ABSTRACTS OF
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Radiochemical purity showed that over 98% of radioactive ^{188}Re was in the form of ^{188}Re-HEDP complex. In terms of haematological radio toxicity, doses that were used in the study had no significant effect on the number of leukocytes and platelets. The greatest reduction in the number of leukocytes and platelets in most animals was noted in the second week after the application of the radiopharmaceutical. After the sixth week of treatment, the values of the tested blood units reached the value before treatment. Animal model in our study allowed monitoring radio toxicity of ^{188}Re-HEDP. The haematological radio toxicity of doses used is negligible and transitory. These results suggest that ^{188}Re-HEDP is an attractive radiopharmaceutical for palliative treatment of primary and metastatic bone tumours.

Keywords: *rhenium-188, hydroxyethylidene diphosphonate, animal model, radio toxicity, bone metastases*

FATTY ACID COMPOSITION OF ASPARAGUS OFFICINALIS OILS

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Vegetarians have no direct sources of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) (long chain omega-3 fatty acids) in the diet, hence they must convert alpha-linolenic acid to EPA and DHA in the body. Human beings evolved on a diet that was balanced in the omega-6 and omega-3 polyunsaturated fatty acids (PUFA), and was high in antioxidants. Edible wild plants provide alpha-linolenic acid and PUFA. Today, we know that omega-3 fatty acids are essential for normal growth and development and may play an important role in the prevention and treatment of coronary artery disease, hypertension, diabetes, arthritis, other inflammatory and autoimmune disorders, and cancer. Analysis of fatty acids was performed with GC-FID. Comparison of obtained results from analysis of fatty acids showed that, Asparagus oil has high nutritional value because it contains 45,62 linoleic acid and 8,84 % linolenic acid. Therefore, we can conclude that *Asparagus* oil are edible and have good nutritive values.

Keywords: *Vegetables, Fatty acids, GC-FID, Asparagus officinalis.*

PRESENCE OF DIROFILARIA. REPENS IN PROFESSIONAL DOGS IN THE REGION OF SKOPJE DIAGNOSED WITH THE KNOTT MODIFIED TECHNIQUE

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In the period of March through April, 2010 blood was analyzed from 39 professional dogs without visible clinical symptoms and skin abnormalities. The aim of this research was to determine the presence of filarial nematodes in professional dogs older than 1 year in the region of Skopje – R. Macedonia and to identify present species. Dogs were kept in separate cages, in good hygienic conditions, treated with praziquntel every three months. For detection of microfilaria in blood a modified Knott technique was used. Differentiation of present microfilaria was done on the base of morphological characteristics and micrometry. Out of 39 dogs , 8 dogs (20,5%) were positive for the presence of D. repens with average length of 354,94 µm and width of 6,59 µm. This represent a first report of Dirofilaria repens determination in dogs in R. Macedonia which live in the area of high level underground water, making the ideal conditions for reproduction of the mosquitoes as a vector for this disease.

Keywords: *Dirofilaria repens, official dogs, Knott technique, micrometry;*

ASSESMENT OF COMPLIANCE OF RAW MILK SAMPLES FROM REPUBLIC OF MACEDONIA FOR RESIDUES OF TETRACYCLINES ACCORDING TO METHOD PERFORMANCE REQUIREMENTS LAID DOWN IN THE COMMISSION DECISSION 657/2002/EC

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As antimicrobials tetracyclines are widely used at food producing animals for prevention and treatment of infection diseases caused by bacteria or as a feed additives to improve feed efficiency and growth. The presence of residues of these drugs might have various adverse effects as direct toxicity and allergic reactions in some hypersensitive individuals. Even more important long-time intakes of low-doses of antibiotics in foodstuffs can cause problems related with drug persistency at the microorganisms. The maximum residue limits (MRL's) for tetracycline according to Commission Regulation 37/2010/EU [1] are set at 100 μg/ kg. The same MRL's are in force in Republic of Macedonia according the national legislation [2]. Analytical methods that are employed for detection of residues of tetracyclines must be able to detect levels which are under and around the MRL's. The most widely used screening methods for detection of residues of tetracyclines in food are microbiological [3] or immunochemical [4]. As proscribed in the Commission Decision 657/2002/EC [5] each positive result must be confirmed with other validated methods that have to include spectrometric detection [6]. Decision limit (CCα) and detection limit (LOD) are the validation parameters which are important for assessment of compliance of samples regarding the presence of residues of veterinary drugs in food.

In this paper the obtained results from the analysis of 480 samples of raw milk for the residues of teteracyclines will be presented and assessed for compliance regarding the obtained validation parameters during from the in house validation. The employed confirmatory method is High-Performance Liquid Chromatography (HPLC) with Diode Array Detection (DAD). Sample extraction was performed with McIlvine buffer and the clean-up with OASIS HLB solid-phase extraction cartridges [6]. The samples were considered for non-compliant if the individual concentrations for tetracyclines exceeded the determined 131,1 μg/ kg, 121,1 μg/ kg, 116,8 μg/ kg and 124,5 μg/ kg for oxytetracycline, tetracycline, chlorotetracycline and doxycycline, respectively. The determined concentrations lower than 10,4 μg/ kg for oxytetracycline, 12,0 μg/ kg for tetracycline, 16,8 μg/ kg for chlorotetracycline and 20,7 μg/ kg for doxycycline were considered to be under the limits of detection of the employed method.

Keywords: *tetracyclines, maximum residue limits, raw milk, HPLC*