









- [9] Majumdar, T.; Chattopadhyay, P.; Saha, D.; Sau, S.; Mazumder, S.: Virulence plasmid of *Aeromonas hydrophila* induces macrophage apoptosis and helps in developing systemic infection in mice. *Microb. Pathog.*, 2009; 46: 98–107.
- [10] Sellins, K.; Cohen, J.: Gene induction by gamma-irradiation leads to DNA fragmentation in lymphocytes. *J. Immunol.*, 1987; 139: 3199–3206.
- [11] Kohn, K.: The significance of DNA – damage assays in toxicity and carcinogenicity assessment. *Ann. N Y Acad. Sci.*, 1983; 407: 106–118.
- [12] Mahmoud, A.; Zowail, M.; Yossif, G. ; Sharafeldin, K.: Cytogenetical studies on some River Nile species from polluted and nonpolluted Aquatic habitats. *Egypt. Acad. J. biolog. Sci.*, 2010; 2 (1): 1-8.
- [13] Birungi, Z.; Masola, B.; Zaranyika, M.; Naigaga, I.; Marshall, B.: Active biomonitoring of trace heavy metals using fish (*Oreochromis niloticus*) as bioindicator species. The case of Nakivubo wetland along Lake Victoria. *Phys. Chem. Earth*, 2007; 15–18: 1350–1358.
- [14] Florea, A.; Büsselberg, D.: Metals and metal compounds: occurrence, use, benefits and toxic cellular effects. *Biometals*, 2006; 19: 419-427.
- [15] Sharaf-Eldeen, K.; El-Ezabi, M.; Al-Bohaissi, A.: The molecular changes of hepatocytes in tilapia zillh under the effect of the agricultural and industrial pollution in the River Nile, Egypt. *Egypt. J. Aquat. Biol. & Fish*, 2006 ; 10(2): 55 – 76.
- [16] Abdul Shakoor, C.; Farhat, J.: Assessing metal, protein, and DNA profiles in *Labeo rohita* from the Indus River in Mianwali, Pakistan. *Environ. Monit. Assess* DOI 10.1007/s10661-010-1486-4, 2010.
- [17] Vittoria, S.; Ilaria, D. and Joachim, S.: DNA damage in eelpout (*Zoarces viviparus*) from Goteborg harbour. *Mut. Res.*, 2004; 552: 187-195.
- [18] Lima, P.; Benassi, J.; Pedrosa, R.; Dal Magro, J.; Oliveira, T.; Wilhelm, F.: Time-course variations of DNA damage and biomarkers of oxidative stress in tilapia (*Oreochromis niloticus*) exposed to effluents from a swine industry. *Arch. Environ. Contam. Toxicol.*, 2006; 50(1): 23-30.
- [19] Tanmay, M.; Pritam, C.; Dhira, R.; Subrato, S.; Shibnath, M.: Virulence plasmid of *Aeromonas hydrophila* induces macrophage apoptosis and helps in developing systemic infection in mice. *Micro. Patho.*, 2009; 46: 98-107.
- [20] Yamamoto, A.; Taniuchi, S.; Tsuji, S.; Hasui, M.; Kobayashi, Y.: Role of reactive oxygen species in neutrophil apoptosis following ingestion of heat-killed *Staphylococcus aureus*. *Clinical and Experimental Immunology*, 2002; 129: 479-484.
- [21] Ching, K.; Nakano, T., Chapman, L. Demby, A.; Robertson, B.: Genetic characterization of wild-type genotype VII hepatitis A virus. *J Gen. Virol.*, 2002; 83(1): 53-60.
- [22] Yagoub, S.: Isolation of Enterobacteriaceae and *Pseudomonas* spp. From raw fish sold in fish market in Khartoum state. *Bacteriol. Res. J.*, 2009; 1(7): 85-88.
- [23] Steinert, S.: DNA damage as a bivalve biomarker. *Biomarkers*, 1999; 4(6): 492–496.
- [24] Connell, D.; Lam, P.; Richardson, B.; Wu, R.: Introduction to ecotoxicology. Oxford: Blackwell, 1999; 135.