(Liver)

NO : 106

TITLE : Parasitological and Immunoserological Studies on some Human Hepatic Parasitic Infections.

AUTHORS : M. A. A. Hassan

ADDRESS : Dept. of Parasitology, Fac. of Med. Assiut University.

SOURCE : Thesis (Ph.D), 1996.

ABSTRACT

The aim of the present work was to study the role of some serious parasitic diseases which might cause remarkable damage of the liver. The work included the study of the incidence of: Hydatid disease, Fascioloasis, Schistosomiasis, Visceral larva migrans and Toxoplasmosis.

The present work also aimed at rapid diagnosis of the causative parasite mainly based on sensitive and specific serological examination. Early diagnosis helps to save much of the liver damage which is usually untreateable medically and sometimes surgically as well. Two hundred hepatients and 100 apparently healthy controls were the subjects of the present study. Urine, stool, differential leucocytic count for eosinophilia and serological examinations were done for each case of patients and controls.

a-The prevalence of parasitic disease in patients suffering from liver diseases was of an important values, so in diagnosis of hepatic patients particularly when they have high eosinophilia, parasitic causes must be taken in consideration. The most common of them was Toxoplasma gondii (66.5%) followed by Schistosma parasites (53.5%).

b-The overall prevalences of the studied parasitic disease were higher in males than females.

c-Hepatomcgaly was a constant sign of all positive cases of the five studied parasites, while splenomegaly was less common (86.92) of schistosomiasis and 66.67 % of fascioliasis - may be due to accompanying schistosomiasis-60 % of visceral larva migrans, 55.64% of toxoplasmosis cases and no case with hydatid disease.

d-Impairment of liver function was detected in all the present cases hydatid disease with the exception of cases of. Fever was also a symptom of all cases of fascioliasis, but it occurred in 40% in visceral larva migrans, about 83% of hydatid disease and toxoplasmosis and 29.91% of schistosmiasis.

e-Eosinophilia accompanied the five parasitic diseases studied.

f-The present study illustrated the importance of reaching rapid diagnosis of the liver parasites in order to avoid the damage of the liver which might be untreatable. Serological reactions particularly IHAT and ELISA estimation proved to be very sensitive testes especially after the recent development of highly purified antigens parasitic diseases.

(Liver)

NO	**:**	107
TITLE	**:**	Confirmatory Diagnosis of Hepatitis C.
AUTHORS	**:**	Amal, A. Mahmoud.
ADDRESS	**:**	Dept. of Clinical Pathology, Fac. of Med., Assiut University
SOURCE	**:**	Thesis (M.Sc), 1998.

ABSTRACT

The study was performed on one hundred individuals (86 males and 14 females, their ages vary from 17-60 years), positive for anti-HCV antibody by third generation ELISA from October 1996 to February 1997. Twenty individuals (negative ELISA) were included as controls (16 males and 4 females, their ages ranged from. 25-52 years). To confirm the diagnosis of hepatitis C, recombinant immunoblot assay (RIBA) as a suppllementary test and revers transcriptase - plymerase chain reaction (RT-PCR) as a confirmatory test were done. Third generation enzyme immunoassay (ELISA), and RIBA-3 were used. Detection of HCV-RNA was done. Blood picture was done. Liver functions were done for all individuals. RIBA was done for 58 individuals and PCR was done fo all 100 individuals. RIBA and PCR were also done for controls. Results showed that positive RIBA was found in 52 of 58 (91.4%) of positive ELISA, positive PCR was found in 65% of positive ELISA and 35% was negative PCR (false positive ELISA) and positive ELISA, positive RIBA and negative PCR were 19 of 56 (33.9%) false positive ELISA). There was positive ELISA, negative RIBA and negative PCR in 3 of 56 (5.6%) (false positive ELISA). The true positive ELISA, positive RIBA and positive PCR were 34 of 56 (60.7%). Sensitivity of ELISA and RIBA were the same but the specificity of RIBA (54.8%) was better than specificity of ELISA (36.4%). Positive and negative values are nearly the same in both ELISA and RIBA. In RIBA study, the antigen bands were core regions (C1 + 2 and C3 +4) and showed highly positive results in most positive RIBA cases. (C1+2 93.1% C3+4 89.7% respectively). The reactivities against the proteins of the cores are followed by the reactivates againts the protein of NS3 region (81%) then NS4, then NSI, the last N55 which was positive in 41.4%. ALT level was abnormally high in 50 % of positive ELISA, 50.9% of positive RIBA, 52.3% of positive PCR 45.6% of positive RIBA, 52.3% of positive PCR 45.7% of negative PCR and 50% of positive ELISA, RIBA and PCR. In conclusion PCR is the only test used as reference to confirm the presence or absence of HCV-RNA in a sample and it is a reliable confirmatory test. The specificity or RIBA is better than ELISA. Lastly the false positive ELISA ranged from 30-35% when positive ELISA cases are tested by RIBA and confirm by PCR.

(Liver)

NO	**:**	108
TITLE	**:**	Incidence of Non A Non B (Hepatitis C) Marker in Blood Donors.
AUTHORS	**:**	Nagwa, O. Nnaser
ADDRESS	**:**	Dept. of Clinical Pathology, Fac. of Med., Assiut University
SOURCE	**:**	Thesis (M.Sc), 1998.

ABSTRACT

The prevalence of HB_sAg among blood donors using ELISA technique was 4.2%. The difference in the incidence of HB_sAg between males (4.3% of males) and females (3.7% of females) was statistically insignificant. No high predilection for HB_sAg was found for any age group. The statistical analysis of the obained results from denors with HB_sAg positive cases showed significant increase in serum SGPT, SGOT ($p<0.001$), and bilirubin ($P=0.009$).

The prevalence of HCV Ab among blood donors using ELISA technique was 18.8%. The difference in the incidence of HCV-Ab between males (18.4% of males) and females (20.7% of females) was statistically insignificant. No high predilection for HCVAb was found for any age group. The statistical analysis of the obtaned results from donors with +ve HCV Ab showed significant increase in serum SGPT ($P<0.001$), SGOT ($P=0.001$), and bilirubin ($P=0.01$).

(Liver)

NO	**:**	109
TITLE	**:**	Coagulation Inhibitors in Patients with Liver Diseases.
AUTHORS	**:**	Ensan, A. Abo-oaf
ADDRESS	**:**	Dept. of Gastroenterology & Tropical Med., Fac. of Med. Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1999.

ABSTRACT

The study was designed to estimate the level of protein C and antithrombin 3 in patients with acute and chronic hepatocellular insufficiency and to study the aetiology of enhanced fibrinolysis in patients with chronic liver disease. The study included 80 cases, 60 patients (40 had liver cirrhosis and 20 had acute hepatitis and 20 controls). Patients and controls are age and sex matched. Diagnosis was based on history, clinical examination and laboratory investigations abdominal ultrasonographic examination and upper gestrointestinal endoscopic examination. Patients with liver cirrhosis were classified according to the Child-Pugh index. Controls had normal abdominal ultrasonographic findings and liver functions. Blood picture, liver functions,. prothrombin time, hepatitis markers, protein C, antithrombin 3, and FDP were determined for all cases. It is concluded that levels of protein C and antithrombin 3, were significantly decreased in patients with liver cirrhosis and acute hepatitis. Protein C and antithrombin 3 are considered as a useful makers of acute and chronic hepatocellular insufficiency. Acute hepatitis is usually not associated with a significant increase in fibrinolysis in contrast to liver cirrhosis.

(Liver)

NO : 110

TITLE : Nosocomial Infection in Meonates.

AUTHORS : M. Z. Abdel-Rahman

ADDRESS : Dept. of Pediatrics, Fac. of Med. Assiut University.

SOURCE : Thesis (M.Sc), 1999.

ABSTRACT

In order to determine the resrvois, risk factors and pattern of microorganisms in neonatal nosocomial infection and to evaluate the predictable value of body surface cultures in diagnosis of neonatal sepsis, this study was carried out in the Special Care Baby Unit (SCBU), Assiut University Hospital on 80 neonates born in the hospital and admitted immediately to the SCBU. Superficial swabs were collected from the studied neonates and blood and CSF cultures were done on supicion of septicaemia. Simultaneous swabs were taken from working personnel, different areas and equipment of the SCBU. Culture studies of 533 swabs taken from different areas of the SCBU revealed growth in 458 swab samples (85%) indicating considerable contamination of different areas of the unit and sources of infection. S. sureus was the predominant organism (33.8%) followed by K. pneumoniae (20.1%). P. aeruginosa (10.3%). E. coli (9.6%) C. albicans (7.4%) S. lentus (6.6%), Pneumococci (5.7%), Salmonella (2.2%), St. pyogens (2%), S. epidermidis (1.3%) and Proteus (1.1%). Almost all sources of the unit reveal the presence of S. aureus, K. pneumoniae and P. aeruginosa thus forming the potential reservoirs of nosocmial infection to babies. This may be attributed to overcrowding, rapid turn - over and failure to follow basic principles of strict protective barrier nursing. Among the studied 80 neonates, the overall nosocomial infecrion rate was 61.2% and the infection proportion was 53.7% Degrees of infection ranged from 77.3% and 76% in the very low birth weight (VLBW) and the preterm < 32 wk groups to 15.8% and 19% in the normal birth weight (NBW) and fullterm groups.

(Liver)

NO : 111

TITLE : Prevalence of Chronic Liver Disease Among Assiut Cement Company Employees, Egypt.

AUTHORS : Mohamed A. Nafeh, Osman A. Osman, Ahlam M. Farghaly, Enas A. Dief*, Mona Amin*, Nabila M. Rashwan* and Sherif I. Kamel

ADDRESS : Departments of Tropical Medicine and Gastroenterology and *Bacteriology, Faculty of Medicine Assiut University

BULLETIN : Assiut Med. J. Vol. 26, No. 2, 2002.

ABSTRACT

Chronic liver disease represent a major health problem in different parts of the world. Egypt is an endemic area for both viral hepatitis and schistosomiasis resulting in a high morbidity and mortality from chronic liver disease.

This work was designed to study the prevalence of hepatitis markers and CLD among a healthy group of population. The employees of Assiut Cement Company were selected as they represent the general population and their job and exposure to cement and its constituent does not entail hepato-toxicity. Over a period of 4 years 2450 employees were evaluated clinically, biochemically, ultrasonographically and serologically for evidence of hepatic insults.

Anti-HCV was positive in 749 (30%) of the studied population. It was detected alone in 236 (31.5%) of subjects, in combination with Hbs Ag in 34 (4.5%), with anti- Hbs Ag in 97 (13%), with anti-HBc (IgG) in 153 (20.4%) and in combination with both anti-HBs and anti-HBc in 229 (30.6%). The seroprevalence of anti-HCV was significantly correlated with age, marital status, residence, socio-economic status, educational level, circumcision and schistosomal infection and parenteral therapy. PCR was positive in 81 (57.4%) out of 141 random sample of anti-HCV positive subjects. Hepatitis BsAg was detected in 132 (5.4%), anti-HBs alone in 222 (9%), and anti-HBC in 741 (30.2%), so serological evidence of previous exposure to HBV was detected in 1424 (58.1%). Regarding anti-HDV, 72 (54.5%) were positive for IgM anti-HD, IgG anti-HD or both. Based on adopted diagnostic criteria for the diagnosis of CLD the studied population were classified as normal, carriers, suspected liver disease SLD and CLD (44%, 2.1%, 30.2% and 3.8% respectively). It was noticed that hepatic insults were found in more than half of the subjects (55.9%) which seems to be higher percentage among apparently healthy subjects. Physical signs suggestive of CLD were uncommon in the cohort. Follow-up of subjects labelled as SLD is highly recommended to evaluated their outcome in the next years.

(Liver)

NO	**:**	112
TITLE	**:**	Serum levels of Adhesion Molecules in Lichen Planus and the Effect of Associated Hepatitis C Virus.
AUTHORS	**:**	Alaa E. Moubasher, Sohair M. Ahmed* Ahmed M. Mahmoud
ADDRESS	**:**	Dept. of Dermatology & Andrology and *Clinical Pathology, Assiut University Hospital.
BULLETIN	**:**	Assiut Med. J. Vol. 26, No. 3, July, 2002

ABSTRACT

Immunological mechanisms have been suggested to be fundamental in the initiation and perpetuation of lichen planus (LP). Adhesion molecules such as ICAM-I, VCAM-I and E-selectin, play an important role in immum cell interaction. LP has recently been observed to occur with increased frequency in patients with hepatitis C virus. So the aim of this work is to measure serum levels of ICAM-I, VCAM-I and E-selectin in LP patients and to compare the levels of these adhesion molecules in LP patients associated with and without HCV.

Serum levels of sICAM-I, sVAM-I and sE-selectin were measured by ELISA in 48 LP patients (38 classic and 10 actinic) and 24 health controls. Both patients and controls were screened for hepatitis C virus antibodies by ELISA technique.

Serum levels of sICAM-I, sVCAM-I and sE-selectin were significantly higher in LP patients compared to controls ($P<0.05$, 0.01 and 0.001 respectively).

Only sE-selectin was significantly higher in actinic patients compared to patients with classical LP ($P<0.05$). There were no significant difference in the studied parameters between patients with and without mucus membrane affection.

Hepatities C associated LP patients (15 = 31%) had significantly higher levels of sICAM-I and sVCAM-I compared to hepatitis C negative patients ($P<0.001$ and 0.05 respectively). No significant difference in the levels of sE-selectin was found between the two groups.

Adhesion molecules, may play an important role in the pathogensis of lichen planus, with a distinct role of hepatitis C virus on ICAM-I.

(Lung)

NO	**:**	113
TITLE	**:**	Frequency of Mycoplasma Pneunoniae Among Assiut University Hospital Patients.
AUTHORS	**:**	M. S. Khalil
ADDRESS	**:**	Dept. of Clinical Pathology, Fac. of Med., Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1996.

ABSTRACT

In this study, 90 patients with respiratory tract infection were examined. 38 patients with pneumonia, 24 patients with acute bronchitis, 24 patients with URI and 4 patients with bronchial asthma complicated by emphysema. This in addition to 21 apparently healthy controls.

Isolation of M. pneumoniae was done by cultivation of different respiratory specimens onto mycoplasma agar media and in biphasic media.

The highest age prevalence of M. pneumoniae infection was 6-17 years old. Cough, chills, headache and malaise were prominent manifestations of the infection. Bacteriological isolation and identification of the organism was successful only in 71.4% of seropositive patients. The selective biphasic media were superior to the mycoplasma agar media as regards the isolation. Isolation rates from throat swabs and sputum specimens were not significantly different. Significant titre of CF test was 64. The test had a sensitivity of 100% and specificity 100%. CHA test was a rapid and economic test. However, it lacks the sensitivity as it was 64.3% but it had a specificity of 100% so it can used as a valuable screening test in suspicious cases.

(Meat)

NO : 114

TITLE : Microbial Evaluation of some Meat Meals At Assiut Restaurants.

AUTHORS : M. I. Hassn

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

A total of 78 samples of ready - to eat cooked meat meals were collected from Assiut restaurants, class I and class II. The microbial evaluation of the samples was done by estimation of APC, Enterobacterae, Coliforms & Staph aureus. The mean value for the aforementioned micro-organisms was $1.2x10^7 \pm 9.77$, $1.9x10^5 \pm 37.5$, $1.8x10^5 \pm 25.85$ & 90.67 ± 34.94 CFU/g. respectively. *C. perfringens* had count varied from <3-1100/g. One hundred thirty seven isolates were recovered, in different percentages, *Arizona, Citrobacter spp., Enterobacter spp.*, Providencia group, *Morgenella morganii, Proteus rettgerii, P. vulgaris, Serratia Spp*. and *Shigella Spp*.
Salmonella and *E. Coli* failed to be detected from examined samples. Suggestives measures to improve such meat quality were illustrated.

NO : 115

TITLE : Muscular Parasites of Buffalo in Assiut.

AUTHORS : Omima, A. Gad Elkarim.

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

A total of 155 (0.253%) inspected buffalo carcases during the period from 1991 to 1993 were infested by C. bovis, whereas the incidence in both young and old animals was 117 (0.191%) and 38 (0.062%) out a total of 1208 slaughtered buffalo animals, respectively. The number of slaughtered buffalo animals during 1991, 1992 and 1993 was 27747, 12353 and 21108, where incidence of C. bovis in young and old animals was 51 (0.186%) and 24 (0.087%), 39 (0.316%) and 14(0.114) and 27 (0.127%) and nil, respectively. The incidence of Sarcocyst infestation among young buffalo animals was 478 (1.72%), 201 (1.62%) and 305 (1.44%) while in examined old animals was 1248 (4.49), 1228 (4.73%) out of 27747, 12353 and 21108 slaughtered buffalo animals during 1991, 1992 and 1993, respectively. A total of 4693 (7.67%) out of 61208 slaughtered buffalo animals were infested by Sarcocystosis during the period from 1991 to 1993.

(Meat)

NO : 116

TITLE : Sanitary Status of Meats Meals of the Students of El- Azhar University

AUTHORS : E. A. Dief

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

A total of 75 random samples of ready-to eat cooked meat samples were collected from three different localities meat serving establisments belong to El-
examined microbiologically. The average plate count, Enterobacteriaceae, *Coliforms* and *Staph. aurecu*s were $1x10^8$, $1x10^5$, $7.9x10^4$ and $3.9x10^4$/g respectively. *Salmonellae* and *C. Perfringens* failed to be detected in the examined samples. Different strains of enteric organisms, coagulase-positive and coagulase negative *Staph. aureus* could be recovered in variant percentages. There is a significant difference in the *Enteropaeteriaeeae* and *Staph. aureus* counts between *Faisal* and Wessa building. The public health significance of the isolated organisms was discussed.

NO : 117

TITLE : Prevalence of Campylobacter Jejuini in Fresh and Frozen Meat in Assiut Governorate.

AUTHORS : S. Th. Haleim

ADDRESS : Dept. of Microbiology, Fac. of Med., Assiut University.

SOURCE : Thesis (M.Sc), 1997.

ABSTRACT

This work was carried out to estimate the prevalence of C. jejuni in slaughtered cattle and buffalo. Samples were collected as 120 of frozen beef meat, 120 fresh meat sample of cattle and buffalo, 120 samples, 15 each of 4 different sites of cattle: or buffalo and 60 samples of meat product. The organism was isolated from 2.5% of frozen beef samples, 6.67% of fresh beef meat and 3.33% of fresh buffalo meat samples. The percentages of C.jejuni from different sites of cattle viz bile, liver, feces and lymph node were 13.33%, 13.33%, 20% and 3.33% respectively, while in case of buffalo were 6.67%, 6.67%, 13.33% and 0% respectively. The organism was isolated from fresh minced meat only with a percentage of 5% out of 20 samples, but not from any of the sausage and beef burger. The effect of cooking and cold storage on the survival of C.jejuni was also studied .

(Meat)

NO : 118

TITLE :

AUTHORS : Lobna, M. Ilwy

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.

SOURCE : Thesis (M.Sc), 1997.

ABSTRACT

Three hundred samples were obtained from different slaughtered animals (35 buffaloes, 15 cattle 15 sheep, and 10 goats). The samples were collected from surface and muscles (shoulder surfaces, thigh surfaces, quarter muscles, and hindquarter muscles). The samples were investigated for determination of Aerobic Plate Count (APC), Enterobacteriaceace. Another 100 samples were obtained from 25 buffalo carcasses for determination of Coliform (MPN), E.Coli count (M.P.N), C.Perfringens count (M.P.N) as well as isolation of Staph. Aureus and serological identification of E.Coli. The level of contamination varied between different animals and locations. Different types of microorganisms could be isolated during the course of our study.

NO : 119

TITLE : Prevalence of *Escherichia Coli* With Special Reference to *E. Coll* O157 in some Retail Meat Products and Cattle in Assiut Governorate

AUTHORS : A. M. Sayed; A. A. Abou El-Alla; M. M. Abd El-Hafeez; Asmaa, A. A. Hussein* And Z. A. Hassanien**

ADDRESS : Animal Health Research Institute, Assiut Regional Laboratory,*Dept. of Zoonoses, Fac. Vet. Med. Assiut Univ. and **Dept. of Poultry diseases, Animal Health Research Institute, Dokki, Giza.

BULLETIN : Vol. 45 July 2001 No. 90

ABSTRACT

One hundred meat products (50 samples of each luncheon and minced beef) and one hundred fecal samples of beef cattle were collected randomly from supermarkets, restaurants and slaughter houses at Assiut Governorate for the presence of *E. coli* especially *E. coli* O157. *E. coli* was detected with percentages 30%, 46% and 55% in luncheon, minced beef and fecal samples respectively. *E.coli* O157 was identified in 4% and 5% minced beef and fecal samples respectively, but not detected in luncheon samples. *E. coli* O119, O55, O117, O158, O114 and O107 were also identified in the examined samples. The results, the public health significance as well as recommended hygienic measures were discussed.

(Meat and Meat Products)

NO	**:**	120
TITLE	**:**	Mycological Status of Meat and some Meat Products.
AUTHORS	**:**	Nahed, M. Ahmed
ADDRESS	**:**	Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.
SOURCE	**:**	Thesis (Ph.D), 1999.

ABSTRACT

Two hundred samples of meat and meat products were collected from Assiut markets and examined mycologically. The mean mould count varied from product to another according to the temperature used. Forzen meat and basterma were highly contaminated. *Aspergillus spp* was the most predominant in all the examined samples. The enzymatic activity of the test fungi was investigated, some fungal isolates were able to produce L-asparginase or protease or lipase with variable degrees of activity. The effect of *garlic, allspice, black pepper, white pepper* and *nutmeg* on the growth rate and enzymatic activity of the test fungi showed variable results. Most of them had a marked effect on the majority of the test fungi specially when used in high concentrations. The public health significance of the isolated fungi as well as the suggestive control measures were discussed.

(Meat Products)

NO	**:**	121
TITLE	**:**	*Campylobacter* Organisms of Public Health Importance in Selected Meat Products.
AUTHORS	**:**	A.M. Nassar, Y.Hefnawy, S.M.Fathi, A.Abou El Alla* and S. F. Hassan*
ADDRESS	**:**	Food Hygiene Dept., Fac. Vet. Med . Assiut., Univ. and **Animal Health Research Institute, Assiut.
BULLETIN	**:**	I^{ts} Cong of Food Hygiene & Human Health, 6-8 February 2001 Dept. of Food Hygiene, Fac. Vet. Med., Assiut, Egypt

ABSTRACT

A total of 175 meat product samples were subjected to microbial analysis for the presence of *campylobacter* organisms by two methods, estimation of sodium chloride percent, determination

than Butzler medium for the recovery rate of the organism. *Campylobacter* organisms could be isolated from 14.55, 30.00, 22.50, 30.00 and zero % on Prestons medium from the examined beefburger, fresh minced meat, raw kofta, fresh and frozen sausage respectively. The identified campylobacters pathogenic strains were *C.jejuni biotype* 1, *C.coli and C.laridis* which constituted 68.57, 17.14 and 8.57% of the isolated strains respectively, whereas the recovered non pathogenic strains were *C.fecalis* and *C.sputorum subsp. bubulus* (2.68 % each). The mean value of NaCl% and pH were 1.59%$\pm$ 0.02, 6.18$\pm$0.03; 0.03$\pm$0.02, 5.85$\pm$0.09; 1.36$\pm$0.08, 5.92$\pm$0.14, 1.3%$\pm$0.03, 5.89$\pm$0.09 and 1.85%$\pm$0.04. 6.08+0.07 for the aforementioned products respectively. The correlation between pH, Na C1% and the presence of *campylobacters* showed different results. All the examined samples were accepted organoleptically and neither nitrate nor nitrite was detected in any samples.

(Milk)

NO : 122

TITLE : Occurrence of Yersinia Enterocolitica in Milk and some Dairy Products.

AUTHORS : Eman K. Ahmed.

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.

SOURCE : Thesis (Ph.D), 1997.

ABSTRACT

Yersinia enterocolitica is belonging to Psychrotrophic bacteria. It is a Gram negative rod shaped bacterium widely distributed in nature in both winter and summer months. Several cases of food poisoning outbreaks have been traced due to consumption of milk and some dairy products contaminated by Yersinia enterocolitica and this reflect the lack of hygienic supervision and poorly cleaned and sanitized daily farm equipments and processing plant equipments. Water used in dairy plants and for drinking must be obtained to kill the pathogen if it present. Heat treatment beside proper handling and distributions of milk and milk products must be done under the most possible hygienic condition.

NO : 123

TITLE : Food Poisoning Spore Forming Microorganisms in Milk and some Milk Products.

AUTHORS : Nahed, M. M. Wahba

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.

SOURCE : Thesis (M.Sc), 1997.

ABSTRACT

A total of 210 random samples of milk, kareish cheese, damietta cheese, processed cheese, ice cream and milk powder (35 samples of each) were collected from different localities in Assiut City for isolation and enumeration of B.ereus and *Cl.perfringens* and detection of clostridial orgaisms. B.cereus could be detected using surface plating technique and MPN technique at varying percentages. On the other hand, *Cl.Perfringens* was found in 22.9%, 11.4%, 5.7%, 25.7%, 17.1% of the examined samples respectively, while it could not be detected in Damietta cheese samples. Clostridial orgainsms were detected using stormy fermentation test. The public health importance of *B.cereus* and *Cl.Perfringens* as well as the recommended sanitary measures were discussed.

(Milk)

NO	**:**	124
TITLE	**:**	Campylobacter Organisms of Public Health Importance in Selected Meat Products.
AUTHORS	**:**	Sahila, F. Hassan.
ADDRESS	**:**	Dept. of Food Hygiene, Fac. of Vet. Med., Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1997.

ABSTRACT

A total of 175 meat product samples (55 beef burger, 40 fresh minced meat, 40 raw Kofta, and 40 fresh and frozen susage (20 of each) were obtained from supermarkets, restaurants and examined orgenoleptically, chemically and microbioogically. pH values varied between 5.2 and 6.7 and the mean values of the examined beef burger, fresh minced meat , raw kofta, fresh sausage and frozen sausage were 6.18±0.03, 5.98±b0.04, 5.92±0.04, 5.89±0.09 and 6.08±0.07, respectively. Sodium chloride concentrations varied form 0.12% to 2.7%, where the mean Nacl contents were. 59%±0.02 0.25%±0.02, 1.36%±0.08, 1.36%±0.03 and 1.85%±0.0, respectively in the aforementioned samples. Recovery rate of Campylobacter organisms were 14.55, 30, 22.5, 30 and zero% in the previously examined samples, respectively. 35 campylobacters strains were recovered from the examined products where 33 of them were pathogenic. The identified pathogenic strains were C.Jejuni biotype 1 (68.57%), E.coli (17.14%) and C.laridis (8.57%), where the two nonpathogenic strains were C.fecalis and C.sputorum Subsp. Bubulus (2.86% for each). The public health hazards of campylobacters were discussed.

(Milk)

NO : 125

TITLE :
Governorate.

AUTHORS : M.S. Sabreen and Amal Ali Abdel-Haleem* .

ADDRESS : Dept. of Food Hygiene, Fac. of Vet. Med., Assiut Univ., and *Animal Health Research Institute, Assiut.

BULLETIN : Assiut Vet. Med. J. Vol. 42 No. 84, January 2000 .

ABSTRACT

and villages in Assiut province. The samples were examined microbiologically for Aerobic plate, Coliforms, Fecal coliforms, *E. coli*, Enterococci, *Staph. aureus* and total yeast and mold counts as well as isolation of other *Staphylococci* and detection of nereobes. The obtained results reveal that the average counts of total bacteria were 14×10^9 and 12×10^8
milk samples, respectively. Coliforms, Fecal coliforms and *E.coli* were existed in 100, 58 and

organisms were detected in variable number. Enterococci were enumerated in 46 and 80% of the
$\times10^5$ and 9×10^4/ ml, respectively.
Staph. aureus
with average counts of 2×10 and 1×10^3/ml of the samples, respectively. Staph epidermidis were

were existed in 16 and 40% of the samples of both types, respectively. Anaerobic bacteria were

$\times10^4$ and 1×10^3/ml of the samples, respectively.
The public health hazard and preventive measures were discussed .

(Milk)

NO : 126

TITLE : Prevalence of Aeromonas Hydrophila in Some Dairy Products Available in Assiut City.

AUTHORS : Ahmed A-H. Ahmed; Amal A. Abdel-Haleem* and M.F. Hussein* .

ADDRESS : Dept. of Food Hygiene, Fac. Vet. Med., Assiut Univ. and *Animal Health Research Institute, Assiut.

BULLETIN : Assiut Vet. Med. J. Vol. 44 No. 88, January 2001.

ABSTRACT

One hundred and seventy five random samples of Damietta cheese (50), cooking butter (50) and ice cream (75) were collected randonly from different localities in Assiut City for enumeration and isolation of *Aeromonas hydrophila* species and for detection of their pathogenictiy. Aeromonas species could be detected using TSA agar plates in 36, 80 and 46.7% of the examined Damietta cheese, cooking butter and ice cream samples with highest frequency distributions of 38.9, 67.5 and 31.4% within the range of 10^2-10^4, 10^6-10^8 and 10^4-10^6 organisms/g or ml, respectively. Identification of *aeromonas* species proved that *A.hydrophila*, *A. caviae* and *A.sobria* were found in 14, 20 and 2% of the examined Damietta cheese samples, respectively. Cooking butter proved to contain *A.hydrophila*, *A. caviae* and *A.sobria* in percentages of 46, 26 and 8, respectively. While, ice cream samples were contaminated by these organisms in percentages of 17.3, 22.7 and 6.7 of the samples, respectively. Detection of pathogenicity of the isolated *Aeromonas* species revealed that 71.4, 78.3 and 61.5% of the isolated. *A.hydrophila* recovered from Damietta cheese, cooking butter and ice cream, respectively were pathogenic depending on their haemolysin production However, 23.1 and 5.9% of the isolated *A.caviae* detected in cooking butter and ice cream samples, respectively were pathogenic, while 75 and 60% of A. sobria recovered from those products, respectively were pathogenic. Damietta cheese samples yielded no pathogenic strains of A. caviae, while the only strain recovered from such product was pathogenic. The public health hazard and the recommended measures to prevent contamination by this organism were discussed.

(Milk)

NO	**:**	127
TITLE	**:**	Behaviour of Milk Ring Test on Milks of Some Farm Animals with Special Reference to a Modified Serum Ring Test.
AUTHORS	**:**	A.F. Bastawrows; H.A. Abd El-Kader and M.A. Ali .
ADDRESS	**:**	Animal Health Research Institute Assiut Regional Laboratory .
BULLETIN	**:**	Assiut Vet. Med. J. Vol. 43 No. 85, April 2000.

ABSTRACT

An investigation was carried out to find the real behaviour of milk ring test (MRT) on milks of

were subjected to the tube agglutination test (TAT). A modified serum ring test (MSRT) on the afore mentioned 250 samples of blood sera (90 cattle, 70 buffaloes, 50 goats and 40 sheep). The results of MSRT were in good agreement with those of TAT. The importance of carrying out MSRT besides the other serological tests for correct evaluation of brucellosis in farm animals was stressed out .

results show that each kind of milk had its own typical mode of behaviour with the MRT. On the other hand, the brucella agglutinins of the different animal species had no distinct role in the behaviour of MRT because the results show that MRT behaves nearly similar behaviour with the

(Milk)

NO : 128

TITLE : Microbiological Evaluation of some Dairy Desserts Sold by Dairy Shops and Served at some Restaurants in Assiut City.

AUTHORS : Amal Ali Abdel - Haleem; M.K. Moustafa* and Ahmed A-H. Ahmed*

ADDRESS : Animal Health Research Institute, Assiut Regional laboratory and *Dept. of Food Hygiene, Fac. Vet. Med. Assiut University

BULLETIN : Vol. 45 April 2001 No. 89

ABSTRACT

Seventy random samples of dairy desserts were collected from different dairy shops and some restaurants in Assiut City. The samples included mehallabeia (15 samples), rice with milk (25 samples) and ice cream (30 samples). The obtained results showed that the average counts of Aerobic plate count were $2.1x10^4$, $3.1x10^3$ and $2.4x10^4$/g or ml of the examined samples, respectively. It was found that most of mehallebeia samples (53.3%) and rice with milk samples (48%) contained numbers ranged from 10^2-10^3/g, while the majority of ice cream samples (73.3%) lies within the range of 10^4-10^5/ml. Coliforms existed in 40, 36 and 100% of the examined desserts respectively. Most of the examined samples of mehallabeia (20%) had counts < 10/g. Also, most of rice with milk samples (16%) had the same counts of coliforms/g. The majority of ice cream samples (46.7%) had counts ranged from 10^3 - 10^4 coliforms/ml. Fecal coliforms existed in 26.7, 28 and 66.7% of the examined samples, respectively, in numbers of less than 10/g for all positive samples of mehallabeia and 10-10^2 for most of positive samples (16%) of rice with milk. The majority of ice cream samples (33.3%) had counts < 10 fecal coliforms/ml. Concerning *E. coli*, the organism was detected in 20, and 40% of the examined samples, respectively in numbers below 10 organisms/g for all positive samples of mehallabeia and 10-10^2/g in 16% of rice with milk, while most of ice cream samples (16.7%) had counts of less than 10 *E. coli*/ml. The *entrococci* contaminated 53.3, 48 and 86.6 % of the examined dairy desserts samples, respectively in average counts of <100 /g of mehallabeia and rice with milk, and 8.1 10^3 /ml as an average count for ice cream. Most of ice cream samples (60%) had numbers of *enterococci* within the range of 10^3 - 10^4 organisms/ml. Total yeast and molds were detected in 80, 86 and 100 of the examined samples, respectively. The average counts were respectively 2.6 x 10^2, $5.3x10^2$ and 1.2 x 10^4/g or ml. All of the positive samples of mehallabeia (80%) and rice with milk (64%) had counts ranged from 10^2-10^3, while most of ice cream samples (56.7%) contained the organisms in numbers between 10^4-10^5/ml. The public health hazards and preventive measures were discussed.

(Milk)

NO : 129

TITLE : Incidence of Aerobic and Anaerobic Sporeformers and Thermophilic Fungi in Condensed Milk in Assiut City.

AUTHORS : Eman Korashy and M. S. Sabreen*

ADDRESS : Animal Health Research Institute, Assiut Regional Laboratory and *Dept. of Food Hygiene, Fac. Vet. Med., Assiut University.

BULLETIN : Vol. 45 July 2001 No. 90

ABSTRACT

Fifty random samples of full cream sweetened condensed milk case were collected from different supermarkets in Assiut City for microbiological evaluation. Thermoduric bacteria could be detected in 62% of the condensed milk samples, with an average count of $7.6x10^3$ /g. *B. cereus, B. coagulans, B. stearothermophilus, B.subtilis* and *B. megaterium* could be isolated from the examined samples with incidence percentages of 28, 18, 12, 22 and 6%, respectively. Cl. perfringens could be detected in 6% of the condensed milk samples using MPN technique, with at average value of 2.9 x 10/g, while on SPS agar this organism was present in 4% of the examined samples, with an average of $1.5x10^2$/g. On the other hand, 3 (6%) of condensed milk samples were positive for thermophilic fungi, with an average number of 1.6 x 10^3/g. The economic significance and the public health importance of these organisms were discussed.

(Milk)

NO : 130

TITLE : Association of *Osmophilic Molds* and *Yeasts* with some Sweetened Dairy Products Sold in Assiut City.

AUTHORS : M. A. Abdel-Sater And Amal Ali Abdel-Haleem*

ADDRESS : Dept. of Botany, Fac. of Sci., Assiut Univ.*Animal Health Research Institute, Assiut Regional Laboratory

BULLETIN : Vol. 45 July 2001 No. 90

ABSTRACT

The mycological analysis of some sweetend milk products commonly consumed in Egypt, was evaluated on two isolation media. The results indicated that the ice cream and rice with milk were highly polluted than the other two products (mehallabeia and condensed milk). The average counts of *Mesophilic fungi* on malt extract and 15% sucrose- re fluctuated between 54-588 and 39-309 colonies/g, respectively. Moreover, various species of *Mesophilic molds* were recovered on the isolation media. Members of *Aspergillus*, *Cladosporium*. *Penicillium* and Rhizopus were the most prevalent species in the samples examined. Also, yeast were found to be present in 10-43.3% and 40-66.6% of the samples on the two type of media used respectively. The total yeast count represented 22.3, 24.7, 30.5 and 11.1% and 45.3, 0.0 & 24.4% of total colony count of all fungi recovered respectively from the examined products on both Malt extract and Czapek 15% sucrose agar media. The public health importance and the preventive measures were discussed.

(Milk)

NO	**:**	131
TITLE	**:**	Contamination of Marketed Raw and Ultra High-Temperature Treated Milk with Aflatoxin M_1 in Assiut City, Middle Egypt
AUTHORS	**:**	A. Sh. Seddek and D. A. Salem*
ADDRESS	**:**	Forensic Med. & Toxicology Dept., Fac. of Vet. Med., Qena , South Valley and *Assiut University.
BULLETIN	**:**	Int. Conf. for Develop. and the Env. in the Arab World, March, 26-28, 2002

ABSTRACT

A total of 110 milk samples were tested for aflatoxin M_1 (AFM_1). Buffaloes and cows milk samples (30 each) were obtained from retail markets and 50-marketed ultra high-temperature treated (UHT) milk samples were collected also from Assiut City markets. Raw milk, full and low cream and skimmed UHT milk were obtained during Oct. 1999 to Feb. 2000.

AFM1 was detected using ELISA in 57 samples (51.82%) out of 110 milk samples. AFM_1 had a range of 3.5 ng/l to 65 ng/l in marketed raw or UHT milk. No change in AFM_1 levels was found after boiling of the highest five positive raw milk samples for 10 min.

This study revealed that all AFM_1 mean values found in different milk sources were below the levels recommended by the commission of the European Community (50 ng AFM_1/L) and USA FDA (500 ng AFM_1/L). Altogether, 15 out of 110 analyzed samples (13.64%) of raw and UHT milk (5 buffaloes, 2 cows and 8 UHT) exceeded the European recommended levels. 26.32% (15/57) of the individual positive samples exceeded the European limit for AFM_1 and never exceeded the USA FDA limits. A total of 27 out of 57 positive samples (47.37%) had levels of AFM_1 exceeding the Swiss legal limits, which are the most restrictive in the world (10 ppt). Health hazards of AFM_1 in milk were also discussed.

(Milk and Faeces)

NO : 132

TITLE : Prevalence of *Yersinia Enterocolitica* in Milk and Faeces of Somelactating Animals and Typing of the Obtained Isolates by Plasmid Profile .

AUTHORS : Enas El-prince and Amal Sayed Mohamed Sayed*.

ADDRESS : Dept. of Food Hygiene, and *Dept. of Animal hygiene and Zoonoses, Fac. of Vet. Med., Assiut University.

BULLETIN : Assiut Vet. Med. J. Vol. 46 No. 92, January 2002.

ABSTRACT

Yersinia enterocolitico gastroenteritis in humans have been recognized with increasing frequency in recent years. One hundred and eighty random samples of milk and faeces of lactating cows, ewes and goats (60 each) constituting 30 milk samples and 30 faecal specimens were aseptically collected from different districts in Assiut Governorate in the period from May to August 2001. These samples were examined for *Y. enterocolitica* isolation and typing of the obtained isolates by plasmid profile. The organism was recovered from one milk sample (3.33%) of both cows and goats, however, it failed to be detected in ewe`s milk. Concerning the examined faeces of cows, ewes and goats, the prevalence of *Y. enterocolitica* was 13.33, 10 and 10%, respectively. Moreover, it has been isolated from milk and faeces of only one (3.33%) of both dairy cows and goats. In addition, out of 12 *Y. enterocolitica* isolates, 2 (16.67%) from milk samples and 10 (83.33%) from faecal samples were obtained. Whereas, 2 virulent, plasmid

virulent, plasmid bearing and of biotypes 1B and 4, respectively. While, one (8.33%), 2 (16.67%) and 3(25%) isolates of cows, ewes and goats faecal samples were virulent, plasmidless and of biotypes either 1A or 4. The public health hazard of *Y. enterocolitica* and the sanitary measures for improving milk quality as well as the potential source of infection were discussed.

(Milk and Milk Product)

NO	**:**	133
TITLE	**:**	Occurrence of Aeromonas Hydrophila in Milk and some Milk Products in Assiut City.
AUTHORS	**:**	M. F. Hussine
ADDRESS	**:**	Dept. of Food Hygiene (Milk), Fac. of Vet. Med. Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1999.

ABSTRACT

Three hundred random samples of milk and some milk products were examined for the presence of *Aeromonas hydrophila* species in Assiut city. Aeromonas species could be detected by using TSA agar plates in 46.7%, 36%, 76%, 80%, 46.7% of the examined raw milk, Damietta cheese, kareish cheese, cooking butter and ice cream samples with average counts of $2.2x10^4$, $8.5x10^5$, $8.1x10^6$, $8.4x10^7$, and $3x10^7$/ml or g respectively, while by using SA agar medium Aeromonas species could be recovered from 45.3%, 26%, 70%, 72% and 40% of the previous examined respectively with average corents of $2.8x10^5$, $4.3x10^4$, $1.3x10^3$ $1.6x10^7$ and $5x10^7$/ml or g. respectively. Aeromonas hydrophila and Aeromonas caviae strains represent the main strains isolated from milk and milk products, while Aeromonas sobria represents the lowest percent of isolation, and represent with Aeromonas hydrophila the main pathogenic species among Aeromonas hydrophila species.

(Mite Species)

NO : 134

TITLE : Population Ecology of Five Water Mite Species (*Acarina: Arachnida*) from the Nile at Sohag Governorate, Upper Egypt.

AUTHORS : Soliman F. E., M. A. Hussein* and S. A. Ramadan

ADDRESS : Zoology Dept., Sohag Fac. of Sci., South Valley University and *Assiut Univ.

BULLETIN : Bull. Fac. Sci., Assiut Univ., 28 (1-E), P-P. 53-74 (1999).

ABSTRACT

The population ecology of five free living and parasitic water mite species; Hydrozetes lacustris (Mitchell, 1882), Malaconothrus egregia (Berlese, 1904), Hermannia gibba (Koch*), Limno-halacarus sp.* and *Linobia nilotica*) have been investigated in three locations on the eastern bank of the Nile at Sohag Governorate during the period from January, 1989 to March, 19991. Hermannia gibba (Koch), was the most common species exhibiting four generations per year. Hydrozetes lacustris (Mitchell, 1882), was flourishing during March-April and July-September, exhibiting two generations Malaconothrus egregia (Berlese, 1904) showed two overlapping generations, while *Limnohalacarus sp*. and *Linobia nilotica* showed two generations annually. The interrelationships between the abundance of the previously mentioned species and the main prevailing physico-chemical factors in their natural habitats are discussed.

(Neonates)

NO : 135

TITLE : Anaerobic Bacterial Infection in Neonates.

AUTHORS : A. A. Abdel-hafez

ADDRESS : Dept. of Pediatrics, Fac. of Med., Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

The study included 120 infected newborns aged few hours to 17 day (77 males and 43 females). admitted to the special care baby unit (SCBU), Assiut University Hospital.

Among the studied cases 80.83% showed positive blood cultures. Septicemic cases showed significantly higher frequencies of temperature instability, poor feeding, tachycardia, jundice, omphalitis, vomiting and abdominal distension than cases with negative blood cultures. Compination of poor feeding tachycardia, apnea, jaundice, omphalitis, vomiting and abdominal distension than cases with negative blood cultures.

Cases with positive blood cultures for anaerobic bacteria either isolated or mixed with aerobic bacteria showed significantly higher rate of premature rupture of membranes and prolonged labor than cases with aerobic septicemia. A combination of foul smelling discharge and gas formation in tissues showed the highest predictive value for the prediction of anaerobic septicemia among cases with sepsis neonatorum.

Cases with early onset septicemia showed significantly higher frequencies of cyanosis, tachycardia>160 beats/minute and tachycardia>60 breaths/ minute than cases with late onset septicemi. In cases with aerobic septicemia *Staphylococcus* aureus was isolated from 46% of them, klebsiella species from 44% *Staphylococcus* albus from 6% and *E. coli* from the last 4% of cases with aerobic septicemia.

In cases with anaerobic septicemia, Bacterodies Fragilis was isolated from 75% of them (isolated in 37.5% and mixed with *Peptostreptococci* in the other 73.5%). *Clostridium* perfringens was isolated from the last 25% of the cases with anaerobic septicemia.

The total fatality rate in the studied cases was 33.3%, it was significantly higher in cases with positive blood culture (38.14%) than in the rest of cases (13.4%) ($p<0.05$).

The case fatality rate in cases with mixed aerobic/anaerobic septicemia (100%) was significantly higher than in cases with either aerobic (27.8%) or anaerobic septicemia (62.5%) .Additionally, it was significantly higher in cases with anaerobic septicemia (62.5%) than in cases with aerobic septicemia (27.8%) .

(Organic Extracts)

NO	:	136
TITLE	:	Screnning of Plantago Major Organic Extracts Against some Gram Positive and Gram Negative Bacteria.
AUTHORS	:	Raafat F. Arafa
ADDRESS	:	Phytochemistry Laboratory, Botany & Microbiology Department, Faculty of Science, Al-Azhar University, Assiut.
BULLETIN	:	Ass. Univ. Bull. Environ. Res. Vol. 3 No. 2, October 2000

ABSTRACT

The bioactivity-guided separation technique of organic extracts is described. Ethyl acetate fraction crude extract showed most potent antibacterial activity. Through fractionation and purification of ethyl acetate fraction using column chromatography (CC), the semi-pure and pure active fractions were collected and biologically evaluated and identified as Luteolin-7-O-glucoside using Co-chromatography and Ultraviolet spectrophotometer.

(Packed Meat)

NO	:	137
TITLE	:	Incidence of salmonella and *E.coli* in Packed Meat products Sold in Assiut City.
AUTHORS	:	Sh. M. Fathi and A. El-R. Thabet*
ADDRESS	:	Dept. of Food Hygiene, Fac, of Vet. Med., Assiut University and *Animal Health Research Institute, Assiut Regional Laboratory.
BULLETIN	:	Assiut Veterinary Medicine J. Vol. 46 No. 91 . October 2001

ABSTRACT

Recovery of *Salmonellae* and *Escherichia coli* from a total number of 100 random samples of different types of packed meat products were evaluated. The collected samples were 30 from each beefburger and sausage and 40 from minced meat samples. Out of the analysed 100 samples, *Salmonellae* were detected only in 6 (6%), 5 isolates from beefburger and only one strain from sausage samples, while they could not be recovered from the examined minced meat samples. The isolated *Salmonella* serotype were two strains of *S. typhimurium* and three strains of *S.typhi* which were detected in the examined beefburger samples, while the only *S.paratyphi.* A strain was recovered from sausage samples. Regarding the isolation of *E.coli*, they were detected in only 14 samples , 2 strains from beefburger, 5 from sausage and 7 from the examined minced meat samples, where their incidence was 6.67%, 16.67% and 17.50% in the examined samples, respectively. The isolated *E.coli* strains were identified serologically into eight strains as *E.coli* biovar 1 and 4 strains as biovar II. The serotyped strains revealed 6 different serovars. Sources of contamination., precautions during preparation and manufacturing of such meat products, as well as the public health hazards of the presence of *Salmonella* and *E.coli* in meat products were discussed.

(Pasteurized Milk**)**

NO	**:**	138
TITLE	**:**	Occurrence of *Yersinia Enterocolitica* and *Aeromonas Hydrophila* in Pasteurized Milk in Sohag City.
AUTHORS	**:**	Sohair, Z. Hussein and Eman K. Ahmed .
ADDRESS	**:**	Animal Health Research Institute, Assiut, Regional Laboratory.
BULLETIN	**:**	Assiut Vet. Med. J. Vol. 46 No. 92, January 2002.

ABSTRACT

In Sohag Governorate a trial was made for isolation of *Y. enterocolitica* and *A.hydrophile* from fifty random samples (400 ml each) of pasteurized milk collected from different supermarkets. *Y.enterocolitica* recovered from 4% of pasteurized milk samples. *Y.enterocolitica* isolates were susceptible to Tetracycline (TE_{30}); Streptomycin (S_{10}); Chloramphnicol (C_{30}) and Sulphamethoxazole (SXT_{25}) and resistant to Ampicillin (AM10) and Norfloxacin (NOR_{10}). *A.hydrophila* group isolated from pasteurized milk were *A.caviae* (8%); *A.Sobria* (2%) and *A.hydrophila* (6%). All isolates were highly susceptible to chloramphnicol (C_{30}); Sulphamethoxazole (SXT_{25}) and Tetracycline (TE_{30}) but resistant to Ampicillin (AM_{10}); Norfloxacin (NOR_{10}) and Neomycin (N_{30}).

(Pigeons)

NO	**:**	139
TITLE	**:**	Studies on Paratyphoid Infections in Pigeons.
AUTHORS	**:**	M. A. Mohamed
ADDRESS	**:**	Dept. of Poultry Disease, Fac. of Vet. Med., Assiut University
SOURCE	**:**	Thesis (M.Sc), 1999.

ABSTRACT

A total of 1170 pigeons were examined bacteriologically for determination of salmonella amongest pigeons. Forty-Five samonella strains were isolated at a recovery rate 9.3% from sacrificed pigeons, 2.64% from cloacal swabs, while there is no samonellae could be isolated from pigeon eggs. Salmonella serotypes and the frequency of isolation was as follows: S. typhimurium 93.3% and *S.coeln* 6.7% from the total number of isolated salmonellae. The delayed secondary enrichment culture (DSE) proved to be superior to 24 hr incubation of enrichment culture in isolation of salmonellae. The serological screening revealed that the microaggl. test was more sensitive and superior to tube aggl, and rapid serum aggl. Tests in detection of paratyphoid infections in pigeons. All of the examined salmonallae isolated possessed two plasmids of low copy number of molecular weights 69; 54 Kb for S. typhimurium isolates and 72; 57 kb for *S.coeln* isolated. MIC values of ten types of drugs revealed that there is no resistance against enrofloxacin and amoxacillin and there is complete resistance against sulphaquinoxaline. Both of the isolated serovars were pathogenic for experimentally infected squabs with mortality rate 100% and 86.6% for *S. typhimurium* and *S. coeln* respectively. All of the samonella isolated were completely sensitive to cefitofur, cefotaxime, norfloxacin and enrofloxacin. Biochemical analysis of experimentally infected squabs showed hypoproteinemia, hypocholesterolemia and hypoglycemia with increase in uric acid concentration. In vivo sensitivity bioassay, the enrofloxacin succeeded in completely stoppage of salmonella excretion from feces. The usage of lactose and bioadd in a feed led to reduction of salmonella colonization in the intestine of pigeons.

(Pigeons)

NO : 140

TITLE : Pathological and Aetiological Studies on *Granulomatous Dermatitis* in Racing Pigeons in Assiut Governorate .

AUTHORS : Sanaa, A.H. El-Shamy, Shahera, M.R. Abdel Haseeb and Azhar, M. Abdel Aziz.

ADDRESS : Animal Health Research Institute Assiut Regional Laboratory .

BULLETIN : Assiut Vet. Med. J. Vol. 43 No. 85, April 2000 .

ABSTRACT

In Assiut Governorate, *E.coli* dermatitis was obseved in 9(4.5%) out of a flock of 200 birds.The flock showed emaciation, conjunctivitis and decreased hatchability rate. Histopathological examination revealed hyperkeratosis, parakeratosis, local chronic inflammatory nodular lesions in the dermis, panniculitis and cellulitis. Similar granulomatous lesions were seen in the three livers of these cases.

NO : 141

TITLE : *Paramyxovirus* infection in Pigeons .

AUTHORS : R.S. Ibrahim. Fatma A. Moustafa* and M.Mubarak**.

ADDRESS : Dept. of Surgery, Fac. Vet., Assiut Univ., *Animal Health Institute, Assiut Branch and **Dept. of Path. and Clinical Path., Fac. Vet. Med., Assiut Univ.

BULLETIN : Assiut Vet. Med. J. Vol. 43, No. 86, July 2000 .

ABSTRACT

Nervous signs and diarrhoea were investigated in four pigeon lofts at Assiut and Sohag Governorates. Viruses were isolated in allantoic sac of 10- day - old chicken embryos, and produced curling of embryos and deformity of toe fineries on first passage. The isolated viruses produced haemagglutination (HA) of chicken RBCs. The serological testing by haemagglutination inhibition (HI) revealed that HA activity of isolated viruses was inhibited by antisera raised against Newcastle disease virus (NDV) while in same way, antisera from diseased pigeons inhibited the HA activity of NDV (LaSota). Sedemint prepared from allantoic fluids containing the virus was examined by transmission electron microscope (TEM). Virus morphology was similar to that of paramyxoviruses (PMVs). TEM of brain tissues from infected embryos showed viral particles in different stages of cellular infection and budding. Polypeptide profiles of the isolated viruses and LaSota virus were studied by SDS-PAGE and found to share several protein bands of mol. wts. 180,110,75,60,55 and 40 kDa. Forty kDa Protein band was expressed in all tested viruses but stained dense in all viral isolates than that of LaSota virus. Basing upon HA and HI activities, virus morphology, and polypeptide profiles, it was concluded that the isolated viruses were related to *paramyxoviruses*.

(Pigeons)

NO	**:**	142
TITLE	**:**	Viral Encephalopathy of Pigeons in Assiut Governorate.
AUTHORS	**:**	M. Mubarak And I. A. Fouad*
ADDRESS	**:**	Dept. of pathology, Fac. Vet. Med. Assiut Univ. and *Animal Health Research Institute, Assiut lab.
BULLETIN	**:**	Vol. 45 April 2001 No. 89

ABSTRACT

Pigeons in two lofts (n=250, 150) aging 9-18 months in Assiut Governorate manifested nervous signs and diarrhoea. Morbidity and mortality percentages in the affected two lofts were 90%, 80% and 85%, 75%, respectively. Histopathological examination of the brain tissues, in addition to other organs, of the infected pigeons was carried out. There was neuronal degeneration in the form of chromatolysis followed by microgliosis, demyelination, satellitosis and neuronophagia. These changes were observed in the mid-brain and brain stem. Mature viral particles were detected in the cytoplasm of neurons of the cerebral gray matter. Each viral particle was composed of filamentous core (nucleocapsids) and external enveloping membranes which had radiating projections (spikes). The morphology of the viral particle was similar to that of paramyxoviruses. It was concluded that paramyxovirus infection of pigeons in Egypt should be considered when a neurological disease is investigated.

(Pigeons)

NO	**:**	143
TITLE	**:**	Plasmid Profile, Antimicrobials Minimal Inhibitory Concentration and In-Vivo Sensitivity of *Salmonella Typhimurium* and *Salmonella Coeln* Isolated from Pigeons In Upper Egypt.
AUTHORS	**:**	R.S. Ibrahim; M.M. Aly; T.Y. Abdel Motelib and M. Mohamed
ADDRESS	**:**	Dept. of Poultry Diseases, Fac. of Vet. Med., Assiut University
BULLETIN	**:**	Vol. 45 July 2001 No. 90

ABSTRACT

Salmonella typhimurium and *Salmonella coeln* isolates obtained from pigeons in Upper Egypt revealed detection of low copy number plasmids which were similar in number and molecular weight among strains of the same serovar. Plasmids of molecular weights 69 and 45 Kb were isolated from *Salmonella typhimurium*, while 72 and 57 Kb were recovered from *Salmonella coeln*. A single pattern of antimicrobial resistance was recorded to sulphaquinoxaline among strains of *Salmonella coeln*, while double drug resistance pattern was common against sulphaquinoxaline and erythromycin among strains of Salmonella typhimurium. Multiple drug resistance was observed for both *Salmonella typhimurium* and *Salmonella coeln*. Complete sensitivity to enrofloxacin and amoxycillin was noticed by both serovars. In-vivo sensitivity of *Salmonella typhimurium* revealed that enrofloxacin prevented shedding of micro- organisms and minimized the intestinal colonization after the 3 rd day of treatment till the end of the trial, followed by amoxycillin which showed reshedding of micro-organisms at 26 th day from stopping of the treatment.

(Plants)

NO : 144

TITLE : Studies on Certain Insects Pests Infesting Sorghum with Reference to their Natural Enemies in Upper Egypt.

AUTHORS : M. A. Abdelazime

ADDRESS : Dept. of Plant Protection, Fac. of Agriculture, Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

Studies were conducted at Agricultural Research Station, Shandaweel, Sohag Governorate during 1991 and 1992 seasons. The studies were done to determine the effect of planting dates (May 20, June 10 and June 30), fertilizing levels (60, 90 and 120 kg N/fed.) and varieties (Giza 15, Local 129, N.E.S. 1007 and Dorado) on the infestation of aphids, *Schizaphis graminum* (Rondani) and *Rhopalosiphum maidis* (Fitch) and their natural enemies.
The results indicated that:
1-The planting dates of late May and mid June gave the less aphid infestation.
2-The fertilizing level of 60 kg gave the less aphid infestation.
3-The varieties of Dorado and N. E. S. 1007 were more susceptible to infest with aphid than Giza 15 and Local 129 varieties.

NO : 145

TITLE : Studies on Fungi Associated with Roots of Wheat Plants Cultiva in Assiut, Egypt .

AUTHORS : M. H. Ahmed

ADDRESS : Dept. of Botany, Fac. of Sci., Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

Eighty species and 7 varieties belonging to 26 genera were isolated and identified from different sources (soil, rhizosphere and rhizoplane) Severity of wheat root-rot increased by increasing plantage pathogenicity tests proved that all 9 selected species were pathogenic. Treatments with 4 fungic ides (as chemical control) and 5 antagonistic species (as biological control) caused increasing in surviving plants and great reduction in root - rot in wheat plants under green house conditions.

(Plants)

NO : 146

TITLE : Studies on Neck Rot Disease of Onion.

AUTHORS : Nglaa, G. A. Othman

ADDRESS : Dept. of Plant Pathology, Fac. of Agriculture, Assiut University.

SOURCE : Thesis (M.Sc), 1996.

ABSTRACT

Neck rot disease, caused by botrytis allii Munn, is one of the most serious diseases that attacks onion plants grown for seed production in the field or during storage or transit.

Results of this work can be summanized as follows:

1. Five isolates of B. allii Munn. were isolated from diseased onion plants showing typical symptoms of neck rot disease collected from different governorates of Upper Egypt. all the tested isolates proved to be pathogenic on bulb and seed onions of Giza 6, Giza 20, and Shadoweel 1 cultivars inducing typical symptoms of neck rot disease.
2. G. 6 cultivar was greatly affected by B. allii followed by G. 20 while Sh. 1 was the least affected cultivar.
3. Isoelectric focusing (IEF) analysis of the total intracellular protein of five isolates of B. allii showed qualitative and quantitative differences in protein content among isolates and species. The similarity certain common protein bands of B. allii leads to the suggestion of considering them as races than being isolates.

Seed heads and stalk of seed onion sprayed with propagates of B. allii with the different concentration gave infected seeds with B. allii. this result lead us to arecommond that it is important to treat seed with fungicides before sowing to reduce neck rot disease severity.

Twelve fungal isolates out of 33 and 3 bacterial isolates out of 10 exhibited moderately and highly antagonistic effect against B. allii in vitro. However, 6 fungal isolates showed over growth upon the tested pathogen.

The fungi Penicilliun chrysogenum, Fusarium solain and the bacterium Bacillus cearus played the greatest inhibitory action to the tested pathogen whereas the fungi Aspergillus flavus, A. alutaceus, A. niger, Penicilliun stekii and the Becterium Bacillus isolates showed lowest inhibitory effect.

Effect of T. herizianum was superior in reducing the percentage of infection than the other tested microorganisms.

(Plants)

NO	**:**	147
TITLE	**:**	Studies on the Genus *Helianthemum* Mill in Egypt.
AUTHORS	**:**	N. M. Hassan
ADDRESS	**:**	Dept. of Botany, Fac. of Sci., Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1996.

ABSTRACT

The present work deals with a systematic revision of the native species of genus *Helianthemum*. A detailed description for each taxon is given, which is based on distinct morphological characters. A map showing its distribution in Egypt and a list of the revised specimens are given The characters which proved to be of systematic value in the distinction of the Egyptian taxa are those of, habit, flowers and fruits. The revision revealed the presence of eleven species including four varieties another two subspecies *Helianthemum lippii* and var. *maritimum*, the latter is new to science. *Helianthemum Kahiricum* is among the polymorphic species. Two subspecies are now known: subsp. *Kahiricum* and subsp. *Schweinfurthii* comparative anatomical of the leaf and old stem and also Scanning Electron Microscopic investigations on the seed coat were carried out.

(Plants)

NO	**:**	148
TITLE	**:**	Isolation and Pathogenicity of Fungi Associated with Roots of Wheat Plants Cultivated in Assiut Area, Egypt.
AUTHORS	**:**	M.B. Mazen, A.D. Allam* and M. Hashem* A.Y.Abdel-Mallek.
ADDRESS	**:**	Botany Dept, Fac. of Sci, and *Plant Path. Dept., Fac. of Agric., Assiut Univ..
BULLETIN	**:**	1st Internat. Conf. on Basic Sci. & Advanced Tech., Nov. 9-12,1996, Assiut

ABSTRACT

Eighty species and 7 species varieties representing 26 genera of fungi were isolated from non-rhizosphere and rhizoplane samples collected from 4 localities cultivated with wheat plants (seasons 1993/1994) in Assiut area, Egypt. Soil yielded the broadest number of isolated species (71) followed by rhizosphere (64), while rhizoplane habitat had the narrowest one (50). Asperigillus and Fusarium were common in the three habitats collected from the four localities. *A. fivus, A. niger, A. iterreus, F. usarium oxyporum and Peniicillium corylophilum were the most* dominant species in soil and *Rhizosphere in rRizoplane, Alterntaria alternata, A. tniger, F. liateritium, F. montilifhn, F.oxystoprum, F. F.sotlani, Drechslera halodes, D.spicifera, Cochliobolus Iunata, Macrophomina Phaseolina* and *Rhizopus oryzae* were recorded in high frequency of occurrence. The total count of rhizosphere mycoflora was higher (in 3 out of 4 locations) as compared to soil and the R/S valuves in the four localities were as follows: 1.26, 1.95, 0.8 and 1.26 respectively. From diseased wheat plants, several phytopathogenic fungal species were isolated namely: *Alt Alternata, F. equiset; F. moniliforme, F.oxyspourm, F.solani, D.halades, D.spicifera, D.sorkinana* and *M.phaseoline*. In greenhouse experiments these fungi were found to be able to infect wheat roots and caused pre-and post-emergance damping of and increase the root-rot severity .

(Plants)

NO	**:**	149
TITLE	**:**	Monthly Variations in the Mycolfora of WheatFieds in El-Kharga Oasis, Western Desert, Egypt.
AUTHORS	**:**	Abdel-Hafez S.I.I., Moharram A.M. and Abdel-Sater M.A.
ADDRESS	**:**	Botany Dept, Fac. of Sci., Assiut Univ.
BULLETIN	**:**	1st Internat. Conf. on Basic Sci. & Advanced Tech., Nov. 9-12,1996, Assiut

ABSTRACT

Changes in the counts of moulds on wheat crop and in the air of wheat fields were monthly followed during the growing season (November-April). The monthly counts of total fungi showed irregularly fluctuated and were markedly affected changes in the counts of some fungal species, with the highest counts being almost detected during January and February. Eighty-nine species and 3 varieties belonging to 39 genera were collected from the rhizosphere, phyllo, grains and the atmosphere of wheat plant using glucose-cellulose-and 50% sucrose-agar at 28 *C. The most frequently encountered species were: Alternaria alternata, Aspergillus flavus, A. fumigatus., A.niger, Cladosporium cladosporioides, Cochliobolus spicifer, Fusarium oxysporum, Gibberella fujikuroi, Humicola grisea, Nectria haematococca, Penicillium chrysogenum* and *P.oxalicum*. Their monthly counts irregularly fluctuated giving peaks at different months. *Eurotium* (represented by *E.amstelodami, E.chevalieri* and *E.halophilicum*) was not encountered on plates of glucose-or cellulose-agar, but it was isolated from wheat grains in high frequency of occurrence on plates of 50% sucrose-

(Plants)

NO	**:**	150
TITLE	**:**	Performance of some Faba Bean (*Vicia Faba* L.) Genotypes in Orobance Infested Soil.
AUTHORS	**:**	M. A. A. Morsy
ADDRESS	**:**	Dept. of Horticulture, Fac. of Agriculture, Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1998.

ABSTRACT

The investigation in this thesis showed that the seven *faba bean* lines chosen in this study differed markedly in their behaviour against the broomrape (*Orobanche crenata*). In both seasons the effect of broomrape on the growth of the host plant and dry seed yield and the yield components such as number of pods per plant, weight of 50-seeds and weight of seed plants was existed. Also, the study stated that the only limiting factor for the performance of the faba bean line through broomrape is the actual values for % dead and podless plants, in other words, the actual values for % podded plants.

(Plants)

NO	**:**	151
TITLE	**:**	Studies on Bacterial Soft Rot Disease of Potato Tubers.
AUTHORS	**:**	K. A. M. Abo-Elyosser
ADDRESS	**:**	Dept. of Plant Pathology, Fac. of Agriculture, Assiut University.
SOURCE	**:**	Thesis (M.Sc), 1998.

ABSTRACT

The present work was undertaken to study the effect of certain treatments on incidence of potato seed-pieces decay in the field and influences of certain cultural practices on predisposition of potato tubers to soft rot disease pre and during storage. The reaction of some potato cultivars to the disease as well as the role of certain potato tubers constituents on their resistance to bacterial soft rot were also investigated. Results indicated that dipping potato seed-pieces in the antibiotics: Chloramphenicol, Streptomycin and Ampicillin at 1000 pmm for 15 min. inhibited the infection by soft rotting bacteria. Storing potato tubers at 4 c for 15 days before plantation led to a decrease in incidence of soft rotting. Early plantation caused higher increase in the disease. Early harvested in May first and application of nitrogen fertilizer increased the susceptibility of potato tubers to bacteria soft rot disease during storage. In contrast, addition of phosphorous fertilizer caused the reverse effect. Addition of potassium had no effect. Susceptibility of potato tubers to bacterial soft rotting disease was increased by increasing storage periods at 4.c for 1,2,3 and 4 months. Spraying of micronutrints fertilizers (copper manganese, zinc and iron) decreases incidence of the disease, however spraying boron increased susceptibility to be disease. Tubers of Alpha, Santa and Mirkal cultivars appeared to be less susceptible followed by Geganite, Diamant, Askort and Nicola. Less susceptible cultivars contained higher amounts of pectin and calcium and less concentrations of sugars as well as low activity of pectic enzmes as compared with more susceptible cultivars.

(Plants)

NO : 152

TITLE : Studies on the Fungal Flora and Viral Infection of Cucumber Plant.

AUTHORS : Ngwa, A. A. Abdel-Razek

ADDRESS : Dept. of Botany, Fac. of Sci., Assiut University.

SOURCE : Thesis (M.Sc), 1998.

ABSTRACT

The first part of this investigation deals with some virological studies on cucumber plants cultivated in Assiut. It was observed that young cucumber plants showed several external symptoms suggesting natural infection with cucumber mosaic virus (CMV). Manual inoculation with leaf extracts from naturally infected cucmber induced the formation of local lesions and systemic infections in leaves of snake cucumber (*Cucumis melo var. Flexuosus*), squash (*Cusurbita pepo*), pumpkin (*Cucurbita maxima*), *Danra stramonium, perpper* (*Capsicum annunum*) and cucmber (*Cucumis sativum*). Electron microscopy of partially purified preparations from leaf extracts of naturally infected cucumber showed some isometric particles identical to CMV particles. These particles were observed after purification with diethyl-ether and staining with 2% uranyl acetate. Inoculation of healthy cucumber and squash with leaf extracts containing CMV caused a reduction in the amounts of chlorophylls (a) and (b) especially after 7 and 12 days of inoculation. The latex (undiluted or water - diluted) extracted from leaves of *Calotropis procera* was found to be inhibitory to CMV infectivity where it caused a significant decrease in the number of local lesions formed in the treated leaves of *Datura stramonium*.

In the second part of this investigation cucumber plants were mycologically analyzed for the isolation and identification of fungi inhabiting leaves and roots of these plants. The airborne fungi as well as the fungi associated with the whitefly Bemisia tabaci were also surveyed A total of 46 fungal species appertaining to 30 genera were isolated from cucumber plants (40 species and 26 genera), from the air (33 species and 25 genera) as well as from the whiteflies (17 species and 13 genera). The dominant phylloplane fungi comprised *Aspergillus flauvs, A. fumigatus, A. niger. Rhizopus stolonifer, Chaetomium globosum, Nectria haematococca, E. nidulans, Cochliobolus spicifer, Setosphaeria rostrata, Allernaria allernaia, Stachybotrys chartarum* and *Acremonium stricum*. The counts of rhizosphere fungi were also increasing with the increase of plant age. The total count of airborne fungi over cucumber fields dispalyed irregular fluctuations during the experimental period with the highest counts being recorded 11 weeks after sowing and the lowest after 14 weeks. The whitely Bemisia tabaci was the most dominant insect in the cucumber field. This insect was found to harbour various fungal propagules which were mostly belonging to the genera *Aspergillus, Penicillium, Cladosporium* and *Emericella*.

(Plants)

NO	**:**	153
TITLE	**:**	Studies on some Root Rot Diseases of Wheat.
AUTHORS	**:**	D. W. B. Abdel-Motaleb
ADDRESS	**:**	Dept. of Plant Pathology, Fac. of Agriculture, Assiut University.
BULLETIN	**:**	Thesis (M.Sc), 1998.

ABSTRACT

Wheat root rot disease is one of the most important diseases that attack both seedling and adult plants causing serious losses in crop productivity. The present investigation was designed to study the causal pathogens of such disease in Assiut Governorate. Influence of some factors on disease incidence under green house and field conditions was also studied. Influence of soil texture, nitrogen fertilizer, irrigation, plant density, methods of cultivation and wheat cultivars in disease incidence were studied. In nature, the severity of wheat root rot disease significantly increased by increasing plant age and decrease in repining it, also varied according to the area of collection. The most frequently isolated pathogenic fungi were *fusarium moniliforme, f. Framinearim, f, salan, f. oxysporum, Drechslers habodes, d. sorokiniana* and *d. specifera*. The isolated species varied in their virulence. *Drechslera soroliniana* proved to the most virulent one followed by *fusarium graminearum, fusarium solant* and *f.moniliforme*, then *Cladosporoides*. Giza 162 wheat cultivar was the lowest susceptible one to root infection while Sakha 8 was the highest susceptible one. Root exudates of the tested wheat cultivars in presence of sand soil extracts exhibited the highest stimulation to spore germination and mycelial growth of the tested fungi followed by loam soil then clay soil texture extracts. The role of root exudates in the physiology of disease resistance was reported and discussed.

(Plants)

NO : 154

TITLE : Studies on Cotton Root Rot Disease.

AUTHORS : A. M. A. El-Smawaty

ADDRESS : Dept. of Plant Pathology, Fac. of Agriculture, Assiut University

SOURCE : Thesis (M.Sc), 1999.

ABSTRACT

The study addresses the problem of cotton root rot only during the seedling stage because roots of cotton are extremely vulnerable to attack by fungi during this period. A total of 79 samples of cotton seedlings infected with postemergence damping off or rotted roots of adult plants were obtained from cotton - producing areas in Upper Egypt Governorates. Significant positive and negative correlations were observed among frequencies of some of the isolated fungi, however, patterns of association among the frequencies were affected location, sampling date; cultivar and previous crop. A random sample of 137 isolates were tested for pathogenicity on seedlings of cotton cultivar Giza 83 under greenhouse conditions. Isolates of *Fusarium spp, M. phoseolina* and *R. solonl* were collectively the predominant group representing 78.83% of the tested isolates. Isolates of this group also constituted the majority (77.75%) of the isolates. Regarding pathogenicity of the 55 isolates of *Fusarium spp*. tested under greenhouse conditions, 39 isolates (70.9%) were pathogenic to seedling of Giza 83. Cluater analysis was used to compare between protein banding patterns obtained by SDS - PAGE from isolates of *Rhizoctonia spp*. The interaction between the seed - dressing fungicides Monceren, Vitavax 200, Rizloex T, and Beret MLX and the insecticides Nuvacrone, Azodrin, and Kalthane S was evaluated under field conditions in Assiut and Mallawy. Twenty two isolates of *Trichoderma spp. Aspergillus app.* and *Penicillium spp*. were evaluated under field conditions in Assiut and Mallawy, as to their efficiency in controlling cotton seedling damping-off.

(Plants)

NO : 155

TITLE : Taxonomical Studies Along with Ecological Analyses on Taxa of Section Flavi in Egypt: two new Records, and Synoptic and Dichotomous Keys to the Taxa Treated.

AUTHORS : Mady A. Ismail.

ADDRESS : Dept. of Botany, Faculty of Science, Assiut University

BULLETIN : Bull. Fac. Sci., Assiut UNIV. 29 (2-D), P-P.213-232 (2000).

ABSTRACT

Sixty isolates of taxa related to Subgenus *Circumdati* Section Flavi (previously known as *Aspergillus flavus* group) isolated from a wide variety of sources in Egypt were characterized cultural and morphological (macroscopic and microscopic) features on two cultural media and two incubation temperatures. Those isolates fall into 10 taxa (8 speceis and 2 species varieties) of which 2 are new records to Egypt (*A. clavatoflavus* and *A. oryzae* var. *effusus)*. A synoptic key as well as a dichotomous key for the identification of these taxa are designed. The keys use definitive and readily observable features: colony diameters; colony appearance (colour, reverse, production of white mycelial turf); stipe, vesicle, conidiogenous cells and conidia characteristics. Most interesting that all taxa treated could be categorized into 3 categories based on conidiogenous cells: (1) taxa with conidiogenous cells strictly biserriate (*A. clavatoflavus, A. zonatus*), (2) taxa with conidiogenous cells predominantly biserriate (*A. flavofurcatus, A. flavus* var. *flavus, A. subolivaceus, A. tamarii*), and (3) taxa with predominantly uniseriate conidiogenous cells (*A. flavus var. columnaris, A. oryzae* var. *Oryzae , Oryzae var. effusus and A. parasiticus).* Brief descriptions of the taxa treated accompany the keys with ecological analyses prepared from some species lists in more than 120 published surveys mostly from different sources in Egypt. These analyses revealed further records for 4 species: 3 known only each from a single isolate (*A. flavofurcatus, A. subolivaceus, A. zonatus*) and one known only from rainforest soils in Australia and Malaysia (*A. clavatoflavus*).

(Plants)

NO : 156

TITLE : Mycological Criteria and Antifungal Properties of Cardamom and Black Mustard from two East African Tropical Countries.

AUTHORS : Mady A. Ismail

ADDRESS : Dept. of Botany, Faculty of Science, Assiut University.

BULLETIN : Bull. Fac. Sci., Assiut Univ. 29 (2-D), P-P.233-254 (2000).

ABSTRACT

Twenty-nine out of 30 samples of cardamom pods and all of the 20 samples of black mustard seeds investigated from the two tropical countries were heavily invaded by or contaminated with fungi. A total of 96 species and one species variety related to 42 fungal genera were found associated with the samples of the two spices. Noteworthy, a broader spectrum of both genera and species, and also a higher level of contamination for cardamom were recorded. These observations could be explained through the high level of moisture contents for cardamom (9.33-17.45%) compared to black mustard samples (5.05-9.0%). The fungi comprised mainly species of *Aspergillus, Eurotium, Penicillium* and *Cladosporium* on both isolation media used. Some others were reported to be predominant (or predominant and only isolated) either from cardamom (*Fusarium, Chaetomium, Rhizopus, Lasiodiplodia* and *Chrysosporium*) or black mustard (*Stemphylium* and *Rhodotorula*). The most frequent isolated species from cardamom on DRBC were *A. flavus* (91 out of 607 isolations) *F. graminearum* (72), A. niger (67), *F. solani* (42), and on DG18 were *A. niger* (92 out of 713), *A. flavus* (88), *E. chevalieri* (75) and *E. amstelodami* (57). Most interesting and not previously reported for mustard seeds was that *A. proliferans* (164 out of 350 isolations) was the commonest fungus on DRBC followed by *P. viridicatum* (36), *E. repens* (26), while species of *Eurotium, E. repens (293 out of 475), E. rubrum* (70), *E. chevalieri* (14) and *E. amstelodami* (13) were the dominant on DG18. Among these fungi from both spices, some are possible producers of mycotoxins and these include *A. flavus, A. ochraceus, P. viridicatum, P. aurantiogrisem* and *F. graminearum*. So, the important point for food use is that a mouldy spice may contaminate other ingredients, and hence the final product.

Powdered cardamom proved to have much more antifungal activities against the mycotoxigenic and other fungi tested compared to powdered black mustard. The growth of all fungi tested were inhibited at different levels by the different cardamom concentrations, except one (*P. islandicum)* by the high concentration (20mg/ml), three (the Kenyan *A. flavus isolate, A. parasiticus, A. versicolor)* by the moderate (10mg/ml) and low (5mg/ml) and four (*A. sydowii, A. terrreus, P. fellutanum* and an isolate of *F. proliferatum)* by only the low concentration were found to be stimulated. Contrariwise, powdered black mustard inhibited only 10 out of 19 isolates by 20 mg/ml, 5 isolates by 10 mg/ml and by the low dose (5 mg/ml medium) while proved to have stimulatory effects on the others.

(Plants)

NO : 157

TITLE : Sorghum Grain Borne Fungi and their Control :
1-Fungi Associated with Discoloured Sorghum Grain Genotypes and their Effects on Quality and Mycotoxins Production.

AUTHORS : M.K.M. Arafa, M.A.Abdel-Sater*, M.R.A. Hovny**, A.M.K. Zahra.

ADDRESS : Plant Pathology Res. Institute Agric. Res. Center, Giza, *Botany Dept., Fac. of Sci., Assiut Univ., and **Field Crops Res. Institute, Agric. Res. Center, Giza.

BULLETIN : Bull. Fac. Sci., Assiut UNIV. 29 (1-D), P-P.285-295 (2000).

ABSTRACT

Nineteen fungal species belonging to eleven genera frequently associated with discoloured grains of thirteen sorghum genotypes were identified. Aspergillus flavus and *A.niger* were the most frequently isolated species from the different discoloured grains followed by *Alternaria alternata* and *Gibberella fujiuori*. Total number of fungi isolated from the grains varied according to degree and/or type of discolouration on grain surface. Percentage of fungi found in black point, pink, red point, slight black, and normal grain colours were 43.70, 34.58, 19.04, 29.26, and 3.23%, respectively.

Infected grains caused decrease in germination, increase in seedlings damage and/or discoloured embryos. The quality tests in discoloured grain showed decreases in protein or oil contents and 1000-seed weight, while only free fatty acid was increased.

Both aflatoxin and zearalenone (ZON) mycotoxins were present in almost all discoloured grains, and the highest levels of the above toxins were observed in the pink colour. Red point discoloured grains were also found to have most of the alternatiol (AOH) toxin. But, deoxynivalenol (DON) and moniliformin (MF) were detected only in pink and slight black grain colours, respectively. Normal grains contained the least of aflatoxin only.

Artifical inoculation of grains by *G.fujikuori* (anamorph=*Fusarium moniliforme*) and/or A.flavus have been implicated nearly the same mycotoxins as those produced in discoloured grains and grains infection reduced their germination, increased grain invasion, and/or caused germ discoloration.