

(Cadmium Toxicity)

NO	: 139
TITLE	: Evaluation of Some Protective Agents Against Chronic Cadmium Toxicity in Rats
AUTHORS	: Sally Y. Abdel-hamid.
ADDRESS	: Dept. of Forensic Medicine & Toxicology, Faculty of Veterinary Medicine, Assiut University.
SOURCE	: Thesis (Ph.D) 2004

ABSTRACT

In the present work, the effects of simultaneous administration of either Se, vit C or Zn singly or in combination on the prevention of chronic cadmium toxicity in rats were studied. One hundred and twenty albino rats were used in this study. The animals were divided into 6 groups. The first group served as a control and the other groups received a daily intraperitoneal injection of Cd, Cd + Se, Cd + vit C, Cd + Zn or Cd + all of the protective agents, respectively. After 3 months the rats were sacrificed; blood, liver, kidney and heart samples were collected. Biochemical analysis for the oxidative stress indices (LPO and NO), antioxidants (total thiols, SOD, CAT, GSH-Px and ceruloplasmin) and Cd residue concentration were determined. Histopathological examination of liver, kidney and heart tissues by light microscope were done.

(Cancer)

NO	: 140
TITLE	: Design and Synthesis of Certain New 2,3-Dihydro-1,3,4-Oxadiazole-2-thione Derivatives of Expected Anticancer and Antimicrobial Activities.
AUTHORS	: Ahmad M. Abou Rayah.
ADDRESS	: Dept. of Pharmaceutical Medicinal Chemistry, Faculty of Pharmacy, Assiut University.
SOURCE	: Thesis (M.Sc) 2004

ABSTRACT

Several 2,3-dihydro-1,3,4-oxadiazole-2-thione derivatives incorporating ethylene amino entity (Mannich bases) showed good anticancer activity. Such studies encouraged us to synthesize a new series of 5-(2-hydroxyphenyl)-2,3-dihydro-1,3,4-oxadiazole-2-thione bearing a substituted ethylene amino moiety linked to the less basic nitrogen of 1,3,4-oxadiazole nucleus for testing as anticancer agents. The results showed that seven of the investigated compounds displayed high significant anticancer activity as compared to reference standard. These seven compounds showed non-selective broad spectrum and promising activity against all cancer cell lines. The antimicrobial evaluation of the selected compounds was accomplished using cup diffusion method and the antibacterial MIC of the most active compounds was made using serial dilution method.

(Fish)

NO	: 141
TITLE	: The Effect of Lead and its Interaction with Supplementation of Selenium and Vitamin E on the Growth Performance, Biochemical and Physiological Characteristics, Histopathology and Cytopathology of <i>Oreochromis niloticus</i> .
AUTHORS	: Abd El Salam M. Ebrik
ADDRESS	: Dept. of Zoology and Entomology, Faculty of Science, Assiut University.
SOURCE	: Thesis (Ph.D) 2005

ABSTRACT

In the present study 480 specimens of *Oreochromis niloticus* were used to determine the adverse effects of different sublethal concentrations of lead (2.5, 5 and 10 ppm) on behavioral changes, mortality, growth performance (body weight gain, condition factor and hepatosomatic index), blood constituents (hemoglobin, glucose, total protein, albumen, globulin, lipids, trieglycerides, ALT and AST enzymes) and histopathological characteristics of the liver. The validity of selenium (0.5 and 1.0 mg) and vitamin E for inhibition of such effects was testified.

(Insurance)

NO	:	142
TITLE	:	The Pricing of the Fire and Explosion Hazard in Fertilizers Industry in Egypt
AUTHORS	:	Odat S. Loka T.
ADDRESS	:	Dept. of Insurance, Faculty of Commerce, Assiut University.
SOURCE	:	Thesis (Ph.D) 2003

ABSTRACT

This study deals with a principle goal, which is the pricing of insurance of fire hazard for the constituents of fertilizer companies and the explosion of machines and devices of fertilizers companies Chapter One: It deals with importance of fertilizers industry, ways of protection, causes of losses and ways of pricing. Section one: Fertilizers industry. Section Two: Ways of protection and prevention. Section Three: The pricing methods used in the insurance field. Section: Influential factors pricing fire insurance and explosion hazards in fertilizers industry. Chapter Two: Studying the range of relevance of the applicable insurance prices. Section one: Insurance of the properties in fertilizers factories. Section Two: The premiums and indemnities for fertilizers factories. Chapter Three: The suggested mathematical model for pricing the insurance of fire and explosion in factories. Section one: Using the credibility theory in pricing. Section Two: Using Beez's experimental credibility system. Chapter Four: Work application. Section one: An application of the suggested model on pricing fire and explosion data in fertilizer industry. Section Two: Comparison between the calculated prices and the actual applicable one. The results and recommendations: to be guided by the prices proposed from the investigator, provided that these prices must be reconsidered now and then to evaluate actual applicable results and modifying them in accordance with the results of the actual practice of documents in the Egyptian market.

(Lead)

NO	: 143
TITLE	: Role of Antioxidants in Controlling Lead Reproductive Toxicity in Rots: Clinical and Histopathological Studies.
AUTHORS	: Dena A. Sayed.
ADDRESS	: Dept. of Pathology & Clinical Pathology, Faculty of Veterinary Medicine, Assiut University.
SOURCE	: Thesis (M.Sc) 2005

ABSTRACT

Our study focused on the effect of lead toxicity and its counteraction by treatment with the antioxidant (Antox) on female and male genital system. 50 rats at age of weaning used. After two months of treatment, all rats slaughtered and examined grossly. Samples for histopathological examination obtained. Lead toxicity delayed the day of vaginal opening, affected the ovarian follicles and the female genital tract. Lead toxicity induced necrobiotic changes of primordial, primary, secondary and vesicular follicles. In mature follicles (only 16.7% was affected). Lead toxicity induced focal metaplasia of fallopian tube, uterine glands, cervix and vagina with presence of Intranuclear inclusion bodies. Lead toxicity affected the testes as it decreased the number of the whole cells of the spermatogenic cell cycle. Antioxidant protected both female and male genital system from the effect of lead toxicity.

(Rabbits)

NO	: 144
TITLE	: Clinicopathological Studies on Immunotoxicity of Lead Acetate and Benzene in Rabbits with a Special References to it's Control
AUTHORS	: Neveyn A. Elghaney M.
ADDRESS	: Dept. of Pathology & Clinical Pathology, Faculty of Veterinary Medicine, Assiut University.
SOURCE	: Thesis (Ph.D) 2003

ABSTRACT

Toxicity of lead, benzene or mixture of both had resulted in toxic hepatitis, nephrosis and bone resorption. Histopathological characteristics were intranuclear eosinophilic inclusion bodies in liver & kidney and lead crystal in all tissues examined. The toxicity in the three types had destructed the humoral immunity and cell mediated immunity. These substance act by interference with vaccination programs and lowered the animal resistance resulted in secondary infection. Vitamins, Selenium and BCG treatment gave the best result to restore the damaging effect of toxicity in all groups nearly to normal level or approximately close the other immunostimulant combination did not had the same stimulatory effect but was corrective.

(Silicosis)

NO	: 145
TITLE	: Silicosis Among Mines And Quarries Workers "Causes And Methods Of Prevention"
AUTHORS	: M. R. El Tahlawi.
ADDRESS	: Professor of Mining Geology, Faculty of Engineering, Assiut University, Egypt.
BULLETIN	: Ass. Univ. Bull. Environ. Res. Vol. 9 No. 2, October 2006

ABSTRACT

Silicosis is an incurable respiratory disease caused by inhalation of free-silica dust, which leads to inflammation and scarring of lung tissue. This disease is considered one of the oldest occupational disease in the history of mankind. Work in mines, quarries, foundries, ceramics factories,...etc encloses a lot of danger due to inhalation of silica-bearing dust. Statistical data of the spread of this disease in different countries and a case study are given for Assiut Fertilizer Factory area, Phosphate of Abu Tartour mines in the New Valley Governorate, and limestone quarries of Bani Khaled, north of Minya.

It has been shown clearly that the highest percentage of the disease in Egypt in 1989 is found in the mining industry and this percentage has increased greatly in the past few years due to the establishment of many new ceramic factories.

The paper also endeavors the most important recommendations to prevent the silicosis such as the engineering controls, adequate respiratory protection programs for workers, adequate surveillance program including exposure and medical monitoring, using respirators and personal hygiene.

(Water)

NO	: 146
TITLE	: Residual Effect Of Heavy Metals Due To Used Drinking Water Polluted With Sewage On Health Performance And Blood Serum Antioxidant Vitamins In Sheep And Goats In Assiut Governorate.
AUTHORS	: Abd El-Rahman A. Ali.
ADDRESS	: Dept. of Biochemistry, Assiut Health Research Institute.
BULLETIN	: Ass. Univ. Bull. Environ. Res., Vol. 8 No. 1, March 2005

ABSTRACT

The present work was directed to detect the residues of heavy metals in some water canals in which the sewage waste water was discharged in some villages of Assiut Governorate. In addition this research was planned to study the effect the use of such water on the health performance and blood serum antioxidant vitamins (vitamin A, Beta Carotene, vitamin E and vitamin C) of sheep and goats drinking from these water sources. The obtained results were compared with of those sheep and goats drinking from tap water.

A total number of 115 sheep of both sexes and 80 goats of both sexes aged from 3–5 years belonged to some owners in some villages at Assiut Governorate, these animals are drinking water polluted with sewage for long period. Besides, a total number of 25 sheep of both sexes and 25 goats of both sexes aged from 3-5 years drinking form tap water for long periods in the same villages used as control. Blood samples were collected to obtain clear sera for estimation of vitamin A, Beta carotene, vitamin E and vitamin C.

20 water samples were collected from water canals polluted with sewage, in addition to 10 tap water samples from the same villages. Chemical analysis of water samples was carried out to estimate lead, cadmium, copper and zinc concentrations using Atomic Absorption Spectrophotometer. The obtained data revealed that lead, cadmium, copper and zinc concentrations in water samples of canals polluted with sewage were highly significantly elevated than the international permissible limits and also significantly increased than those of tap water. The biochemical analysis of blood serum showed a highly significant decrease in the levels of vitamin A, Beta carotene, vitamin E and vitamin C in the serum of both sheep and goats drinking from polluted water compared with those drinking from tap water.

The health condition of sheep and goats drinking water form canals polluted with sewage was clearly lowered which was manifested by abnormal activity, emaciation, weakness, debility, depression and the anemic changes especially pale mucous membranes .

It could be concluded that heavy metal pollution problems in the studied water canals were serious as reflected by the high concentration in lead, cadmium, copper and zinc levels in the collected water samples. Therefore preventive measures must be intended to minimize the pollution of water. Hygienic disposal of sewage must also be applied. Education of the farmers and the owners of sheep and goats about the risk of such pollutants should, also, be applied.