish samples (<i>Chrysichthys nigrodigitatus</i>) of an industrial effluent receiving water in Ibeshe, Lagos Lagoon Complex between February and June, 2009. In assessing the impact of effluent discharge on the lagoon, Water and fish samples result were compared with the WHO/FEPA standard while the sediments results were compared with the results for unpolluted sediment. The average levels of heavy metals found in surface water, sediment and fish samples were as follows: surface water; 0.293mg/l for Fe, 0.177mg/l for Cu, 0.107mg/l for Pb, 0.213mg/l for Cr, 0.177mg/l for Mn, 0.233mg/l for Ni and &lt;0.10mg/l for Cd. Sediment; 85303.33µg/g for Fe, 53.967µg/g for Cu, 38.35µg/g for Pb, 110.183µg/g for Zn, 93.88µg/g for Cr, 274.967 µg/g for Mn, 1.017 µg/g for As, 67.4 µg/g for Ni and 1.00µg/g for Cd. Fish sample; 4.263 µg/g for Fe, 8.229µg/g for Cu, 1.967µg/g for Pb, 11.338µg/g for Zn, 1.329µg/g for Cr, 1.513µg/g for Mn, 4.046µg/g for Ni and 0.458µg/g for Cd. The concentration of Pb and Ni in surface water were higher than WHO / FEPA limits, while Cd, Zn, Cr and As were found below FEPA limit. Fe, Cu, Pb, Cd and Zn were all higher in concentration when compared with the values of unpolluted sediment. Consequently, the concentration of Zn, Cr, Cd in fish were below the FEPA limit. Water quality of Ibeshe were typify of alkaline pH (8.90 - 9.00), high Dissolved Oxygen content (4.20 -7.80mg/l), Turbidity (24.8 – 156NTU) and freshwater salinity values (0‰). The findings reported in this study would be expected to serve as baseline level for future heavy metal pollution status of the Ibeshe, Lagos Lagoon area. [Ladigbolu Ismail Adejare , Balogun Kayode James and Shelle R.O. <b>Hydrochemistry and levels of some heavy metals in samples of Ibeshe, Lagos Lagoon Complex, Nigeria.</b> Journal of American Science 2011;7(1):625-632]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>. <b>Keywords:</b> Lagoon, effluent discharge, sediment, Heavy metal</p>		
69	<p style="text-align: center;"><b>Breeding success of Lesser Crested Tern and Swift Tern at Shidvar island, Iran</b></p> <p style="text-align: center;">Saber Ghasemi<sup>1</sup>, Farhad Hosseini Tayefeh<sup>2</sup>, Neda Mola Hoveizeh<sup>3</sup>  <sup>1</sup>Faculty of Environmental science, Islamic Azad University, Bandar abbas Branch, Iran. <a href="tel:+987616672328">Tel:(+98) (761) 6672328</a>, <a href="tel:+989358201684">Mobile:(+98)935-820-1684</a>, E_mail:<a href="mailto:saberghasemi@gmail.com">saberghasemi@gmail.com</a>  <sup>2</sup>Department of Environment, Bushehr Province, Iran. <a href="tel:+989177755886">Tel:(+98) (917)7755886</a>, E_mail:<a href="mailto:farhadtayefeh@gmail.com">farhadtayefeh@gmail.com</a>  <sup>3</sup>Faculty of Environmental science, Islamic Azad University, Bandar abbas Branch, Iran. Mobile <a href="tel:+989373557610">:(+98) 937-355 7610</a>, E_mail:<a href="mailto:neda7975@yahoo.com">neda7975@yahoo.com</a></p> <p><b>ABSTRACT:</b> The aim of this study was to investigate the breeding success of Lesser Crested Tern <i>Sterna bengalensis</i> and Greater Crested Tern <i>Sterna bergii</i> at Shidvar Island, in Persian Gulf, southern of Iran. Total Count Method that included tree breeding colonies was carried out. A total of 365 nests, belonging to 240 nest of Lesser Crested Tern and 125 nest of Swift Tern, were categorized under number of eggs and were counted. The mean clutch sizes of Lesser Crested Tern and Swift Tern were estimated 1.04±0.01 and 1.04±0.03 respectively. Furthermore, the average of breeding success during incubation of eggs, nestling and post-nestling were measured 67.7%, 100% and 95.24% for Lesser Crested Tern and 83.3%, 70% and 100% for Swift Tern. The total breeding success was measured 74.43% and 66.63% for them respectively. Relative abundance of birds during outward migration was measured 65.32% and 34.68% for two species, respectively. It is considered that the importance of Shidvar Island for seabirds, especially for family of Sternidae, must be recognized and the protection of this site from threats must be enforced. [Saber Ghasemi, Farhad Hosseini Tayefeh, Neda Mola Hoveizeh. <b>Breeding success of Lesser Crested Tern and Swift Tern at Shidvar island, Iran.</b> Journal of American Science 2011;7(1):633-638]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>. <b>KEYWORDS:</b> Breeding Biology, <i>Sterna bengalensis</i>, <i>Sterna bergii</i>, Shidvar, Iran</p>	<a href="#">Full Text</a>	69
70	<p style="text-align: center;"><b>Transmissivity of the Glazing Surface of a Solar Flat Plate Collector Based on the Metrological Parameters of Yola, Nigeria</b> Bello Y Idi<sup>1</sup> and Dillip K De<sup>2</sup></p>	<a href="#">Full Text</a>	70

	<p><sup>1</sup>Department of Physics, Adamawa State University, Mubi Nigeria  <a href="mailto:Belyus2000@gmail.com">Belyus2000@gmail.com</a></p> <p><sup>2</sup>Department of Physics, Federal University of Technology, Yola, Nigeria  <a href="mailto:Dipak61@yahoo.com">Dipak61@yahoo.com</a></p> <p><b>Abstract:</b> A glazing surface is one of the most vital components of a solar flat plate collector which is meant to admit maximum possible radiation and minimizes upward loss of heat. The most commonly used glazing surface is transparent glass. The performance of the glazing surface depends on the magnitude of its transmissivity. For a given material, this optical property is a function of solar geometry that varies with geographic location. In this work, the monthly mean value of transmissivity of the most commonly used glazing surface, 3mm transparent glass was determined for 12 months of the year with respect to the solar geometry of Yola town. A peak value of 0.8823 was recorded in the month of September while a minimum value of 0.8775 was recorded in the month of January. An annual mean value of 0.8807 was recorded with a standard deviation of 0.0015. The results imply that plane glass as a glazing surface admits about 88% of the solar radiation incident on it to the absorbing surface. The slight variation all year round is an indication of its consistent performance all times of the year at the locality.  [Bello Y Idi and Dillip K De. <b>Transmissivity of the Glazing Surface of a Solar Flat Plate Collector Based on the Metrological Parameters of Yola, Nigeria.</b> Journal of American Science 2011;7(1):639-643]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> transmissivity, plane glass, glazing cover, flat plate collector, solar energy</p>		
71	<p><b>Utility Mapping with Ground Penetrating Radar: an Innovative Approach</b></p> <p>Bello. Y. Idi<sup>a</sup> and Md. N. Kamarudin<sup>b</sup></p> <p><sup>a</sup>Department of Geomatic Engineering, FKSG, Universiti Teknologi Malaysia.  <a href="mailto:belyus2000@gmail.com">belyus2000@gmail.com</a></p> <p><sup>b</sup>Institute of Geospatial Science and Technology, (INSTEK), Universiti Teknologi Malaysia.  <a href="mailto:mdnorkamarudin@utm.my">mdnorkamarudin@utm.my</a></p> <p><b>Abstract:</b> A new approach for the fitting of hyperbolic signatures due to point or cylindrical reflector in a GPR radargram is proposed. The technique is based on the least square error minimization of hyperbolic function derived from the general equation of hyperbola leading to the determination of the optimal values of the fitting parameters at the minimal level of sum of squared error function. The parameters are used to determine the radar velocity and the radius of cylindrical reflector. A test for the effectiveness of the proposed technique was conducted using a GPR radargram obtained at a road side where subsurface utilities are anticipated. A unique hyperbolic signature obtained in the radar image was digitized and interpreted using the developed algorithm in MATLAB environment. Hyperbolic fitting parameters <i>a</i> and <i>b</i> were numerically obtained as 49.6444ns and 4.3182m respectively. The parameters were used to obtain the media velocity, dielectric constant and depth of the reflector as 0.174m/ns, 2.973 and 2.61m respectively. The technique therefore seems promising and a new approach to utility mapping.</p> <p>[Bello. Y. Idi and Md. N. Kamarudin. <b>Utility Mapping with Ground Penetrating Radar: an Innovative Approach.</b> Journal of American Science 2011;7(1):644-649]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Ground penetrating radar, least square fitting, radar velocity, hyperbolic reflection, utility mapping</p>	<a href="#">Full Text</a>	71
72	<p><b>Application of variational iteration method for solving the nonlinear generalized Ito system</b></p> <p>A.M. Kawala *; Hassan A. Zedan **</p> <p>*Department of Mathematics, Faculty of Science, Helwan University, Cairo, Egypt  **Department of Mathematics, Faculty of Science, Kafer el sheik University, Cairo, Egypt  <a href="mailto:kawala_26_1@yahoo.com">kawala_26_1@yahoo.com</a></p> <p><b>Abstract:</b> In this article, we implement relatively analytical technique called the variational iteration method (VIM)for solving nonlinear generalized Ito system. In this method, a correction functional is</p>	<a href="#">Full Text</a>	72

	<p>constructed by a general Lagrange multiplier. Two cases are given to illustrate the accuracy and effectiveness of the method .We compare our results with results obtained by exact solution. This Comparison reveals that the variational iteration method is very effective, convenient and easier to be implemented.</p> <p>[A.M. Kawala; Hassan A. Zedan. <b>Application of variational iteration method for solving the nonlinear generalized Ito system</b>. Journal of American Science 2011;7(1):650-659]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Variational iteration method; Lagrange multiplier; nonlinear generalized Ito system</p>		
73	<p style="text-align: center;"><b>Abundance Of Molluscs (Gastropods) At Mangrove Forests Of Iran</b></p> <p style="text-align: center;">S. Ghasemi<sup>1</sup>, M. Zakaria<sup>2</sup>, N. Mola Hoveizeh<sup>3</sup></p> <p><sup>1</sup>Faculty of Environmental science, Islamic Azad University, Bandar abbas Branch, Bandar abbas, Iran. <a href="tel:+989397231177">Tel: (+98) 9397231177</a>, <a href="mailto:saberghasemi@gmail.com">E_mail:saberghasemi@gmail.com</a></p> <p><sup>2</sup>Faculty of Forestry, University Putra Malaysia, Malaysia.</p> <p><sup>3</sup>Faculty of Environmental science, Islamic Azad University, Bandar abbas Branch, Iran.</p> <p><b>ABSTRACT:</b> This study determined the abundance and diversity of molluscs (focused on gastropod) at Hara Protected Area (HPA) and Gaz and Hara Rivers Delta (GHRD) mangroves, southern of Iran. Point count sampling method was employed in this study. A total of 1581 individual of gastropods, representing 28 species and 21 families, were observed in the two sites. The PCA plot indicated that all species have correlation with winter excluding species namely <i>Ethalia sp.</i>, <i>Haminoea sp.</i>, <i>Trichotropis sp.</i> and <i>Tibia insulaechorab curta</i> at HPA and <i>Telescopium telescopium</i>, <i>Stocsicia annulata</i>, and <i>Stenothyra arabica</i> at GHRD. The mean number of species was estimated 6.88±2.77 (per plot) versus 9.65±6.63 (per plot) at HPA and GHRD respectively. The results of X<sup>2</sup> test indicated that there was a high significant difference between total gastropod population observed at 4 seasons (X<sup>2</sup><sub>3, 1</sub>=31.9, p&lt;0.001), but there was no significant difference in term of number of species between sites in order to seasonal observation (X<sup>2</sup><sub>3, 1</sub>=0.84, p&gt;0.05). The results of diversity comparisons indicated that the highest diversity was in the HPA as compared to GHRD. Furthermore, the SIMPER analysis indicated that mangroves of HPA and GHRD were dominated with Asseminea sp., although the number of population was much higher at <i>R. mucronata</i> habitat. Eight species namely <i>Asseminea sp.</i>, <i>Stenothyra arabica</i>, <i>Cerithidium cerithinum</i>, <i>Littoria intermedia</i>, <i>Telescopium telescopium</i>, <i>Iravadia quadrasi</i>, <i>Atys cylindrica</i> and <i>Cyclostrema ocrinium</i> represented more than 91% of observations at HPA, while at GHRD, there were only three species namely <i>Asseminea sp.</i>, <i>Stenothyra arabica</i> and <i>Cerithidea cingulata</i> which represented more than 90% of observations. The result states that the great importance of HPA and GHRD for gastropod assemblages as main food resource for wading birds must be recognized and the protection of these sites from threats must be thoroughly enhanced.</p> <p>[S. Ghasemi, M. Zakaria, N. Mola Hoveizeh. ABUNDANCE OF MOLLUSCS (GASTROPODS) AT MANGROVE FORESTS OF IRAN. Journal of American Science 2011;7(1):660-669]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Gastropod, Mangrove Forest, Abundance, Iran</p>	<a href="#">Full Text</a>	73
74	<p style="text-align: center;"><b>Barriers of Local Participation in Rural Cooperatives A Case Study of Fars, Iran</b></p> <p style="text-align: center;">Abrisham Aref</p> <p style="text-align: center;">School of Humanities and Social Science, Science and Research Branch Islamic Azad University, Tehran, Iran <a href="mailto:abrishamaref@yahoo.com">abrishamaref@yahoo.com</a></p> <p><b>Abstract:</b> Local participation has an important role in development of rural cooperatives. This article attempts to illustrate the barriers of people participation in rural cooperatives in Fars Province, Iran. Rural cooperatives are certainly a major contributor to rural development in many countries. But, in this case there are a significant number of barriers to effectively using rural cooperatives as a tool for rural development. This paper used qualitative approach to illustrated barriers of cooperatives through local participation. The findings through focus group identified several constraints that have limited active local participation in rural cooperatives.</p>	<a href="#">Full Text</a>	74

	<p>[Abrisham Aref, <b>Barriers of Local Participation in Rural Cooperatives A Case Study of Fars, Iran.</b> Journal of American Science 2011; 7(1):670-673]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a></p> <p><b>Keywords:</b> participation, rural cooperatives, rural development</p>		
75	<p><b>Biofilm Formation by Blood Stream Staphylococcal Isolates from Febrile Pediatric Cancer Patients at South Egypt Cancer Institute</b></p> <p>Salwa S. Seif El-Din <sup>*1</sup>, Moustafa S. El-Rehewy<sup>1</sup>, Mohammed M. Ghazaly<sup>2</sup>, Mohamed H. Abd-Elhamid<sup>3</sup>  Medical Microbiology and Immunology<sup>1</sup>, Pediatric Oncology<sup>2</sup> Departments, Faculty of Medicine Assuit University and Clinical Pharmacy at South Egypt Cancer Institute<sup>3</sup>, Assiut, Egypt  *<a href="mailto:salwaegy@yahoo.com">salwaegy@yahoo.com</a></p> <p><b>Abstract:</b> Background Blood Stream infection (BSI) remains the major cause of morbidity and death in patients undergoing treatment for cancer. Approximately 10% to 30% of all febrile neutropenic cancer patients are bacteremic at presentation. Staphylococci are the most frequently isolated organisms from blood cultures of febrile neutropenic (FN) cancer patients. Aims: This study aimed to define the main causative organisms of 139 episodes of bacteremia in 100 febrile neutropenic pediatric patients admitted to South Egypt Cancer Institute (SECI), pediatric oncology ward. Also to study the prevalence of biofilm forming capability of the coagulase-negative staphylococci (CONS) and <i>Staphylococcus aureus</i> (<i>S. aureus</i>) blood isolates (39) (group A) and their relation to clinical and in 29 staphylococci strains and nasal mucosal isolates from healthy care workers (group B). Methods: All Isolates were identified and tested for antibiotic susceptibility by Microscan Walkaway System. The CONS and <i>S. aureus</i> isolates from blood cultures of pediatric patients were then tested for slime production using qualitative congo red agar plate test (CRA test), quantitative microtitre plate assay (MTP). The presence of <i>icaA</i> and <i>icaD</i> genes by polymerase chain reaction (PCR) was also determined. Results: Among 139 episodes of fever and neutropenia recorded in 100 patients, bacteremia represented 54.7% in which Gram negative organisms constituted 53 % from the total episodes obtained and Gram positive staphylococcal isolates were 47%. <i>S. aureus</i> were 14 strains and CONS were 22 strains. Of the 14 <i>S. aureus</i>, 10 strains were <i>icaA</i> and <i>icaD</i> positive versus 8 strains were CRA test positive and also were MTP positive. Two strains of <i>S. aureus</i> were PCR positive for <i>ica</i> genes and slime negative on CRA and MTP. Of the 22 CONS, 12 (53%) were <i>ica</i> genes positive versus 11 strains (46%) were positive using CRA test and 9 strains were MTP positive. One strain of CONS was positive using MTP and PCR negative. Group B isolates were CRA, MTP and <i>ica</i> genes negative. Biofilm forming staphylococcal strains on CRA (15/19) and (16/22) with <i>ica</i> genes were resistant to Imipenem, Amoxicillin/clavulanic, Cephalosporins, and Oxacillin. Conclusions: The results of the present study shows a high percent of Gram negative bacteremia in pediatric oncology ward and that isolates expressing <i>ica</i> genes were exhibiting more resistance to broad spectrum antibiotics. This supports that biofilm adds to the virulence profile isolated from blood stream infections and that the <i>ica</i> genes are important virulence markers for clinically significant CONS isolates. The better agreement between the CRA plate tests with the molecular detection of <i>ica</i> genes indicates the former as a reliable test for the phenotypic characterization of virulence of clinical isolates.</p> <p>[Salwa S. Seif El-Din, Moustafa S. El-Rehewy, Mohammed M. Ghazaly, Mohamed H. Abd-Elhamid. <b>Biofilm Formation by Blood Stream Staphylococcal Isolates from Febrile Pediatric Cancer Patients at South Egypt Cancer Institute.</b> Journal of American Science 2011;7(1):674-686]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Biofilm, bacteraemia, coagulase negative staphylococci, cancer</p>	<a href="#">Full Text</a>	75
76	<p><b>Prevalence of SEN Virus Infection in Multitransfused Patients in Assiut University Hospitals, Egypt</b></p> <p>Ismail S. Mohamed <sup>1</sup>, Amany G. Thabit <sup>1</sup>, Sherine A. Abd-El Rahman<sup>1</sup>, Essam Eldin A. Mohammed <sup>2</sup>,  Salwa S. seif Eldin <sup>*1</sup> and Aliaa M. A. Ghandour <sup>1</sup>  Departments of Medical Microbiology&amp; Immunology <sup>1</sup> and Internal Medicine <sup>2</sup>, Faculty of Medicine,  Assiut University, Assiut , Egypt  *<a href="mailto:salwaegy@yahoo.com">salwaegy@yahoo.com</a></p> <p><b>Abstract:</b> Background: SENV is a blood- borne, circular ss DNA virus and possessing nine genotypes (A</p>	<a href="#">Full Text</a>	76

	<p>to I).Among nine genotypes, SENV-D and SENV-H genotypes have the strong link with patients with non (A-E) hepatitis infections. Recently, the identification of SEN virus (SENV) as a possible etiologic agent of parenteral transmission hepatitis led to the study of the prevalence of such agent. This study compared SENV prevalence and its two important genotypes (D&amp;H) which might be pathogenic in high risk subjects including blood transfused patients and hemodialysed patients and low risk subjects as healthy blood donors. Subjects and methods: This study included 75 multitransfused patients, 60 of them were hemodialysed and the remaining were blood transfused including haemophilics, anaemics and leukemics. The study included also 25 healthy blood donors as a control. They were enrolled consecutively at the department of Internal Medicine, Assiut University Hospital. The sera were separated and SENV DNA was detected by polymerase chain reaction. Results: A higher prevalence of SENV infection was detected in patients groups than in blood donors (46.7% versus 20%).No significant relation was found between SENV infection and age, duration of haemodialysis or liver enzymes. However, there was significant difference between SENV positive and negative patients as regards gender and number of blood transfusions. Conclusion: SENV is commonly present in blood transfused and haemodialysed patients attended to Assiut University Hospitals as well as in blood donors at comparable rates. SENV infection has been found in only 20% of blood donors but in 46.7% of patients. The results also indicated that other possible routes of SENV infection other than blood transfusion may be included. Its pathogenic role in causing hepatitis is not documented, so far it can be considered as simple guest till further studies have been done.</p> <p>[Ismail S. Mohamed, Amany G. Thabit, Sherine A. Abd-El Rahman, Essam Eldin A.Mohammed, Salwa S. seif Eldin and Aliaa M. A. Ghandour. <b>Prevalence of SEN Virus Infection in Multitransfused Patients in Assiut University Hospitals, Egypt.</b> Journal of American Science 2011;7(1):687-696]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Prevalence; SEN; Virus; Infection; Patient</p>		
77	<p style="text-align: center;"><b>The Effectiveness of Kangaroo Technique on Preterm Baby Weight Gain</b></p> <p style="text-align: center;">Iman Ibrahim Abd El Moniem and Madiha Amin Morsy* Child Department, Faculty of Nursing - Ain Shams University, Cairo, Egypt <a href="mailto:*madihaaboughalaa@yahoo.com">*madihaaboughalaa@yahoo.com</a></p> <p><b>Abstract:</b> The aim of the study was to assess mother's perception about kangaroo technique, implement on hospitalized premature babies and evaluate the effectiveness of kangaroo technique on preterm babies weight gain. A quasi experimental design was used in this study. The study subjects consisted of two hundred (200) mothers divided into two identical groups. The studied group included mothers who applied the kangaroo technique, while those exposed to routine hospital care were consider a control. Data were collected through using pre-designed interviewing questionnaire to assess mothers and neonates characteristics, knowledge about kangaroo technique. An observational checklist was used to assess mothers' practices; towards application of kangaroo technique. This technique had been applied for the study group only. The result of the study revealed that there was a statistically significant difference in mother's knowledge and practices between both study and control groups after application of kangaroo technique with significant effects on preterm baby weight and attachment. The study concluded that application of kangaroo technique enhanced mother-child attachment and had positive effect on weight gain and possibility of early discharge from neonatal intensive care units (NICUs). Therefore, the study recommended the application of kangaroo technique for all low birth weight premature babies as part of the routine daily care to babies admitted to the neonatal intensive care units.</p> <p>[Iman Ibrahim Abd El Moniem and Madiha Amin Morsy. <b>The Effectiveness of Kangaroo Technique on Preterm Baby Weight Gain.</b> Journal of American Science 2011;7(1):697-702]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Kangaroo technique- Premature babies-Mother infant bonding-Duration of hospitalization-weight gain</p>	<a href="#">Full Text</a>	77
78	<p style="text-align: center;"><b>The Contribution of Women in Rural Development in Iran</b></p> <p style="text-align: center;">Fatemeh Allahdadi School of Humanities and Social, Science and Research Branch Islamic Azad University, Tehran, Iran, <a href="mailto:faaref@yahoo.com">faaref@yahoo.com</a></p>	<a href="#">Full Text</a>	78

	<p><b>Abstract:</b> This paper highlights the concerns of women and the challenges they face in rural development process. Agriculture is certainly a major contributor to rural development in many countries. It is one of the most important economic sectors in Iran. In this way rural women play a special role in rural development. When women are economically and socially empowered, they can become a potent force for change. Findings through secondary data showed that although women have an important role in rural development in Iran, but there are some problem faced by women farmers. The finding can assist the local organizations and community developers for remove this problem.</p> <p>[Fateme Allahdadi. <b>Enhancing the Role of Women Farmers in Rural Development.</b> Journal of American Science 2011;7(1):703-707]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> women farmers, rural development, agricultural development</p>		
79	<p><b>Simultaneous diffusion of Cr-Si on Ni-Base super alloy using pure Cr and Si by pack cementation method</b></p> <p>A. Afshar<sup>a</sup>, A. Sabour<sup>b</sup>, M. Saremi<sup>c</sup>, D. Ghasemi<sup>a,*</sup></p> <p><sup>a</sup> Islamic Azad University, Science and Research Branch, Tehran, Iran,  <sup>b</sup> Tarbiyat Modarres University - Tehran – Iran,  <sup>c</sup> Department of Materials Science and Engineering -Tehran University – Tehran – Iran.</p> <p>* <b>Corresponding Author:</b> Davood Ghasemi, E-mail: <a href="mailto:Davoodghasemi@yahoo.com">Davoodghasemi@yahoo.com</a></p> <p><b>Abstract:</b> Pure Cr and Si powders were used to produce Cr-Si coatings by Simultaneously diffusion of these elements on Ni-base Super alloy. A mixture of elemental Cr and Si powders (as Cr, Si sources) was used with (NaCl-NaF) or (NaCl-NaF-NH<sub>4</sub>Cl) mixed activators were applied. The results of this study indicated that for co diffusion of these elements, Si content must be 0.1 Cr content in the pack mixture. Using 95%NaCl-5%NaF mixed activator was produced porous Cr-Si coatings, but by addition of 1% NH<sub>4</sub>Cl to pack mixture, porosity of Cr-Si coating was eliminated. Increasing of (NaCl-NaF) content was led to increase depth of Si diffusion into the surface.</p> <p>[A. Afshar, A. Sabour, M. Saremi, D. Ghasemi. <b>Simultaneous diffusion of Cr-Si on Ni-Base super alloy using pure Cr and Si by pack cementation method.</b> Journal of American Science 2011;7(1):708-711]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Simultaneous diffusion, pack cementation, pure elements, mixed activator, Super alloy.</p>	<a href="#">Full Text</a>	79
80	<p><b>Effect of some Strains of Probiotic Bacteria against Toxicity Induced by Aflatoxins <i>in vivo</i></b></p> <p>Abou-Baker Salim<sup>1</sup>, Azza Zohair<sup>2</sup>, Amany El-Saied Hegazy<sup>3</sup> and Amal Said<sup>3</sup></p> <p><sup>1</sup>Food Toxicology and contaminants Department, National Research Center, <sup>2</sup>Faculty of Specific Education, Minufiya University, <sup>3</sup>Nutrition Department, National Research Center, Cairo, Egypt  <a href="mailto:salimali740@hotmail.com">*salimali740@hotmail.com</a></p> <p><b>Abstract:</b> Aflatoxins are highly toxic, mutagenic, teratogenic and carcinogenic compounds produced by some species of <i>Aspergillus</i>, especially <i>A. flavus</i> and <i>A. parasiticus</i>. This study was conducted investigate the effect of some strains of probiotic bacteria against toxicity induced by contaminated diet with aflatoxins in male rats. Animals were divided into 6 equal groups each group contains 7 rats. The first group received a basal diet and served as negative control, the second group received basal diet supplemented with strain 1 of probiotic bacteria (<i>Bifidobacterium bifidum</i>), the third group received basal diet supplemented with strain 2 of probiotic bacteria (<i>Lactobacillus acidophilus</i>), the fourth group received basal diet supplemented with 1.34ppm aflatoxins contaminated peanut as positive control group. The other two groups received basal diet supplemented with 1.34ppm aflatoxins contaminated peanut plus strain 1 and strain 2 probiotic bacteria for 6 weeks. Results revealed that positive control gave a very significant increased in alanine aminotransferase (ALT), aspartate aminotransferase (AST), Alkaline Phosphatase (ALP) activities, creatinine and urea; while decreased total protein (TP), albumin and globulin indicating the toxicity of aflatoxin on both liver and kidney functions. However probiotic strains supplemented to aflatoxins treated group revealed a significantly alleviated TP, albumin and globulin depletion in serum with an elevation of ALT, AST, ALP, creatinine and urea levels. Results also showed that the group received basal diet supplemented with strain 1 (<i>Bifidobacterium bifidum</i>) and with strain 2 (<i>Lactobacillus acidophilus</i>) showed significant beneficial health effects. It was noticed that the group received <i>Lactobacillus acidophilus</i> showed better results than <i>Bifidobacterium bifidum</i>. Results indicated also that</p>	<a href="#">Full Text</a>	80

	<p>the protective action of probiotic strains as a potential protective agent against aflatoxin toxicity as well as their beneficial health effects and may thereby offered an effective dietary approach to decrease the risk of occurrence of liver, kidney function and occurrence of cancer which may be due the ability of probiotic strains to bind with aflatoxins, reduced their uptake, and protected against both memberane and DNA damage. The study revealed also that probiotics can also provide benefits by modulating immune functions.</p> <p>[Abou-Baker Salim, Azza Zohair, Amany El-Saied Hegazy and Amal Said. <b>Effect of some Strains of Probiotic Bacteria against Toxicity Induced by Aflatoxins <i>in vivo</i></b>. Journal of American Science 2011;7(1):772-783]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words</b>, Mycotoxin, Aflatoxin, Peanut, Toxicity, Probiotic bacteria</p>		
81	Journal of American Science 2011;7(1):784-790]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a> . 7	<a href="#">Full Text</a>	81
82	<p style="text-align: center;"><b>Bitopological spaces via Double topological spaces</b></p> <p style="text-align: center;">A. KANDIL O. TANTAWY* S.A.El-Sheikh** M. WAFAlE***</p> <p style="text-align: center;">Mathematics Department, Faculty of science, Helwan University, P.O.Box 11795, Cairo, Egypt.</p> <p style="text-align: center;">*Mathematics Department, Faculty of science, Zagazig University, Egypt.</p> <p style="text-align: center;">** Mathematics Department, Faculty of Education, Ain Shams University, Egypt.</p> <p style="text-align: center;">*** Modern Academy, For Engineering &amp;Technology In Maadi, Egypt.</p> <p style="text-align: center;"><a href="mailto:dr.ali_kandil@yahoo.com">dr.ali_kandil@yahoo.com</a></p> <p><b>Abstract:</b> In this paper we shall study some bitopological properties via double topological spaces. We characterize the notions of pairwise continuous (resp. pairwise open, pairwise closed)(<math>P</math> .continuous, <math>P</math> -open, <math>P</math> -closed, for short) by a double continuous (resp. double open, double closed) mappings between double topological spaces. Also, we characterize the notions of <math>P^*</math> - continuous (resp. <math>P^*</math> -open, <math>P^*</math> -closed) by a supra double continuous (resp. open, closed) mappings between supra double topological spaces. Finally, we investigate the relationships between these types of mappings and give some counter examples.</p> <p>[A. KANDIL O. TANTAWY S.A.El-Sheikh M. WAFAlE. <b>Bitopological spaces via Double topological spaces</b>. Journal of American Science 2011;7(1):791-798]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> bitopological spaces, pairwise continuous mappings, supra- topological spaces, pairwise open mappings, pairwise closed mappings</p>	<a href="#">Full Text</a>	82
83	<p style="text-align: center;"><b>Synthesis and some applications of Anionic Palmitic Acid Schiff Base Salt Surfactants</b></p> <p style="text-align: center;">Aiad, I., Ahmed, S. M. and Dardir . M. M*</p> <p style="text-align: center;">Egyptian Petroleum Research Institute, Cairo, Egypt.</p> <p style="text-align: center;"><a href="mailto:monamdardir@yahoo.com">monamdardir@yahoo.com</a>*</p> <p><b>Abstract:</b> Schiff bases derived from condensation reaction of benzaldehyde or anizaldehyde and diethylenetriamine were prepared. The products were reacted with palmatic acid (1 : 1 mol) to give the corresponding palmitic Schiff base salt surfactants . The chemical structures of the prepared compounds were confirmed using elemental analysis, FTIR and <sup>1</sup>H-NMR spectroscopy. Various surface properties of the synthesized surfactants were evaluated particularly, critical micelle concentration, effectiveness, efficiency, maximum surface excess and minimum surface area . These surfactants were also evaluated as corrosion inhibitors and as biocide agents Gram positive and Gram negative bacterial strains. The rheological properties, and the filter loss for oil-based mud (invert - emulsion mud) were evaluated, the result showed that they were a good emulsifiers and filter loss control agent for oil – base mud. It has been found that they have good corrosion inhabitation for low carbon steel alloy and has good bactericidal effect.</p> <p>[Aiad, I., Ahmed, S. M. and Dardir. M. M. <b>Synthesis and some applications of Anionic Palmitic Acid Schiff Base Salt Surfactants</b>. Journal of American Science 2011;7(1):799-807]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p>	<a href="#">Full Text</a>	83

	<b>Key words:</b> Surfactants, Corrosion inhibitors, oil base mud and biological activity		
84	<p><b>Occupational Health Hazard of Egyptian Employees in Contact with Wastage Nourished Swine</b></p> <p>Ashraf, M. Barakat<sup>*1</sup>; Hassan, A. El Fadaly<sup>1</sup>; Raafat, M. Shaapan<sup>1</sup> and Fathia, A.M. Khalil<sup>2</sup>  <sup>1</sup>Zoonotic Diseases Department, National Research Center, Giza, Egypt  <sup>2</sup>Parasitology and Disease Department, National Research Center, Giza, Egypt  <a href="mailto:ashrafbarakat2@hotmail.com">ashrafbarakat2@hotmail.com</a>*</p> <p><b>Abstract:</b> Egyptian swine still they are free nourished on wastages in small herds without veterinary health measures. Because of their omnivore's behavior, pigs are naturally exposed to zoonotic agents in their setting with subsequent direct human occupational hazards. Brucellosis, Leptospirosis and Toxoplasmosis are the major diseases link human exposure for natives in contact with swine. So, updating the seroprevalence of these pathogens among contact employees reflect to how extent the human bio-hazards are due to direct contact with swine or their contaminant subset. Therefore, sera of 230 free wastage nourished pigs were collected at Cairo, Egypt. Also, 127 serum samples were collected from racing occupational workers. Human and swine sera were serologically analyzed for antibodies against Brucella, Leptospira and Toxoplasma by using commercial kits. Antibodies against <i>Brucella</i> were detected in 29/ 230 (12.61 %) of swine sera, and 11/127 (8.66 %) of workers sera by using Rose Bengal plate test. Antibodies against <i>Leptospira</i> serovars were detected in 53/230 (23.04%) of swine sera using the microscopic agglutination test (MAT) at a titer of 1:200. The highest seroprevalence was recorded for <i>L. pomona</i> (45.28%), followed by <i>L. grippotyphosa</i> (33.96%) and <i>L. icterohaemorrhagiae</i> (20.75%). The seropositive human sera were 25.9% with the highest incidence corresponding to <i>L. pomona</i> serovar (11%). Results of the indirect fluorescent antibody test showed that anti-<i>Toxoplasma</i> antibodies were detected in 74.78% (172/230) and 37.79% (48/127) of swine and contact employees respectively. It can be concluded that serological assays concerning brucellosis, leptospirosis and toxoplasmosis verify direct occupational exposure for high risk group's manipulating employees through carrier animals or their pollutant conditions.  [Ashraf, M. Barakat; Hassan, A. El Fadaly; Raafat, M. Shaapan and Fathia, A.M. Khalil. <b>Occupational Health Hazard of Egyptian Employees in Contact with Wastage Nourished Swine</b>. Journal of American Science 2011;7(1):808-903]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Key words:</b> health hazard, swine, Brucellosis, Leptospirosis, Toxoplasmosis, Egyptian employees</p>	<a href="#">Full Text</a>	84
85	<p><b>Study of medical plant distribution in Lasem area of Northern Iran</b></p> <p>Abed Vahedi<sup>1</sup>, Esmaeil Yasari<sup>2</sup></p> <p><sup>1</sup>Corresponding author: Department of Agronomy and Plant Breeding, Faculty of Agricultural and Natural Resources, Islamic Azad University, Qaemshahr Branch, Qaemshahr, Mazandaran, 48148-35497. Cell: +98-09356211306. Iran. <a href="mailto:abedvahedy@gmail.com">abedvahedy@gmail.com</a>  <sup>2</sup>Assistant Prof, Payame Noor University, Sari, Mazandaran, 48189-35455. Cell: +98-9113511510, Iran. <a href="mailto:e_yassari@yahoo.com">e_yassari@yahoo.com</a></p> <p><b>Abstract:</b> In order to gather and identify the medicinal plants at the mountainous rangelands of Lasem in Larijan of northern Iran, the field survey method was done. The results showed that there were 42 medicinal species in the area belonging to 18 classes. The classes Rosaceae with 8, Compositae with 8, and Labiateae with 7 species had the biggest number of medicinal species; and the growth forms hemicryptophyte and trophyte were the most common. Furthermore, leaves and flowers were the main plant parts used, essence and tannin were the most common compounds, and the most common curative effect was as diuretic. The types, features, and the compounds found in the medicinal plants of this ecosystem suggest that this region has a high potential with regard to the production of medicinal plants; and if the exploiters of the rangelands get to know this potential, they will be able to maintain the ecosystem, to keep it sustainable, and to reap huge economic benefits as well.  [Abed Vahedi, Esmaeil Yasari. <b>Study of medical plant distribution in Lasem area of Northern Iran</b>. Journal of American Science 2011;7(1):904-911]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Key words:</b> Chemical compounds, Curative effects, Lasem, Medicinal plants</p>	<a href="#">Full Text</a>	85
86	<b>Protective Effect of Taurine and Bismuth Subnitrate against Cyclosporine and NSAID-induced Nephrotoxicity in Rats.</b>	<a href="#">Full Text</a>	86

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**Abstract:** The immunosuppressive drug cyclosporine (CSA) has been successfully used in several diseases with immunological basis and in transplant patients. Nephrotoxicity is the major limitation for CSA use. Recent evidence suggests that reactive oxygen species (ROS) play an important role in mediating CSA-induced nephrotoxicity. Co-administration of CSA and non steroidal anti-inflammatory drug (NSAID), sodium diclofenac (SD), increases the efficacy for pain relief in patients with rheumatoid arthritis. However, clinical studies showed enhancement of cyclosporine nephrotoxicity. To characterize biochemical parameters of nephrotoxicity, the study assessed the effect of CSA (10 mg/kg B.wt) alone or in combination with SD (10 mg/kg B.wt) for 6 weeks on serum creatinine (S.Cr), blood urea (BU), alkaline phosphatase (ALP), total protein (TP), albumin and gamma glutamyl transferase (GGT). Oxidative stress was also evaluated; lipid peroxide measured as malondialdehyde (MDA), lactate dehydrogenase (LDH), as well as oxidized and reduced glutathione (GSSG and GSH) in serum of adult albino rats. CSA alone caused significant rise in BU and S.Cr, serum ALP and GGT, while reduction of serum TP and albumin was observed. In addition CSA also alternated oxidative stress through increasing levels of serum MDA, LDH and GSSG and decreasing levels of GSH and GSH/GSSG ratio. When SD combined with CSA, it enhanced all biochemical parameters of CSA-induced nephrotoxicity. The study also extended to evaluate and compare the protective effect of taurine, (tau), which is a major intracellular free beta-amino acid and potent endogenous antioxidant with Bismuth subnitrate (BSN), an antiulcer drug and a specific inducer of renal metallothionein (MT), against nephrotoxicity induced by CSA and SD administration. The present investigation showed that co-administration of both BSN and taurine could antagonize most of CSA negative effects, by attenuating renal dysfunctions, reducing serum MDA and counteracting the deleterious effects of CSA on oxidative stress markers.

[Suzan F.I. Elsis<sup>1</sup>, Salwa Kamal El -Nabarawy. **Protective Effect of Taurine and Bismuth Subnitrate against Cyclosporine and NSAID-induced Nephrotoxicity in Rats.** Journal of American Science 2011;7(1):912-921]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Key Words:** Nephrotoxicity, drug interaction, reactive oxygen species

### Protective Effect of Spirulina Against Mitomycin C-Induced Genotoxic Damage in male Rats

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**Abstract:** *Spirulina platensis* (SP) is a filamentous cyanobacterium microalgae with potent dietary phyto-antioxidant, anti-inflammatory and anti-cancerous properties. The present study aimed to investigate the protective effect of Spirulina against Mitomycin C (MMC)-Induced genotoxic damage in male rats. To evaluate the protective role of *Spirulina platensis* expression alterations of the Bcl-2, CK8, CK19, p53, p21, and p27 genes and formation of micronucleus in male rats were investigated. Sixty Swiss albino male rats were divided into six groups. Group 1, animals were fed on a standard diet as untreated control group. Group 2 animals were fed on a standard diet mixed with 1% SP. Groups 3, animals were fed on a standard diet mixed with 1% SP powder followed by MMC (0.5 mg/kg). Group 4 animals were fed on a standard diet mixed with 1% SP powder followed by MMC (2 mg/kg). Groups 5 and 6 animals were fed on a standard diet followed by MMC (0.5 and 2 mg/kg, respectively). All the animals were sacrificed after an experimental period of 12 weeks. The expression of Bcl-2, CK8, CK19, p53, p21 and p27 genes was investigated using reverse transcription polymerase chain reaction (RT-PCR). The results revealed that MMC treatment induced expression alterations of genes related to apoptosis. Also MnPCEs formation was increased in bone marrow of male rats treated with MMC. These alterations of the gene expression as well as the MnPCEs formation were markedly suppressed when male rats were supplemented with SP for 12

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	<p>weeks. Conclusion: These findings suggest that SP exerts its anti-mutagenic properties by inhibiting alterations in the gene expression and the MnPCEs formation in the hepatic tissues and bone marrow cells of male rats exposed to MMC.</p> <p>[Sabah Abdulaziz Linjawi. <b>Protective Effect of Spirulina Against Mitomycin C-Induced Genotoxic Damage in male Rats</b>. Journal of American Science 2011;7(1):922-931]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> <i>Spirulina platensis</i>, Mitomycin C, Gene expression; RT-PCR; Rats; MnPCEs formation</p>		
88	<p><b>Study of Sub-basal and Anterior Stromal Nerves of Corneal Flap with Modified Gold Chloride Stain</b>  Sherif H Emerah MD, Hany M Labib MD, Ehab EL zakzouk MD, Ahmed A Zaki MD  Cornea and ocular surface unit, Research Institute of Ophthalmology, Cairo, Egypt  Corresponding author: <a href="mailto:ahmedazaki@hotmail.com">ahmedazaki@hotmail.com</a></p> <p><b>Abstract:</b> The aim was to study the regeneration of corneal nerve fibers following creation of corneal flap. <b>MATERIALS AND METHODS:</b> Nine white rabbits underwent creation of corneal flap only without the subsequent excimer laser photoablation, rabbits were scarified at 3 days, one week, two weeks and one month after the procedure. Demonstration of the corneal innervation was carried out with a modified gold chloride procedure. The tissue was dissected into 4-6 lamellae before dehydration and mounted on slides for observation and photography. <b>RESULTS:</b> At the 1<sup>st</sup> week, both superficial, basal epithelial and sub-epithelial nerves were found at the hinge of the flap but the rest of the flap showed a major loss of epithelial, basal subepithelial and superficial stromal nerves. At 1<sup>st</sup> month, A few new regenerating thin nerve fibres were found to emerge from the cut stromal nerve trunks. In addition, the anterior stromal nerve were thin with gradual restoration to its normal condition over time. At 6<sup>th</sup> month, The Sub-basal plexi returns to its pre-operative shape. The nerves of flap stroma become well developed. <b>CONCLUSION:</b> The number of sub-basal and stromal nerve fiber bundles almost completely disappeared after creation of flap. Sub-basal and anterior stromal nerves were still less than normal after 6 months.</p> <p><b>Key words:</b> gold chloride, corneal nerves.</p> <p>[Sherif H Emerah, Hany M Labib, Ehab EL zakzouk, Ahmed A Zaki. <b>Study of Sub-basal and Anterior Stromal Nerves of Corneal Flap with Modified Gold Chloride Stain</b>. Journal of American Science 2011;7(1):932-936]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Sub-basal; Anterior; Stromal; Nerve; Corneal; Flap; Gold Chloride Stain</p>	<a href="#">Full Text</a>	88
89	<p><b>Simulation Optimization Approach for Facility Layout Problem-A Queuing Theory Based Approach</b></p> <p>Seyed Mohammad Taghi Fatemi Ghomi, Amir Ardestani Jaafari</p> <p>Industrial Engineering department at Amirkabir University of Technology, Tehran, Iran.  ardestani.amir@aut.ac.ir</p> <p><b>Abstract:</b> One of the most important issues in facility layout problem is to find the location of the Input/ Output points. We consider single loop path as material flow path for a given layout and find locations of Input/Out points on perimeter of the loop in the uncertain environment. The uncertainty is derived from production time of each department. Our objective is to minimize total time of AGV system after conveying all departmental material flows, we solve an uncertain queuing problem and due to difficulty of the queuing problem, an efficient simulation optimization approach is proposed using simulated annealing algorithm.</p> <p>[Seyed Mohammad Taghi Fatemi Ghomi, Amir Ardestani Jaafari. Simulation Optimization Approach for Facility Layout Problem Using Queuing Theory. Journal of American Science 2011;7(1):937-941]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Facility layout; input/ output points location; queuing theory; simulated annealing</p>	<a href="#">Full Text</a>	89
90	<p><b>Sporicidal Effect of Ozone on Fungal and Bacterial Spores in Water Disinfection</b></p>	<a href="#">Full Text</a>	90

	<p style="text-align: center;">Roushdy M.M. *, Abdel-Shakour E.H. and Abdel-Ghany T.M.          Botany and Microbiology Department, Faculty of Science, Al-Azhar University, Cairo, Egypt  <a href="mailto:m27roushdy@yahoo.com">*m27roushdy@yahoo.com</a></p> <p><b>Abstract:</b> The sporicidal effects of high ozone concentrations were tested against an endospore forming bacterial strain (<i>Bacillus subtilis</i> ATCC 6633) and a fungal strain (<i>Aspergillus brasiliensis</i> ATCC 16404) as a method of water disinfection. We compared the sporicidal action of ozone against these fungal and bacterial strains. Under identical treatment conditions, ozone showed a sporicidal effect on bacterial and fungal spores in water. Our present results showed that ozone concentrations at 7.0 and 9.0 g/m<sup>3</sup> have a sporicidal effect against bacterial and fungal spores respectively. Electron microscopic study of ozone-treated <i>B. subtilis</i> and <i>A. brasiliensis</i> spores mentioned above suggests the outer spore coat layers as a probable site of action of ozone. Our present study on ozone supports the notion that oxidizing agents including ozone probably kill spores by degrading the outer spore components and exposing the spore core to the action of the sanitizer. The ozone was generated using coaxial dielectric-barrier-discharge (DBD) technique. The coaxial DBD cell consists of two cylindrical coaxial electrodes separated by a gap distance and dielectric barrier (glass). AC (50 Hz) high voltage (2-5 kV) was applied on the DBD cell to generate filamentary discharge. The DBD cell is fed by oxygen gas. The basic mechanism of ozone generation simply consists of dissociation of oxygen molecules by the discharge electrons that are formed in the discharge filaments inside the discharge gap. The atomic oxygen, which is produced due to the dissociation, reacts with the oxygen molecules to form ozone. In the discharge, the oxygen molecules are dissociated prior to ozone formation. The concentration of the generated ozone was controlled by the discharge current and the gas flow rate. The generated ozone was used to treat the spores under investigation.</p> <p>[Roushdy M.M., Abdel-Shakour E.H. and Abdel-Ghany T.M. Sporicidal Effect of Ozone on Fungal and Bacterial Spores in Water Disinfection. Journal of American Science 2011;7(1):942-948]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> Sporicidal; Fungal; Bacterial; Ozone; water; Disinfection</p>		
91	<p style="text-align: center;"><b>Diversity of Medicinal Plants in the Biospherical Reservation Areas of Iran</b>  <b>(A Case Study of the protected area of Miankaleh)</b>          Abed Vahedi<sup>1</sup> , Esmail Yasari<sup>2</sup></p> <p><sup>1</sup>Corresponding author: Department of Agronomy and Plant Breeding, Faculty of Agricultural and Natural Resources, Islamic Azad University, Qaemshahr Branch, Qaemshahr, Mazandaran, 48148-35497. Cell: +98-09356211306. Iran. <a href="mailto:abedvahedy@gmail.com">abedvahedy@gmail.com</a></p> <p><sup>2</sup>Assistant Prof, Payame Noor University, Sari, Mazandaran, 48189-35455. Cell: +98-9113511510, Iran. <a href="mailto:e_yassari@yahoo.com">e_yassari@yahoo.com</a></p> <p><b>Abstract:</b> Awareness of people concerning the side effects of chemical drugs has caused an increasing interest in traditional medicine. This study was carried out to gather and identify medicinal plants, their curative effects and the part of them which is used from the reservation area of Miankaleh. The region under study has an area of 68800 hectares situated 12 kilometers north of the city of Behshahr and northwest of the city of Gorgan. During numerous visits to the area, plants were gathered and, after their identification using specialized references of medicinal plants, the part used and the curative effects of the plants were determined. Results obtained showed that out of a total of 43 families, 125 genera, and 155 species found in the region, 33 families, 52 genera, and 61 species (39% of all the species) belonged to medicinal plants, among which the class Asteraceae with 6 species and the class Chenopodiaceae with 5 species had the most medicinal species. The most used parts of the plants were the leaves with 31%, the whole plants with 19%, and the roots with 15%.</p> <p>[Abed Vahedi, Esmail Yasari. Diversity of Medicinal Plants in the Biospherical Reservation Areas of Iran (A Case Study of the protected area of Miankaleh) Journal of American Science 2011; 7(1):949-953]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Miankaleh, Medicinal plants, Boispherical reservation area, traditional medicine</p>	<a href="#">Full Text</a>	91
92	<p style="text-align: center;"><b>Comparative Study and Feed Evaluation of Sprouted Barley Grains on Rice Straw Versus Tamarix Mannifera on Performance of Growing Barki Lambs in Sinai</b></p> <p style="text-align: center;">Afaf M. Fayed</p>	<a href="#">Full Text</a>	92

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**Abstract:** In arid and semi arid areas Tamarix mannifera (Tm) was considered one of the principal feed resources , rice straw (Rs) one of agriculture wastes produced in a large amount but they have low nutritive value so several treatments were applied to ameliorate the utilization of Tamarix and rice straw. The objective of this study was to investigate the effect of sprouted barley on Tm , Rs and mixture of them. Thirty five growing femal Barki lambs of about four months old with an average live body weight (L.B.W) of  $16 \pm 0.5$ kg were divided into five treatments (7 animals each) to receive one of the following experimental roughages: treatment T<sub>1</sub> : rice straw (Rs) ad-lib (untreated) as control; T<sub>2</sub>:dried Tamarix ad-lib(Tm)as control ;T<sub>3</sub> : sprouted barley grains on rice straw ad-lib (BRs) ; T<sub>4</sub> : sprouted barley grains on driedTamarix ad- lib (BTm) ; T<sub>5</sub> : sprouted barley grains on 50 % Rs + 50 % Tm ad-lib (BRs+ BTm) . The experimental growing trial lasted for about 180 day. All animal treatments were fed 60% of total energy requirement as concentrate feed mixture (CFM). At the end of the growing trial five digestibility trial were conducted to evaluate the digestibility of the experimental roughages. Results showed that the treatments with sprouted barely increased CP, Ash and NFE while DM, OM, EE, CF, NDF, ADF and ADL contents, were decreased. Sprouted barely on Tamarix (BTm) or rice straw (BRs) revealed a significant ( $P \leq 0.05$ ) improvement in OM, CP, EE and cellulose digestibility with an insignificant higher in CF, NDF and hemicellulose digestibility. Nutritive values expressed as TDNg/Kg B.W. and DCP% increased significantly ( $P \leq 0.05$ ) with treatments T<sub>2</sub>, T<sub>3</sub> and T<sub>4</sub> than untreated T<sub>1</sub> (Rs) and T<sub>5</sub> (Tm). Also, ewes fed the treated roughages retained higher ( $P \leq 0.05$ ) nitrogen values than untreated treatments. Ewes fed sprouted barely had significantly higher ( $P \leq 0.05$ ) values of total volatile fatty acids (VFA), ruminal ammonia (NH<sub>3</sub>- N) concentration, serum total proteins. Albumin and urea, was insignificantly increased, while serum globulin and creatinin were insignificantly decreased GOT, GPT activity than untreated roughages. The highest ( $P \leq 0.05$ ) value of average daily gain , feed conversion (g feed/ g gain) and economical feed efficiency were recorded for T<sub>4</sub>. However the lowest ( $P \leq 0.05$ ) values were recorded for T<sub>1</sub>. In conculusion we can produce green fodder by utilizing dried Tamarix and rice straw by simple methodology using crop sprouts (barley).

[Afaf M. Fayed. **Comparative Study and Feed Evaluation of Sprouted Barley Grains on Rice Straw Versus Tamarix Mannifera on Performance of Growing Barki Lambs in Sinai.** Journal of American Science 2011; 7(1):954-961]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Key words:** Tamarix , rice straw , sprouted barley , sheep ,growth , rumen and blood parameters

**Study of the Right Liver Lobe Size /Albumin Ratio as a Noninvasive Predictor of Oesophageal Varices Compared to: Spleen Size, Platelet Count and Platelet Count/Spleen Diameter Ratio in Post Hepatitis C Virus Liver Cirrhosis in Egypt**

[Full Text](#)

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**Abstract:** Back ground and aim: Hepatitis C Virus (HCV) is considered the most common aetiology of chronic liver disease in Egypt. Portal hypertension is a major complication of liver cirrhosis, and leads to the development of portosystemic shunts. Oesophageal varices are the most important among these shunts. Bleeding from oesophageal varices is the most serious complication of cirrhosis, with a high risk of death. The prevention of variceal bleeding is very important, non-selective beta blockers and prophylactic band ligation decrease the risk of bleeding by 50%. The current guide lines recommend screening of all cirrhotic patients by endoscopy, to identify patients at risk of bleeding so prophylactic treatment should be started to them. But repeated endoscopic examinations are unpleasant for patients, and carries high cost impact and more burden on endoscopic units, while only 50% of cirrhotic patients have esophageal varices, and up to 30% have large varices. For these reasons many non-invasive predictors for the presence and size of varices have been studied. The aim of this study is to evaluate prospectively the right liver lobe size /albumin ratio and to compare it with spleen size, platelet count and platelet count/spleen diameter ratio as noninvasive predictors of oesophageal varices in post hepatitis C virus liver Cirrhosis in Egypt. Patients

	<p>and methods: This prospective study included one hundred patients with post hepatitis C virus liver Cirrhosis. All studied subjects underwent a detailed history taking, clinical examination and a biochemical workup, including total bilirubin, aspartate aminotransferase, alanine aminotransferase, serum albumin, prothrombin activity, complete blood count and viral markers for hepatitis C and hepatitis B viruses. Child-Pugh score was calculated for all patients. An upper gastrointestinal endoscopy and abdominal ultrasound were performed for all patients. The platelet count to spleen diameter ratio and the right liver lobe to albumin ratio were calculated. Results: All the 4 predictors showed high statistically significant correlation with the presence and the grade of oesophageal varices (P values &lt;0.001) Among the 4 noninvasive predictors the platelet count/spleen diameter ratio gave the highest accuracy at a cut-off value of 1326.58 (sensitivity 96.34% and specificity 83.33%) followed by the right liver lobe/albumin concentration ratio at a cut-off value of 44.2 (sensitivity 91.46% and specificity 77.78%) followed by the spleen size at a cut-off value of 131.5mm(sensitivity 90.24% and specificity 83.33%) then lastly the platelet count at a cut-off value of 131000/mm<sup>3</sup>(sensitivity 84.15% and specificity 83.33%).</p> <p>[Serag Esmat and Dalia Omran. <b>Study of the Right Liver Lobe Size /Albumin Ratio as a Noninvasive Predictor of Oesophageal Varices Compared to: Spleen Size, Platelet Count and Platelet Count/Spleen Diameter Ratio in Post Hepatitis C Virus Liver Cirrhosis in Egypt.</b> Journal of American Science 2011; 7(1):962-968]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Noninvasive predictors of oesophageal varices, the right liver lobe/albumin ratio, the platelet count/spleen diameter ratio, Oesophageal varices, Post HCV liver cirrhosis</p>		
94	<p align="center"><b>Strategies of Rural Development in Shoushtar Township of Iran (Applying SWOT method)</b></p> <p align="center">Ahmad Reza Ommani Assistant Professor Islamic Azad University Shoushtar Branch, Iran <a href="mailto:Ommani@ijamad.com">Ommani@ijamad.com</a></p> <p><b>Abstract:</b> The purpose of this research was using SWOT for identifying strategies of rural development in Shoushtar township of Iran. SWOT technique used for clarifies strengths, weaknesses, opportunities, and threats of rural area in Shouahtar Township, Iran. The population of study was people of rural area of Shoushtar. The sample size (n=110) determined by Cochran formula and selected by random sampling. Based on the results, external (opportunities and threats) and internal (strengths and weaknesses) factors that affected on situation of rural area were evaluated. Based on the participant's idea, each item ranked and importance ratio coefficient identified. Based on the results the score of external and internal factor were 2.05 and 1.71. Also, SWOT results indicated important strategies for rural development were: SO<sub>1</sub>: Using new technology for increasing productivity, SO<sub>2</sub>: Planting new crops with high economic value, ST<sub>1</sub>: Designing developmental plan for development markets, ST<sub>2</sub>: Environmental and natural sustainability, ST<sub>3</sub>:Development of agricultural policy regarding efficiency use of possibilities, WO<sub>1</sub>: Using new technology for public services, WO<sub>2</sub>: Development of extension program for HRD, WT<sub>1</sub>: Development practices for contracting equality in social and economical condition and WT<sub>2</sub>: Development of agricultural policies for productivity in poor farmers practices.</p> <p>[Ahmad Reza Ommani. <b>Strategies of Rural Development in Shoushtar Township of Iran (Applying SWOT method).</b> Journal of American Science 2011; 7(1):969-972]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> SWOT, External Factor Evaluation, Internal Factor Evaluation</p>	<a href="#">Full Text</a>	94
95	<p align="center"><b>Serum Levels of cytokines in poly-transfused patients with Beta-Thalassemia major: Relationship to splenectomy</b></p> <p align="center">Mohga Shfik<sup>1</sup>, Hayat Sherada<sup>1</sup>, Yehia Shaker<sup>2</sup>, Mie Afify<sup>2</sup>, Howayda Ali Sobeh<sup>3</sup>and Samar Moustafa<sup>2</sup></p> <p align="center"><sup>1</sup> Biochemistry - Division- Faculty of Science- Helwan University <sup>2</sup>. Biochemistry Department- National Research Centre- Dokky- Egypt <sup>3</sup>. New Paediatric Hospital- Haematology Department- Faculty of Medicine- Cairo University</p> <p align="center"><a href="mailto:ymshaker@yahoo.com">ymshaker@yahoo.com</a></p> <p><b>Abstract :</b> Beta thalassemia is the most common chronic haemolytic anemia in Egypt. A major cause of morbidity and mortality in -thalassemic patients is infections, assumed to be the result of immunological</p>	<a href="#">Full Text</a>	95

	<p>changes. Cytokines production by immune cells is superior representative of phenotypes and functions of lymphocytes, but results of previous researches are not satisfactory and in some cases are controversial, due to differences in their experimental designs. So the aim of this study was to determine the possible defect, we investigated the cytokine IL-2 and IL-8 productions by blood cells of <math>\beta</math>-thalassemic patients. The study was conducted on fifty one patients with homozygous beta-thalassemia major (23 of them were splenectomized group 1), who attending the Haematology Clinic, New Paediatric Hospital, Faculty of Medicine, Cairo University. Beside 17 healthy subjects served as control, with the same age matched group. All subjects were subjected to: full clinical examination, complete blood counting, liver function tests, and renal function tests. Determination of IL-2 was done by an immunoenzymometric assay for the quantitative measurement (Biosource IL-2 EASIA kit), and Determination of IL-8 by AviBion Human Interleukin-8 ELISA kits. The result showed that, there were significant increase (<math>P &lt; 0.05</math>) in the serum level of IL-8 among group 1 (mean level was <math>526.4 \pm 65.7</math> U/ml) as compared to control group (mean level was <math>208.67 \pm 35.53</math> pg/ml) as well as group 2 (mean level was <math>438.21 \pm 58.063</math> pg/ml). Also group 2 had significant increase (<math>P &lt; 0.05</math>) in the serum level of IL-8 as compared to control group. While, the levels of serum IL-2 showed no significant changes (<math>P &gt; 0.05</math>) between the thalassaemic groups as well as the control group. In conclusion, the study revealed that beta-thalassemia major patients had increased level of IL-8 which was more prominent in splenectomized patients. The potential role of IL-8 and the interactions between different cytokines in thalassaemic patients require further investigation. Multi-transfusions could be responsible for a change in circulating cytokines that could contribute to a state of partial immune deficiency in beta-thalassaemic patients, which is more prominence among the splenectomized patient. [Mohga Shfik, Hayat Sherada, Yehia Shaker, Mie Afify, Howayda Ali Sobeh and Samar Moustafa Serum Levels of cytokines in poly-transfused patients with Beta-Thalassemia major: Relationship to splenectomy. Journal of American Science 2011; 7(1):973-979]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Key words:</b> thalassemia major- IL-2, IL-8- splenectomy</p>		
96	<p style="text-align: center;"><b>Strategies for Retaining Youth in Rural Communities</b></p> <p style="text-align: center;">Ahmad Reza Ommani  Assistant Professor, Islamic Azad University-Shoushtar Branch, Khuzestan, Iran  ommani75451@yahoo.com</p> <p><b>Abstract:</b> The identify factors affecting on migration youths to urban centers is very important to rural program development. For develop strategies that attract and keep youth in rural communities, reasons youth migrate to urban centers must be closely examined and identified. The research method employed was correlative-descriptive. The population consisted rural youth in Shoushtar township of Khuzestan province in Iran. A random sample of rural youths (n=360) was selected. Data collected were analyzed using the Statistical Package for the Social Sciences (SPSS). Appropriate statistical procedures for description (frequencies, percent, means, and standard deviations) were used. The main result of the study revealed that top reasons by youth for moving to urban centre including: employment, education, family-related and to get away. Also the top eight strategies for retaining youth to rural communities were: Improve career opportunities, Provide work experience opportunities, Improve opportunities for education after high school, Improve opportunities for social activities, Improve access to amenities, Promote the advantages of rural living, establishment of youth advisory committees establishment of youth priorities for local government, Promote youth involvement in community decision making. From a development perspective, the youth are the future for any country and the world. The potential of youth to transform rural communities needs to be recognized, especially in developing countries where the majority of citizens depend on agriculture as a source of livelihood. If rural development is to be sustainable, the rural youth need to be brought in the mainstream of the development process, no matter whether the development initiatives come from the public or private sector. Rural development in the long-term depends on how the youth are prepared to cope with the challenges they are likely to face as rural citizens. [Ahmad Reza Ommani. Strategies for Retaining Youth in Rural Communities. Journal of American Science 2011; 7(1):980-983]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> Youth, Rural development, Employment, Migration</p>	<a href="#">Full Text</a>	96
97	<p><b>Melatonin Supplementation Could Trigger Delayed Cardiac Preconditioning Against I/R Injury in Partial Nephrectomized Rats with Emphasis to Possible Role of Cardiac NO.</b></p>	<a href="#">Full Text</a>	97

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**Abstract:** The cardioprotective effects of melatonin are consistent with its ability to scavenge free radical. However free radicals are considered as preconditioning factors, helping the heart to withstand consequent attacks of ischemic reperfusion injury. So, this study aimed to clarify whether melatonin supplementation, concomitant with the deterioration of kidney function in experimental model of renal failure, is able to protect the isolated heart against the liability for global ischemic reperfusion (I/R) injury or its antioxidant effect interferes with proposed preconditioning effect of free radical. Moreover, the study evaluated the changes of myocardial nitric oxide (NO) system with melatonin treatment as one of the suggested triggers of preconditioning. Thirty male Albino rats were divided into three equal groups, sham- operated control rats, 5/6 subtotal nephrectomized (STNx) group and 5/6 subtotal nephrectomized melatonin- supplemented (STNx + M) group. Melatonin was given at a dose of 5 mg / kg/ day for 8 weeks. Rats in all groups were subjected to estimation of plasma urea, creatinine, malondialdehyde (MDA) and nitrate levels, followed by perfusion of isolated hearts. A period of ischemia (30 min) followed by reperfusion for another 30 min was done. The cardiac hemodynamic changes during reperfusion at 5, 15, 25 and 30 min intervals were recorded. At the end of reperfusion, the different chambers of the heart were subjected for determination of the absolute weights as well as their weights to body weight ratios. Sections from the cardiac muscle, mainly ventricle, were used for tissue reduced glutathione (GSH) and nitrate estimation. Partial nephrectomized group (STNx) exhibited significant deterioration of the baseline cardiac hemodynamic as well as more liability for ischemic reperfusion injury in early (5 min) and late reperfusion (30 min) records. Also nephrectomy caused significant cardiac remodeling (hypertrophy), manifested in the increased left ventricle and whole cardiac weights to body weight ratio. The significantly increased plasma MDA, urea and creatinine with nephrectomy showed a negative correlation with the reduced plasma and cardiac tissue nitrate. Melatonin treatment concomitant with the deterioration of renal function(in STNx +M group) showed significant higher basal coronary flow compared to STNx group but it did not improve the ameliorate basal intrinsic cardiac activity due to renal failure. Following I/R, melatonin pre treated group showed some sort of protection against deterioration of cardiac activity in particular at 30 min reperfusion. A 44.5 % decrease in HR in STNx rats versus 30.5% decrease in HR in melatonin treated has been observed. Also the percentage of decrease in peak tension and the tension /left ventricular weight due to reperfusion were significantly lower with melatonin treatment at both 5 and 30 min records of reperfusion. Also melatonin shortened the time to peak tension (TPT) in particular at 30 min reperfusion where ,the increase in TPT due to reperfusion injury was +20.3% with melatonin treatment versus +51.9% in non treated rats. Although, melatonin shortened the half relaxation time(1/2RT) and improve the myocardial flow rate(MFR) compared to non treated group in some records of reperfusion but compared to basal record ; the percentage of change was non significant. Melatonin significantly decreased urea, creatinine and MDA levels which still higher compared to sham control group. Also melatonin ameliorated the hypertrophic changes but not completely with an increase in cardiac tissue GSH and nitrate levels in hearts of melatonin treated rats as well as plasma nitrate. The increased MDA which is an indicator for free radical generation in partial nephrectomized rats did not provide the supposed preconditioning effect against ischemic reperfusion injury in isolated hearts or its effect wasn't conclusive. On the other hand, melatonin was able to improve the basal coronary flow rate and appears to offer some sort of preconditioning and/or protection against I/R injury a condition of excess free radical generation. Cardiac tissue GSH (anti-oxidant) and NO triggering by melatonin may be added to its free radical scavenging effect in the suggested protection and / or preconditioning.

[Bataa M.A .El –Kafoury, Amira M. Abdel- Rahman and Fayda I. Abdel Motaleb. **Melatonin Supplementation Could Trigger Delayed Cardiac Preconditioning Against I/R Injury in Partial Nephrectomized Rats with Emphasis to Possible Role of Cardiac NO.** Journal of American Science 2011; 7(1):984-998]. (ISSN: 1545-1003). <http://www.americanscience.org>.

**Key words:** cardiac preconditioning, ischemic reperfusion, melatonin, nitric oxide, free radicals, partial nephrectomy

	<p style="text-align: center;"><b>Carcinoma</b>  Ahmed M. Awadallah<sup>*1</sup>, Hesham Ali Issa<sup>1</sup> and Mohamed S. Soliman<sup>2</sup>  Department of Clinical and Chemical Pathology<sup>1</sup> and Department of Hepatology, Gastroenterology and Infectious diseases<sup>2</sup>, Faculty of Medicine, Benha University, Benha, Egypt.  <a href="mailto:a_mamdouh8@hotmail.com">*a_mamdouh8@hotmail.com</a></p> <p><b>Abstract:</b> Background: In Egypt, HCC was reported to account for about 4.7% of chronic liver disease patients. Approximately 80% of HCCs are associated with cirrhosis, which is regarded as the most important precancerous etiological factor. Chromogranin A is a cellular marker for neuroendocrine tumors. High serum levels of CgA have also been demonstrated in patients with other malignancies including colon, lung, breast and prostate cancer. Objective: To evaluate serum CgA as a marker for HCC. Patients and Methods: Eighty cases (30 with HCC, 30 with liver cirrhosis and 20 apparently healthy controls) were subjected for estimation of Chromogranin A (CgA) and Alpha feto protein (AFP) by ELISA technique together with routine laboratory investigations including CBC, prothrombin time and concentration and INR and serum urea, creatinine, albumin, AST, ALT, alkaline phosphatase and bilirubin (total and direct). Results: There was a highly significant statistical difference between control group and HCC group and between liver cirrhosis group and HCC group as regard to AFP and Chromogranin A (P&lt;0.01). There was a significant statistical difference between control group and liver cirrhosis group as regard to AFP and Chromogranin A (P&lt;0.05). Conclusion: the results of the present study revealed that the application of CgA as a tumor marker in the diagnosis of HCC is to be considered especially in cases with low levels of AFP, as determination of CgA serum values represents a complementary diagnostic tool in monitoring chronic liver disease patients for detection of HCC. The combined use of both CgA and AFP to detect HCC increases their sensitivity and specificity.  [Ahmed M. Awadallah, Hesham Ali Issa and Mohamed S. Soliman. <b>Evaluation of Serum Chromogranin A as a Useful Tumor Marker for Diagnosis of Hepatocellular Carcinoma.</b> Journal of American Science 2011; 7(1):999-1007]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> Chromogranin A, Hepatocellular carcinoma, liver cirrhosis</p>		
99	<p style="text-align: center;"><b>Monte Carlo method and the Ising model for magnetized and non-magnetized water as MRI contrast agent</b></p> <p style="text-align: center;">Wael Abou EL-wafa. Ahmed<sup>1</sup>, Yasser M. Kadah<sup>2</sup>, Samir M. Badawi<sup>3</sup>  <sup>1</sup> Biomedical Engineering Department, Faculty of Engineering, Minia University, Egypt  <sup>2</sup> Biomedical Engineering Department, Faculty of Engineering, Cairo University, Cairo, Egypt  <sup>3</sup> Industrial Electronics and Control engineering, Faculty of Electronic Engineering, Monoufia University, Egypt  wael@eng.miniauniv.edu.eg</p> <p><b>Abstract:</b> A Monte Carlo algorithm for a two dimensional Ising model is proposed and implemented using Mat lab. It describes a lattice with a discrete number of particles. We study the evolution of the system over time depending on a particular variable called the interaction strength .The results of computer simulations agree with practical experiments showing that there is a change in Energy-Magnetization and strength interaction-Magnetization curves between magnetized water and normal water which means that the magnetized water or Saline changes the properties of the solutions affecting T1 so it can be used as a new contrast agents for MRI.  [Wael Abou EL-wafa. Ahmed, Yasser M. Kadah, Samir M. Badawi. <b>Monte Carlo method and the Ising model for magnetized and non-magnetized water as MRI contrast agent.</b> Journal of American Science 2011; 7(1):1008-1012]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> Monte Carlo; MRI; magnetized water; Ising.</p>	<a href="#">Full Text</a>	99
100	<p style="text-align: center;"><b>Multidrug resistant Egyptian isolates of <i>Acinetobacter baumannii</i></b></p> <p style="text-align: center;"><sup>1</sup> Shabaan Hashem Ahmed; <sup>2</sup>Sayed Fekry Abdelwahab; <sup>3</sup> Ayman Mohammed Hasanen; <sup>4</sup>Doaa Safwat Mohammed<sup>*</sup></p> <p><sup>1</sup>Department of Microbiology and Immunology, Faculty of Pharmacy, University of Assuit, Egypt.  <sup>2</sup> Department of Microbiology, Faculty of Medicine, University of Minia, Egypt.  <sup>3</sup> Department of General Surgery, Faculty of Medicine, University of Minia, Egypt.</p>	<a href="#">Full Text</a>	100

	<p><sup>4</sup>Department of Microbiology, Faculty of Pharmacy, University of Beni-Suef, Egypt.  <a href="mailto:doaa.safwat@yahoo.com">doaa.safwat@yahoo.com</a></p> <p><b>Abstract:</b> The resistance of <i>Acinetobacter baumannii</i> to antimicrobial agents is mediated by all of the major resistance mechanisms, including modification of target sites, enzymatic inactivation and active efflux of drugs. Antibiotic susceptibility testing has been performed on fifty-two <i>A. baumannii</i> isolates. Twenty isolates have been recovered from patients suffering from wound and burn wound infections attending general surgery, plastic surgery and obstetrics and gynecology departments and thirty-two isolates have been recovered from the environment of these departments. Different mechanisms of antimicrobial resistance have been detected among resistant isolates. Broth dilution method have been used to investigate antimicrobial susceptibility pattern, iodometric method have been used to detect <math>\beta</math>-lactamase enzymes and polymerase chain reaction has been used to detect <i>bla</i><sub>oxa-51-like</sub> genes, <i>aph</i> (3')-VIA genes and <i>adeB</i> gene. Tetracycline was the most effective antimicrobial agent against <i>A. baumannii</i>. It has showed high resistance to both of amikacin and meropenem (76.9%), cefipime (80.8%) and both of cephradine and imipenem (96.2%). An extreme resistance to the other antimicrobial agents has been shown by the same organism. <math>\beta</math>-lactamase enzyme has been detected in <math>\beta</math>-lactam resistant isolates, <i>bla</i><sub>oxa-51-like</sub> carbapenemase genes have been detected in carbapenem resistant isolates, <i>aph</i> (3')-VIA genes have been detected in amikacin resistant isolates and <i>adeB</i> gene have been detected in some multidrug resistant strains. So, resistance to <math>\beta</math>-lactams, carbapenems and amikacin has been high in <i>A. baumannii</i> isolates which has caused appearance of multidrug resistant isolates with different resistance mechanisms like <i>bla</i><sub>oxa-51-like</sub> genes, <i>aph</i> (3')-VIA genes and <i>adeB</i> gene.  [Shabaan Hashem Ahmed; Sayed Fekry Abdelwahab; Ayman Mohammed Hasanen; Doaa Safwat Mohammed. <b>Multidrug resistant Egyptian isolates of <i>Acinetobacter baumannii</i></b>. Journal of American Science 2011; 7(1):1013-1019]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> <i>A. baumannii</i>, <i>bla</i><sub>oxa-51-like</sub> genes, <i>aph</i> (3')-VIA genes, <i>adeB</i> gene</p>		
101	<p><b>Evaluation of the effect of three different pesticides on <i>Azolla pinnata</i> growth and NPK uptake</b></p> <p>El-Shahate, R.M.<sup>1</sup> – El-Araby, M.M.I.<sup>2</sup> - Eweda, E.W<sup>3</sup> –El -Berashi, M.N.<sup>2</sup>  1. Soil, Water and Environ. Res. Inst., ARC,  2. Faculty of Science, Ain Shams University,  3. Faculty of Agriculture, Ain Shams University</p> <p><b>Abstract:</b> Three pesticides of common use in rice fields in Egypt were used in the present work. This study was devoted to investigate the effects of different concentrations of the insecticide furadan, fungicide hinosan and herbicide saturn on the growth and NPK uptake of the aquatic fern <i>Azolla pinnata</i>, which is recommended to be applied as a biofertilizer in rice. In this respect, the results obtained showed variable effects of the three pesticides under study. Furadan and hinosan showed positive effects since each increased the growth rate of <i>A. pinnata</i> at lower concentrations (0.001, 0.002 ppm) and consequently increased its NPK content. Maximum dinitrogenase activity was also generally obtained at 0.002 ppm furadan, throughout the different incubation periods. Nitrogen, phosphorus and potassium uptake was generally increased with increasing the incubation period of the applied furadan and hinosan, at all concentrations. The highest NPK uptake by <i>A. pinnata</i> was obtained with the medium concentration (0.002 ppm) of both pesticides after 20 and 25 days of incubation. On the other hand, saturn generally showed inhibitory effects on the growth, N<sub>2</sub>- fixation and NPK uptake even at lowest concentration (0.001 ppm).  [El-Shahate, R.M. – El-Araby, M.M.I. - Eweda, E.W–El -Berashi, M.N. <b>Evaluation of the effect of three different pesticides on <i>Azolla pinnata</i> growth and NPK uptake</b>. Journal of American Science 2011; 7(1):1020-1031]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> <i>Azolla pinnata</i>, fungicides, insecticides, herbicides saturn, hinosan, furadan, growth, dinitrogenase activity, uptake of nitrogen, phosphorus, potassium.</p>	<a href="#">Full Text</a>	101
102	<p><b>An Analysis of Polyethylene Coating Corrosion in Oil and Gas Pipelines</b></p> <p>Amir Samimi<sup>a1</sup> Soroush Zarinabadi<sup>2</sup>  <sup>1</sup>. Faculty member of Islamic Azad University, Mahshahr branch, Iran</p>	<a href="#">Full Text</a>	102

	<p style="text-align: center;"><sup>2</sup> Islamic Azad University, Mahshahr, Iran  <a href="mailto:1-amirsamimi1161@gmail.com">1- amirsamimi1161@gmail.com</a>    <a href="mailto:2-zarinabadi@yahoo.com">2- zarinabadi@yahoo.com</a></p> <p><b>Abstract:</b> The corrosion of pipelines' coatings is one of the main problems in oil and gas industries for which a large amount of money is spent each year. Coating is the first defense line in front of a corrosive environment in which pipes have been buried. Good function of coating depends on its adhesiveness rate to the metal surface. Initial adhesiveness and its durability in the contact conditions are among those factors that enhance coating efficiency in long term. The rate of Initial adhesiveness has a high relationship with coating movement and surface wetness by this movement in the course of applying the coating and also with cleanliness and preparedness of pipe surface. The durability and permanence of adhesiveness depends on coating properties including its resistance in front of moisture penetration. Applying coating on the pipelines has a high cost so for this reason the selection and application of coating is of high importance. Also for underground buried pipes it is not possible to change their coatings in short durations unlike other structures. Therefore the coating must be durable for 20 years. This article proceeds to investigate the reason for corrosion in steel pipes with three poly ethylene layers.  [Amir Samimi Soroush Zarinabadi. <b>An Analysis of Polyethylene Coating Corrosion in Oil and Gas Pipelines.</b> Journal of American Science 2011; 7(1):1032-1036]. (ISSN: 1545-1003).  <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> corrosion ; initial adhesiveness ; poly ethylene coating</p>		
103	<p style="text-align: center;"><b>Scrutiny Water Penetration in Three-layer Polyethylene Coverage</b></p> <p style="text-align: center;">Soroush Zarinabadi*<sup>1</sup> , Amir Samimi<sup>2</sup>  1- Faculty member of Islamic Azad University, Ahvaz Branch  2- Member of young researchers club, Islamic Azad University Mahshahr  <a href="mailto:1-zarinabadi@yahoo.com">1- zarinabadi@yahoo.com</a>    <a href="mailto:2-amirsamimi1161@gmail.com">2- amirsamimi1161@gmail.com</a></p> <p><b>Abstract:</b> Coverage in line pipes include of high costs. For this selecting cover and how apply is high important. Three fold polyethylenes include of epoxy layers, adhesive and polyethylene. Each other from layers having attributes that increasing its application for long term. Polyethylene layer is good shelter for prevent of physical damages. In attention to corrosion in lower temperature is a electrochemical reaction and rate of a electrochemical reaction is very impress of a element or very reactor from surface. This position occurred when influence of a element increasing of other cover controllers. A example of this issue that will be cause of outer corrosion in pipes under soil and this is very importance in work, this is leakage water into covers that can be measurable with coefficient of water leakage that can exchanging layers quality. This article has studied leakage water into three fold polyethylene cover.  [Soroush Zarinabadi, Amir Samimi. <b>Scrutiny Water Penetration in Three-layer Polyethylene Coverage.</b> Journal of American Science 2011; 7(1):1037-1039]. (ISSN: 1545-1003).  <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> leakage water; polyethylene cover; epoxy layer; outer corrosion</p>	<a href="#">Full Text</a>	103
104	<p style="text-align: center;"><b>Effect of Feeding Different Sources of Energy on Performance of Goats Fed Saltbush in Sinai</b></p> <p style="text-align: center;">Ahlam R.Abdou, E.Y. Eid ; Abeer M. El-Essawy, * Afaf M. Fayed, H.G. Helal and H.M. El-Shaer  Department of Animal and Poultry Nutrition, Desert Research Center, Mataria, Cairo, Egypt  <a href="mailto:a_fayed2007@yahoo.com">*a_fayed2007@yahoo.com</a></p> <p><b>Abstract:</b> Feeding halophytes is a feasible solution to minimize the problem of feed shortage in arid and semiarid areas of Egypt. This work aimed to investigate the effect of feeding goats on fresh <i>Atriplex nummularia</i> which is grown naturally and cultivated in Sinai on performance of growing goats when added with different sources of energy supplementation (concentrate feed mixture CFM, ground barley grains or ground date stones and mixture of these materials) on nutrients digestibility, nitrogen balance, water utilization and some rumen and blood metabolites. The experiment was performed on twenty eight of growing goats (six months old) with mean body weight 16 ± 0.38 Kg were divided into four equal groups for 105 days. The diets were given at the basis of 40:60 roughage: concentrate ratio for growth requirements. The roughages were berseem hay in T1 ( control group) or fresh <i>Atriplex nummularia</i> in T2,</p>	<a href="#">Full Text</a>	104

	<p>T3 and T4 whereas the energy supplements were concentrate feed mixture (CFM) in T1, ground date stones in T2, ground barley grains in T3 and a mixture of 50% ground barley grains with 50% ground date stones in T4. Results obtained revealed that inclusion of barley grains in T3 group improved DMI of <i>Atriplex</i> than that in T1, T2 and T4 groups. The highest body weight gain was recorded by animals in T1 and T3 compared to those of the other treatments. In addition Intakes of TDN and DCP were maximum in T1 and T3. The maximum apparent digestion coefficients of OM, CP, EE and NFE were recorded by animals in T3 while those of DM and CF were digested much better by animals in T1. TDN% and DCP% were increased in T1 followed by T4. All animals were in positive nitrogen balance. The maximum values of total water intakes were recorded for animals in T2 whereas the lowest values for animals in T3 with significant differences. Serum creatinine, total protein, globulin and GPT levels were not affected by diet type and they were within the normal ranges. Also a sampling time factor was detected. Ruminant ammonia-nitrogen and total volatile fatty acids revealed significant variations before feeding and 6 hrs post feeding. The feed cost of daily gain (L.E)/ kg was achieved for animals fed ground date stone in T2 (L.E 0.860) which was lower than T4, T3 and T1 (L.E. 1.255, 1.273 and 1.290) respectively. In conclusion, barley grains or ground date stones or their mixture improved the nutrients utilization and intake of <i>Atriplex</i>. Utilization of such halophytic plants supplemented with non-conventional energy supplements could be recommended to enhance feed materials availability all-round year and to improve animal performance as well under arid and saline conditions of Sinai.</p> <p>[Ahlam R.Abdou, E.Y. Eid; Abeer M. El-Essawy, Afaf M. Fayed, H.G. Helal and H.M. El-Shaer. <b>Effect of Feeding Different Sources of Energy on Performance of Goats Fed Saltbush in Sinai.</b> Journal of American Science 2011; 7(1):1040-1050]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Salinity, halophytes, saltbush, barley grains, date stone, goats, intake, nutrients digestion.</p>		
105	<p align="center"><b>Factors Associated with the Distribution of the Invasive Bivalve Clams" <i>Donax Variabilis</i> (Say,1822)" at the Area of the Mediterranean Coast Preferred by Marine Fish Larvae, New Damietta, Egypt</b></p> <p align="center">El-Ghobashy, A.E.<sup>1</sup>; Mahmad, S.Z.<sup>2</sup>; Kandeel, S.K.<sup>3</sup> and El-Ghitany, A.H.*<sup>1</sup></p> <p align="center"><sup>1</sup>Zoology Department, Faculty of Science (Damietta), Mansoura University, Egypt.  <sup>2</sup>Oceanography Department, Faculty of Science, Suez Canal University, Egypt.  <sup>3</sup>Zoology Department, Faculty of Science (Fayoum), Fayoum University, Egypt.  <a href="mailto:asmaa_haris222@yahoo.com">*asmaa_haris222@yahoo.com</a></p> <p><b>Abstract:</b> New Damietta shore is one of the important areas for collection of the clams as well as mullet, seabass and seabream larvae which are reliable for marine aquaculture in Egypt. <i>Donax variabilis</i> was recorded for the first time in Egypt and because of its presence in the area of Damietta Maritime Port, larvae has come stuck with ships from the Atlantic Ocean where they were registered there. The density of <i>D.variabilis</i> increased in site I (718 / m<sup>2</sup>) than in site II (415 / m<sup>2</sup>). Water salinity (33.43 ± 4.59 mg/ L) in site I was less than the salinity of the sea, while it was almost similar to the salinity of the sea (36.94 ± 3.45 mg/ L) at site II. Nutrients concentration at site II were higher than that at site I, where it averaged 0.02 ± 0.01, 0.05 ± 0.03 and 0.26 ± 0.16 at site I and 0.05 ± 0.03, 0.34 ± 0.41 and 0.46 ± 0.36 mg/l at site II for NO<sub>2</sub>, NO<sub>3</sub> and PO<sub>4</sub> respectively. Measured <i>Chlorophyll a</i> was high at site II (0.25 0.12 mg/m<sup>3</sup>) compared to site I (0.25 0.12 mg/m<sup>3</sup>), revealing the increase in phytoplankton biomass at site II. Crustaceans and molluscs were the most groups associated with clam's beds. <i>D.variabilis</i> cohorts appeared during summer months, this indicates that the population consists of only one spawning event. Length frequency of <i>D.variabilis</i> was essentially bimodal during the period of study. Three modes were recorded in June, 2008 at size classes of 7, 11 and 20 mm of shell length.</p> <p>[El-Ghobashy, A.E.; Mahmad, S.Z.; Kandeel, S.K. and El-Ghitany, A.H. <b>Factors Associated with the Distribution of the Invasive Bivalve Clams" <i>Donax Variabilis</i> (Say,1822)" at the Area of the Mediterranean Coast Preferred by Marine Fish Larvae, New Damietta, Egypt.</b> Journal of American Science 2011; 7(1):1051-1062]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key words:</b> Mediterranean coast- <i>Donax variabilis</i>- A biotic factors- Biotic factors</p>	Full Text	105
106	<p align="center"><b>Antimicrobial Evaluation of Novel Pyrrole, Pyrazole, Pyrimidine and Pyrrolo [2, 3-d]-Pyrimidine Derivatives Brearing Sulfonamide Moiety</b></p>	Full Text	106

	<p>Mostafa. M. Ghorab<sup>1</sup>, Helmy. I. Heiba<sup>2</sup>, Amina. A. Hassan<sup>3</sup>, Amany. B. Abd El-Aziz<sup>3</sup>, and Marwa. G. El-Gazzar<sup>2*</sup></p> <p><sup>1</sup> Medicinal, Aromatic and Poisonous Plants Research Center (MAPPRC), College of Pharmacy, King Saudi University, Riyadh, Saudi Arabia.</p> <p><sup>2</sup> Department of Drug Radiation Research, National Center for Radiation Research and Technology, Cairo, Egypt.</p> <p><sup>3</sup> Department of microbiology, National Center for Radiation Research and Technology, Nasr City, Cairo, Egypt.</p> <p><a href="mailto:*marwagalagazzar@yahoo.com">*marwagalagazzar@yahoo.com</a></p> <p><b>Abstract:</b> Novel pyrrole <b>5</b> and <b>6</b>, pyrrolopyrimidine <b>7-10</b>, pyrazole <b>14</b> and <b>15</b> or pyrimidine <b>16</b> and <b>17</b> derivatives bearing biologically active sulfonamide moiety were synthesized and tested for their antimicrobial activity. The synthesized compounds possessed antibacterial and antifungal activities with MIC ranging from 4–256 µg/mL. The most resistant species was <i>Aspergillus flavus</i>, while the most sensitive were <i>Aspergillus fumigatus</i> and <i>Penicillium chrysogenum</i>. The results of the antimicrobial screening showed that all the tested compounds possess significant activity and some were found to be more active than the reference drugs used (ciprofloxacin and ciclopiroxolamine). [Mostafa. M. Ghorab, Helmy. I. Heiba, Amina. A. Hassan, Amany. B. Abd El-Aziz, and Marwa. G. El-Gazzar. <b>Antimicrobial Evaluation of Novel Pyrrole, Pyrazole, Pyrimidine and Pyrrolo [2, 3-d]-Pyrimidine Derivatives Brearing Sulfonamide Moiety.</b> Journal of American Science 2011; 7(1):1063-1073]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> antimicrobial, pyrrole, pyrazole, pyrimidine, pyrrolo [2, 3-d]-pyrimidine, sulfonamide</p>		
107	<p><b>Egyptian Folk Art and its Significance as a Source of Symbolic Design Decorative Clothes Young Men and Women</b></p> <p>*Rabab H. Mohammed and Sahar A. Zaghoul</p> <p>Department of Clothing and Textiles - College of Home Economics - Helwan University, Helwan, Egypt <a href="mailto:*rababh72@yahoo.com">*rababh72@yahoo.com</a></p> <p><b>Abstract:</b> The purpose of this study is to shed light on the importance of folk art as a national art, which should be with him to maintain the continuity by employing a selection of units of the Egyptian People and their meanings of symbolism in the decorative design of the T-shirt as a product commensurate with the youth of both sexes during the age (20 to 30 years), by identifying the views of all producers of clothes, textile and consumers in the proposed designs and the potential demand for purchase and implementation of a selection of them. The research samples contain 418 single distributed according to the research variables on the producers and the number (10) and intended them gentlemen producers of clothes for young people of both sexes and in particular the product T Shirts, and consumers are (408), and understood to mean members of the community of young men and young women aged (20 to 30 years) level of education between (high, medium, low), in order to know the views of samples of the research in the proposed designs and made the most important findings point to the as follows: 1 - the best designs in accordance with the views of producers in the "appropriate decoration popular designs of the proposed" order is a design (V, IX, II, XIV, XI, and IV), due to the fact that these designs bear the character of the popular in contemporary more than Other designs, and then followed in the order designs (VIII, XIII, XV, XVI, and I), and comes at the end designs (X, VII, III, and XII). 2 - the best designs in accordance with the views of producers on "the possibility of the implementation and marketing of proposed designs," the order is the design, "IV, IX, XIV, I, VI, and VI," The reason for this is that these designs can be implemented by more than a method with low costs of production "In terms of raw materials, method of implementation of the decoration, lines run inside the factories," as it gives a higher percentage of profits as a result of consumer acceptance for, and then followed in the order designs, "XII, XIII, V, II, VII", and comes in the end designs "XI, X, XV, and VIII". 3 - There are significant differences between the mean scores of the views of consumers according to the research variables "in the appropriate technical designs proposed at the level (0.01) to the (female, age from" 25 to 30 "years, higher education). 4 - There is no statistically significant difference between the averages of the views of consumers according to the research variables "sex" in the extent of consumer acceptance of the proposed designs. 5 - There are significant differences between the mean scores of the views of consumers according to the research variables "age, level of</p>	<a href="#">Full Text</a>	107

	<p>education" in the extent of consumer acceptance of the designs proposed "at the level (0.01) for the (age of" 25 to 30 "years, higher education).  [Rabab H. Mohammed and Sahar A. Zaghoul. <b>Egyptian Folk Art and its Significance as a Source of Symbolic Design Decorative Clothes Young Men and Women.</b> Journal of American Science 2011; 7(1):1074-1091]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>rd:</b> Egyptian folk art, symbolic meaning, decorative design, Clothing, young men and women</p>		
108	<p align="center"><b>Uncertainty determination of correlated color temperature for high intensity discharge lamps</b></p> <p align="center">A.B. El-Bialy<sup>1</sup>, M.M. El-Ganainy<sup>2</sup> and E.M. El-Moghazy<sup>3</sup>  <sup>1</sup>University College for Woman for Art, science and education. Cairo , Egypt  <sup>2</sup>National Institute for Standards (NIS), Giza, code 11211, Egypt  <sup>3</sup> NIS and Ph.D. student in University College of Woman, Giza, code 11211, Egypt.  <a href="mailto:emoghazy@yahoo.com">emoghazy@yahoo.com</a></p> <p><b>Abstract:</b> Color temperature is a description of the color of light sources. The chromaticity coordinates of the light source lying on the Planckian locus which is called (Commission Internationale de l'Eclairage, referred to as CIE) CIE diagram and the source has color temperature (in Kelvin) equal to the blackbody temperature of the Planckian radiator. For light sources that don't have chromaticity coordinates that fall exactly on the Planckian locus but lie near it. In this case the chromaticity coordinates of such sources can be representing by correlated color temperature (CCT). Uncertainty of Correlated Color Temperature (CCT) or (<math>T_{cp}</math>) for high intensity discharge lamps (HID) is derived from (u, v) color coordinates. The method of the International organization for standardization (ISO) Guide is applied by Gardner to drive analytical expression for uncertainty in <b>u</b> and <b>v</b> chromaticity coordinates and an uncertainty in CCT for few Kelvins can be achieved. The color temperature standard achieved with the uncertainty is. <math>\pm 11.48</math> K for mercury lamp, <math>\pm 3.44</math> K for sodium lamp and <math>\pm 6.4</math> K for metal halide lamp).  [A.B. El-Bialy, M.M. El-Ganainy and E.M. El-Moghazy, Uncertainty determination of correlated color temperature for high intensity discharge lamps. Journal of American Science 2011; 7(1):1092-1096]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Key words:</b> lamp, correlated color temperature, Uncertainty and luminous flux</p>	<a href="#">Full Text</a>	108
109	<p align="center"><b>Genotoxic Effects of Acrylamide in Adult Male Albino Rats Liver</b></p> <p align="center"><b>Khlood M. El- Bohi<sup>1</sup>, Gihan G. Moustafa<sup>1</sup>, Nabela I. El sharkawi<sup>1</sup> and *<sup>2</sup>Laila M. E. Sabik</b>  <sup>1</sup>Dept of Forensic Medicine &amp; Toxicology. Faculty of Veterinary Medicine , Zagazig University, Egypt.  *<sup>2</sup>Dept. of Forensic Medicine &amp; Clinical Toxicology. Faculty of Medicine, Zagazig University, Egypt.  *Lailasabik714@hotmail.com</p> <p><b>Abstract:</b> Background: Acrylamide is a common chemical which is used in both industrial and laboratory processes. It is formed in heated starchy foods especially potato products. Aim of the work: The aim of the present study was to clarify the possible involvement of genotoxic mechanisms in acrylamide-induced hepatotoxicity by measuring the role of cytochrome P450 2E1 (CYP2E1) gene protein and mRNA in rats intoxicated with acrylamide and recording the DNA changes in their hepatic tissues by the <i>in vivo</i> alkaline single cell gel electrophoresis (Comet assay). Material and Methods: Thirty mature male albino rats were used in this study. Rats were classified randomly into three groups; the first group daily received 50 mg/kg acrylamide orally for 21 days. The second group received twice the previous dose (100 mg/kg) by the same route and duration and the third group was administered distilled water and kept as control. Results: The results revealed that, acrylamide caused marked alterations in animal behaviour and mortality % in both treated groups which reached 30% (in the first group) and 40% (in the second group) . Acrylamide elicited a highly significant increase in serum AST and ALT, while a significant decrease of total protein, albumin and globulin levels were recorded. Acrylamide caused down regulation of both CYP 2E1 protein and its mRNA expression concomitant with a dose dependent significant increase in number of DNA single strand breaks. Histopathological investigation revealed necrotic and degenerative changes in the liver of acrylamide treated rats. Recommendation: Acrylamide exposure either occupationally or dietary must be restricted. In addition to, raising awareness of people about its hazards.  [Khlood M. El- Bohi, Gihan G. Moustafa, Nabela I. El sharkawi and Laila M. E. Sabik. <b>Genotoxic</b></p>	<a href="#">Full Text</a>	109

	<p><b>Effects of Acrylamide in Adult Male Albino Rats Liver.</b> Journal of American Science 2011; 7(1):1097-1108]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> Acrylamide, Glycidamide, Genotoxicity, CYP2E1, Comet assay</p>		
110	<p style="text-align: center;"><b>Detection of Community Acquired Methicillin Resistance Staphylococcus aureus among Staphylococcus aureus isolates.</b></p> <p style="text-align: center;">Ola Kader<sup>1</sup>, Samia Ebid<sup>2</sup>, Nancy Mostafa<sup>21</sup> Shima El Sayed<sup>2</sup> and Abeer Ghazal<sup>1</sup>  <sup>1</sup> Microbiology Department and <sup>2</sup> Applied Medical Chemistry Department, Medical Research Institute, Alexandria University.</p> <p><b>ABSTRACT:</b> The rates of MRSA infections in the hospital, as well as the disease in the community, have continued to rise. Staphylococcal cassette chromosome <i>mec</i> (<i>SCCmec</i>) is a variable genetic element that contains the methicillin resistance determinant, <i>mecA</i>. <i>SCCmec</i> typing is one of the most important molecular tools available for distinction between community-acquired MRSA and HA-MRSA occurring on a worldwide basis. CA-MRSA has been reported to carry the loci for Panton Valentin leukocidin (PVL) in high frequency in association with the type IV <i>SCCmec</i>. <b>Aim of this study was to</b> differentiate between HA-MRSA and CA-MRSA by detection of <i>SCCmec</i> and determination the prevalence of PVL gene among MRSA isolates. <b>Material &amp; methods:</b> A total of 34 <i>Staphylococcus aureus</i> isolates were included in this study. Susceptibility of Staphylococci was determined by, Disc diffusion method including methicillin, oxacillin and cefoxitin discs. Penicillin Binding Protein (PBP<sub>2a</sub>) Latex Agglutination test was done to detect the presence of PBP<sub>2a</sub> responsible for methicillin resistance. In addition genotypic identification of MRSA was carried out by detecting <i>mec</i> gene by real time PCR. Conventional PCR was carried using different set of primers for the amplification of <i>SCC mec</i> for differentiating the HA-MRSA and CA-MRSA; moreover detection of <i>PVL</i> as virulence factor was also done. <b>Results:</b> The antibiotic sensitivity of CA-MRSA ranged from (11.76% for ceftazidime) to (47.06% for Imipenem, Erythromycin and Gentamycin); while the sensitivity of HA-MRSA ranged from (2.94% for Amoxicillin and Ampicillin/sulbactam) to (29.41% for Amikin). Out of 34 <i>S. aureus</i> strains; 26(76.47%) isolates were found to be resistant to oxacillin disc, 30(88.24%) isolates were resistant to methicillin; and all strains were resistant to cefoxitin disc. All MRSA strains were confirmed to be methicillin resistant by detection of <i>mecA</i> gene using real time PCR. Out of 34 MRSA strains 32 (94.12%) were PBP<sub>2a</sub> producer. In the present study, though, the majority (25 out of 34) of our strains were not <i>SCC mec</i> typable, yet among the nine typable strains the six hospital strains belonged to type II and III as reported in the literature and the three CA-MRSA belonged to the novel type V reported by other workers to be associated with CA-MRSA and the only PVL positive CA MRSA strain was untypable.  [Ola Kader, Samia Ebid, Nancy Mostafa, Shima El Sayed and Abeer Ghazal. <b>Detection of Community Acquired Methicillin Resistance Staphylococcus aureus among Staphylococcus aureus isolates.</b> Journal of American Science 2011; 7(1):1109-1117]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.  <b>Keywords:</b> Community; Methicillin; Resistance; Staphylococcus; Staphylococcus; aureus</p>	<a href="#">Full Text</a>	110
111	<p style="text-align: center;"><b>Comparative Antioxidant Activity Study of Some Edible Plants Used Spices in Egypt.</b></p> <p style="text-align: center;">Hala, M. Abdou  Biochemistry Department, National Research Center, Dokki, Cairo, Egypt, E-mail:  <a href="mailto:abdou.hala@yahoo.com">abdou.hala@yahoo.com</a></p> <p><b>ABSTRACT:</b> There is an increasing demand for natural antioxidants to replace synthetic additives in the food industry. Many spices have been shown to impart an antioxidative effect in foods. The spices are defined as dry plant material that is normally added to food to impart flavor. Methanol, methanol and water (1:1), water (37°C), water (100°C) extracts of ten edible plants (spices: cumin, chili, pepper, nutmeg, garlic, cloves, ginger, coriander, onion and thyme) were tested as extractants of total polyphenols, antioxidant activities. Antioxidant activities of the extracts were evaluated by 1,1-diphenyl-2-picrylhydrazyl (DPPH) assay and a <math>\beta</math>-carotene bleaching assay. Methanol extract of cloves showed the highest total phenolics content (171.8 mg garlic acid equivalents/100 g dry weight cloves powder). Total antioxidant activity of the ten spices determined by radical scavenging (DPPH) were ranged from (26.19-85.31%). The antioxidant activity by <math>\beta</math>-carotene-lenoleic acid were ranged from (36.55-85.43%). Methanol</p>	<a href="#">Full Text</a>	111

	<p>extract of cloves showed the highest antioxidant activity by DPPH of <math>\alpha</math>-carotene-linoleic acid methods were (85.31, 85.43% respectively).</p> <p><b>[Hala, M. Abdou. Comparative Antioxidant Activity Study of Some Edible Plants Used Spices in Egypt. Journal of American Science 2011; 7(1):1118-1122].</b> (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Key Words:</b> cumin, chili, papper, nutmeg, garlic, cloves, ginger, coriander, onion, thyme, total phenolics, antioxidant activity, solvent.</p>		
112	<p style="text-align: center;"><b>One Country, Two Systems: The Dualistic Land Tenure System in Sierra Leone, and the Need for Reform</b></p> <p style="text-align: center;">Victor Tamba Simbay Kabba<sup>1,2</sup> and Jiangfeng Li<sup>3</sup></p> <p style="text-align: center;"><sup>1</sup>Department of Land Resources Management, Faculty of Economy and Management, China University of Geosciences, Wuhan, 430074, Hubei Province, China <a href="mailto:Victor_kabba@yahoo.co.uk">Victor_kabba@yahoo.co.uk</a> 0086-15827480592</p> <p style="text-align: center;"><sup>2</sup>Institute of Geography and Development Studies, School of Environmental Sciences, Njala University, Republic of Sierra Leone</p> <p style="text-align: center;"><sup>3</sup>Department of Land Resources Management, Faculty of Earth Resources, China University of Geosciences, Wuhan, Hubei 430074, China</p> <p><b>Abstract:</b> Several studies have indicated a strong link between poverty and insecure land tenure. In Sierra Leone like other former British colonies, two separate land tenure systems exist: an imposed British tenure in the western area, and a customary system in the rest of the country. Whilst the former allows freehold tenure, the latter does not. Seventy-five percent of its population are rural, and invariably depends on agriculture for livelihood sustainability. Statistics also show that women who form the bulk of this population are involved in food production. One of the reasons identified why the country is unable to feed its population is the existence of the customary system. In this work, we discussed the two land tenure systems in the country, and analyzed the shortcomings of the customary tenure in detail. Data were mainly desktop literature. We looked at similar cases elsewhere and drew our conclusions. . We discovered that the customary system is not only discriminating against women, and other citizens (from other parts of the country), but discourages investment in agriculture and other land uses in rural areas. It is therefore a threat to food security and rural development in general. It also provokes tension between citizens from the western area, and those from the rest of the country. If the Poverty Reduction Strategy Paper, VISION 2025 and the Millennium Development Goals are to be realized, it is important that authorities step up and reform this customary system, and encourage more access to land, say freehold tenure.</p> <p>[Victor Tamba Simbay Kabba and Jiangfeng Li. <b>One Country, Two Systems: The Dualistic Land Tenure System in Sierra Leone, and the Need for Reform.</b> Journal of American Science 2011; 7(1):1123-1129]. (ISSN: 1545-1003). <a href="http://www.americanscience.org">http://www.americanscience.org</a>.</p> <p><b>Keywords:</b> land tenure, tenure insecurity, freehold, customary tenure, women, poverty, discrimination, rural areas</p>	<a href="#">Full Text</a>	112