Les productions scientifiques : 2010-2014

1- Identification of four common alpha-thalassemia gene deletions among a group with hemoglobinopathies in Setif population, Algeria

By: Houcher, Bakhouche; Ozturk, Aysenur; Begag, Samia; et al.
PTERIDINES Volume: 24 Issue: 3-4 Pages: 251-255 Published: DEC 2013

alpha-Thalassemia (alpha-thal) is one of the most common genetic disorders in the world. It is characterized by the absence or reduced expression of a-globin genes. This study was carried out to evaluate the allelic frequency of alpha-thal defects in a patient for the first time in Setif (Algeria). One hundred and two patients with hemoglobinopathies from Setif region, Algeria, presenting thalassemia were included in this study. Genomic DNA isolation was carried out according to standard methods. For identifying the alpha-thal genotype, investigation of alpha-globin gene deletions (-alpha 3.7, -alpha 4.2, -(MED) and -alpha 20.5) was performed by using multiplex-polymerase chain reaction (PCR). Among the three deletions found, the most mutations were the -alpha 3.7 (10.78%), followed by the -(MED) (5.88%) and -alpha 20.5 (0.98%), whereas the -alpha 4.2 deletion was not observed (0.0%). The allele frequency is 0.054 (11/204) for the 3.7 deletion, 0.029 (6/204) for the MED and 0.005 (1/204) for the 20.5. Molecular heterogeneity of mutations is typical of a-thal in Algeria. Our findings will be valuable and essential for the molecular diagnosis and prevention strategies of hemoglobinopathy gene mutations in the Algerian population.

2- Classification of radar echoes with a textural-fuzzy approach: an application for the removal of ground clutter observed in Setif (Algeria) and Bordeaux (France) sites

By: Sadouki, Leila; Haddad, Boualem
INTERNATIONAL JOURNAL OF REMOTE SENSING Volume: 34 Issue: 21 Pages: 7447-7463 Published: NOV 10 2013

This work deals with the classification of radar echoes and the removal of clutter caused by the Earth's surface. Two incoherent radar sites are considered, which are the regions of Setif (Algeria) and Bordeaux (France) where different climates and landforms prevail. To perform this task, we used a combination of textural and fuzzy approaches. For the textural technique, we applied grey-level co-occurrence matrices that are widely used in the analysis of texture images. We have shown that among nine parameters, only energy and local homogeneity are considered to be effective in discriminating between precipitation echoes and clutter. Then, these parameters are used as inputs for the fuzzy system, while the two radar echo types are its output classes. Image processing done by using this approach has reduced ground echoes by more than 93.5% for Setif and 92.3% for Bordeaux sites, while more than 97.6% of precipitation echoes are stored at both sites. In addition, over 96% of the anomalous propagations observed only in Bordeaux site are removed. The proposed approach gives a filtering average rate that is 94.5% higher than that obtained for the textural technique alone, which is 91.5%.

3-Large scale purification of the SERCA inhibitor Thapsigargin from Thapsia garganica L. roots using centrifugal partition chromatography

By: Ollivier, Anthony; Grougnet, Raphael; Cachet, Xavier; et al.
JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES Volume: 926 Pages: 16-20 Published: MAY 1 2013

Thapsigargin (Tg) is a selective and irreversible inhibitor of the sarcoplasmic/endoplasmic reticulum calcium ATPase (SERCA)-dependent pump at subnanomolecular concentrations. As such, it has become a powerful tool in the study of Ca2+ signaling pathway. Purification of Tg from Thapsia species requires repeated chromatographic steps with normal-phase alumina or silica and reverse phase chromatography. We thus developed an innovative procedure coupling high pressure automatized extraction with centrifugal partition chromatography allowing a fast and safe large-scale isolation of highly pure Tg, in two steps from Thapsia garganica L. roots. Comparison of influence of extraction procedures, storage conditions and harvesting areas on Tg content in different Algerian specimens of Thapsia garganica L roots has been precised by mean of HPLC quantification procedure. Highest Tg content were found in the fresh material of the sample from Setif area.

4- Teignes du cuir chevelu: cas diagnostiques au laboratoire central CHU Setif: periode: 1999-2011.

By: Meradji, A; Aissaoui, I; Touabti, A
Journal de mycologie medicale Volume: 23 Issue: 1 Pages: 80-1 Published: 2013-Mar

5- Les onychomycoses au laboratoire de parasitologie CHU Setif: etude sur dix ans. [In Process Citation].

By: Ilham, A; Touabti, A
Journal de mycologie medicale Volume: 23 Issue: 1 Pages: 81-2 Published: 2013-Mar

6-Technical and economic analysis of large-scale wind energy conversion systems in Algeria

By: Diaf, S.; Notton, G.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS Volume: 19 Pages: 37-51 Published: MAR 2013

In this study, the wind energy potential and economic analysis in 13 locations are investigated using wind speed data measured at 10 m height. From the collected data which are the daily, monthly and frequency profiles of the wind speed at these sites, the southern region of Algeria is found to have the relatively highest wind potential. Technical and economic evaluations of electricity generation from different commercial wind turbines are examined. The yearly energy output, capacity factor and electrical energy cost of kWh produced by the selected wind turbines are calculated. In term of energy production, the results show that Adrar is the best location for harnessing the wind power and generating electricity. The capacity factors

are found to vary from 6% at Skikda to 48% at Adrar. In addition, it was found that the minimum cost per kWh of electricity generated is about 0.0179 $/kWh at Adrar for the southern region, 0.0431 $/kWh at Oran for the coastal region and 0.0518 $/kWh at Setif for the highland region. Among all the considered models, the Suzlon S82-1500 wind turbine is found to be the most attractive in terms of cost per kWh. Based on the obtained results, the wind resource appears to be suitable for power production in the southern region, which makes it a viable substitute to diesel oil for electricity generation.

7-A simple model for secondary clarifier: application to wastewater treatment plant

By: Bakiri, Zahir; Nacef, Saci
Conference: International Conference of the European-Desalination-Society (EDS) on Desalination for the Environment, Clean Water and Energy Location: Barcelona, SPAIN Date:APR23-26,2012
Sponsor(s): European Desalinat Soc (EDS)
DESALINATION AND WATER TREATMENT Volume: 51 Issue: 7-9 Pages: 1571-1576 Published: FEB 2013

Wastewater treatment by low-rate activated sludge in aerobic stabilization ponds is a treatment process that has been, for most Algerian towns, the preferred tool for treating their wastewater because it has proven most reliable and easier to operate. The wastewater treatment plant of the City of Setif (Algeria) is a good example for this type of process. It has a capacity of 330,000 pop-equivalents and has been designed to accommodate 66,000 m(3)/d in dry weather. The work is based on the technical analysis from 2007. The mathematical model for the secondary clarifier was developed, including, propose a modified expression of the settling velocity. The treatment of the pollution parameters has been estimated. The test results have been updated, so that the results correspond to the present Algerian normalization.

8-Genetic Epidemiology, Hematological and Clinical Features of Hemoglobinopathies in Iran

By: Rahimi, Zohreh
BIOMED RESEARCH INTERNATIONAL Article Number: 803487 Published: 2013

There is large variation in the molecular genetics and clinical features of hemoglobinopathies in Iran. Studying structural variants of hemoglobin demonstrated that the beta-chain variants of hemoglobin S and D-Punjab are more prevalent in the Fars (southwestern Iran) and Kermanshah (western Iran) provinces, respectively. Also, alpha-chain variants of Hb Q-Iran and Hb Setif are prevalent in western Iran. The molecular basis and clinical severity of thalassemias are extremely heterogenous among Iranians due to the presence of multiethnic groups in the country. beta-Thalassemia is more prevalent in northern and southern Iran. Among 52 different beta-thalassemia mutations that have been identified among Iranian populations, IVSII-1 G: A is the most frequent mutation in most parts of the country. The presence of IVS I-5 G:C mutation with high frequency in southeastern Iran might reflect gene flow from neighboring countries. A wide spectrum of alpha-thalassemia alleles has been detected among Iranians with -alpha(3.7kb) as the most prevalent beta-thalassemia mutation.

The prevention program of thalassemia birth in Iran has reduced the birth rate of homozygous beta-thalassemia since the implementation of the program in 1997. In this review genetic epidemiology, clinical and hematological aspects of hemoglobinopathies, and the prevention programs of beta-thalassemia in Iran will be discussed.

9- Genetic epidemiology, hematological and clinical features of hemoglobinopathies in Iran.

By: Rahimi, Zohreh
BioMed research international Volume: 2013 Pages: 803487 Published: 2013 (Epub 2013 Jun 18)

There is large variation in the molecular genetics and clinical features of hemoglobinopathies in Iran. Studying structural variants of hemoglobin demonstrated that the beta-chain variants of hemoglobin S and D-Punjab are more prevalent in the Fars (southwestern Iran) and Kermanshah (western Iran) provinces, respectively. Also, alpha-chain variants of Hb Q-Iran and Hb Setif are prevalent in western Iran. The molecular basis and clinical severity of thalassemias are extremely heterogenous among Iranians due to the presence of multiethnic groups in the country. beta-Thalassemia is more prevalent in northern and southern Iran. Among 52 different beta-thalassemia mutations that have been identified among Iranian populations, IVSII-1 G:A is the most frequent mutation in most parts of the country. The presence of IVS I-5 G:C mutation with high frequency in southeastern Iran might reflect gene flow from neighboring countries. A wide spectrum of alpha-thalassemia alleles has been detected among Iranians with -alpha(3.7 kb) as the most prevalent alpha-thalassemia mutation. The prevention program of thalassemia birth in Iran has reduced the birth rate of homozygous beta-thalassemia since the implementation of the program in 1997. In this review genetic epidemiology, clinical and hematological aspects of hemoglobinopathies, and the prevention programs of beta-thalassemia in Iran will be discussed.

10-MAY 1945 IN SETIF: ORIGIN OF A COMIC ALBUM

By: Begag, Azouz
CONTEMPORARY FRENCH AND FRANCOPHONE STUDIES Volume: 17 Issue: 1 Special Issue: SI Pages: 99-116 Published: JAN 1 2013

This article discusses the origins of the bande dessinee [comic] album Lecons coloniales (2012), for which the author wrote the script, with illustrations by Djillali Defali. The album focuses on the build-up to the massacres that took place in May 1945 in and near the Algerian town of Setif in response to nationalist demonstrations in favor of independence from France. The author's parents lived at that time in the nearby village of El Ouricia, where they worked on the farm of a French settler before migrating to France a few years before independence. In the course of researching the historical context for the book, the author made contact with a grandson of the farmer for whom his parents had worked and arranged a meeting in the course of which his elderly mother and the descendant of the settler for whom she had worked reminisced over their childhood memories of El Ouricia.

11-Identification of alpha-globin Chain Variants: A Report from Iran

By: Akbari, Mohammad Taghi; Hamid, Mohammad
ARCHIVES OF IRANIAN MEDICINE Volume: 15 Issue: 9 Pages: 564-567 Published: SEP 2012

Background: This study was carried out to identify molecular and hematological features of alpha- globin chain variants and to evaluate their effects on the clinical and hematological characteristics in Iranian individuals suspected of having thalassemia trait.
Methods: Analysis of red blood cell indices, hemoglobin (Hb) analysis and genomic DNA isolation were carried out according to standard methods. For identifying the alpha-thalassemia (alpha-thal) genotype, investigation of common Mediterranean alpha-globin gene deletions (-alpha(3.7), -alpha(4.2)-alpha(20.5) and -(MED)) was performed by Gap-PCR. To characterize chain variants the entire alpha(1) and alpha(2) genes that spanned from the promoter region to the poly A tail were amplified and directly sequenced.
Results: In this study, 19 members of 17 unrelated families showed alpha-chain variants. Among these cases ten alpha-chain variantsthat included Hb Setif, Hb Constant Spring (Hb CS), Hb Handsworth, Hb Icaria, Hb Evanston, Hb Val de Marne, Hb Utrecht, Hb Savaria, Hb Adana, and Hb Dartmouth were identified. The hematological profile and molecular basis of these ten alpha-chain variants and the phenotypic consequences of their interactions were discussed.
Conclusion: The knowledge of the spectrum of alpha-globin variants present in the Iranian population is essential for the molecular diagnosis and prevention of hemoglobinopathies.

12-Incidental Findings of Variant Hemoglobin During Hemoglobin A(1)c Testing

By: Froom, Paul; Henig, Clara; Zalman, Luci; et al.
AMERICAN JOURNAL OF CLINICAL PATHOLOGY Volume: 138 Issue: 3 Pages: 425-428 Published: SEP 2012

A variant hemoglobin fraction may be an incidental finding during HbA(1c) analysis using the G8 Tosoh HPLC analyzer, but it is unclear if the retention times and fraction patterns can reliably predict the findings of a high-performance liquid chromatography (HPLC) beta-thalassemia program (Bio Rad Variant II analyzer). We chose 100 samples sent for HbA(1c) determinations (G8 Tosoh) with an incidental finding of variant hemoglobin and did a reflex test using the Bio Rad Variant II analyzer (beta-thalassemia program). Two observers attempted to predict the results with that analyzer from fraction patterns and retention times of the hemoglobin variants detected with the G8. They independently identified all hemoglobin variants (HbS, Hb Setif, HbC, and HbD) by their patterns and retention times. We conclude that HPLC confirmation of certain variant hemoglobin fractions found incidentally during HbA(1c) testing on the G8 Tosoh is not necessary.

13-Pattern recognition filtering and bidimensional FFT-based detection of storms in meteorological radar images

By: Raaf, Ouarda; Adane, Abd El Hamid
DIGITAL SIGNAL PROCESSING Volume: 22 Issue: 5 Pages: 734-743 Published: SEP 2012

Important climate changes are today observed around the world, frequently yielding destructing precipitations. To identify and follow the evolution of storms in real-time, meteorological radar images collected in Setif (Algeria), Bordeaux (France), and Dakar (Senegal), are processed. Template and pattern recognition-based filters are firstly used to remove the ground clutter and keep the precipitation echoes unchanged. Bidimensional FFT is then applied to the filtered images, showing that the Fourier spectra characterising convective clouds differ significantly from those of stratified ones. This difference can be usefully employed by the radar operators to quickly detect the formation of violent storms. To forecast the growing of rainfall clouds and their motion, the related radar echoes are reconstituted using inverse FFT. It is found that the 26 first harmonics are sufficient to both rapidly and accurately reconstitute the surface of clouds whereas 82 distinct harmonics are needed to well reproduce their reflectivity.

14-Trace elements determination in Algerian wheat by instrumental neutron activation analysis (INAA)

By: Beladel, B.; Nedjimi, B.; Mansouri, A.; et al.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY Volume: 293 Issue: 2 Pages: 497-501 Published: AUG 2012

In Algeria, bread is the staple food, produced in different kinds from local and imported wheat. Most of it is not subjected to micro-elemental analysis. The objective of this study is to determine quantitatively the traces elements in samples wheat grains produced locally from different cultivated provinces in Algeria. Trace elements (Co, Cr, Cs, Fe, Rb, Sc, Se and Zr) were determined using neutron activation analysis. The results show that the contents of the traces elements in the studied samples were within the safety baseline of all the assayed elements recommended by WHO/FAO except for cobalt in El Harrach province. The analytical results showed that chromium was undetectable in all samples except for Constantine, Ain Mlila and Setif provinces. However zirconium content in a few samples exceeded the permissible level.

15-Transversal distribution (channel-bank) of benthic macro-invertebrates in Algerian rivers (Soummam and its tributaries)

By: Zouggaghe, F.; Moali, A.
REVUE D ECOLOGIE-LA TERRE ET LA VIE Volume: 67 Issue: 2 Pages: 237-250 Published: JUN 2012

Transversal distribution (channel-bank) of benthic macro-invertebrates in Algerian rivers (Soummam and its tributaries). The communities of benthic macro-invertebrates were sampled over the entire watershed Soummam to determine the transversal variability (bank-channel) : 34 stations were studied on the three parts of the watershed Soummam (Soummam valley, Bouira and Setif plateaux) during spring and summer of 2005, 2006 and 2007. The main objective of the study was to determine the community structure of benthic macro-invertebrates in two flow facies (bank and channel). From this structure we determined whether communities are homogeneous or heterogeneous by measuring the distance between the channel and the bank, and that to determine the surface distribution of these communities

in the same station. In terms of taxonomic richness, the similarities were between 60 and 90%, which means that sometimes dissimilarity was up to 40%. However, in terms of abundance, differences were remarkable between the channel and the banks, especially for taxa characteristics of each region. Even for stations where the distance between the samples on the channel and on the bank was less than 2 m, the structure of these benthic macro-invertebrates communities also changed. So the habitat of benthic macro-invertebrates is very small, and each micro-habitat has a structure specific to these benthic communities.

16-Nutritional Factors, Homocysteine and C677T Polymorphism of the Methylenetetrahydrofolate Reductase Gene in Algerian Subjects with Cardiovascular Disease

By: Houcher, Zahira; Houcher, Bakhouche; Touabti, Abderrezak; et al.
PTERIDINES Volume: 23 Issue: 1 Pages: 14-21 Published: MAR 2012

The C677T variant of methylenetetrahydrofolate reductase (MTHFR), a key enzyme in the remethylation of homocysteine (HCY) to methionine, is a frequent genetic cause of moderate hyperhomocysteinemia (HHCY) among individuals with cardiovascular disease (CVD), and particularly when combined with other factors such as hyperlipidaemia. However, in Algeria the influence of nutrient-gene interactions is not known. The aim of the present study was to explore the influence of age and gender, together with folate status, on the association between the C677T MTHFR polymorphism and plasma total HCY (tHCY) concentrations. This research was carried out as a prospective study on 98 patients hospitalized in the Cardiology Section, University of Setif, Algeria. Mean age of participants was 57 y (range 20-96 y). The genetic analysis of the MTHFR C677T polymorphism was performed by real-time polymerase chain reaction (PCR) performed on Light Cycler in borosilicate capillaries with MTHFR 677CT polymorphism detection kit. The concentrations of tHCY, folic acid vitamin B-12 levels were determined using a competitive immunoassay on the IMMULITE 1000 Analyzers. Plasma total cholesterol, triglycerides, glucose, creatinine and urea concentrations were measured by colorimetric methods. Assays were conducted according to the manufacturers' instructions. Plasma tHCY was significantly higher in the patients with CVD, and HHCY was associated with the presence of mildly elevated serum urea and creatinine ($p < 0.05$). MTHFR gene mutation does not seem to be associated with elevation of plasma tHCY in the studied patients and this lack of correlation could be influenced by the higher folate concentrations in our study. CVD patients with 677CT/TT genotypes had a higher concentration of total cholesterol than those with 677CC genotype ($p < 0.05$). Although, the presence of 677T variant together with hypofolatemia (<15.4 ng/ml) had a more detrimental effect on the level of total cholesterol ($p < 0.05$). Folatemia and vitamin B-12 were much higher in 677CC genotype compared to 677CT/TT genotype in CVD subjects without hyperlipidemia ($p < 0.05$). However in patients with hyperlipidemia these values became lower also with 677CC genotype. In conclusion, hyperlipidemia affects the levels of plasma folate and vitamin B-12 concentrations independent of mutated MTHFR genotype. The effect of 677T variant on total cholesterol, folate and vitamin B-12 concentrations may relate to possible adverse effects of elevated tHCY on lipid profiles and on plasma folate and vitamin B-12.

17-ISOLATION, IDENTIFICATION AND ANTIMICROBIAL ACTIVITY OF PSEUDOMONADS ISOLATED FROM THE RHIZOSPHERE OF POTATOES GROWING IN ALGERIA

By: Mezaache-Aichour, S.; Gueehi, A.; Nicklin, J.; et al.
JOURNAL OF PLANT PATHOLOGY Volume: 94 Issue: 1 Pages: 89-98 Published: MAR 2012

Fourteen bacterial isolates from the rhizosphere of potato plants growing near Setif, (Algeria) were characterised as fluorescent Pseudomonads by phenotypical methods and one was identified as Pseudomonas chlororaphis by sequencing ribosomal DNA. In dual culture, this isolate inhibited the growth of the phytopathogenic fungi Fusarium oxysporum f. sp. lycopersici, E oxysporum f. sp. albedinis, F. solani and Rhizoctonia solani and the oomycete Pythium ultimum. Extracts of supernatants from liquid cultures of the Ps. chlororaphis isolate completely inhibited these organisms when incorporated into potato dextrose agar at a rate equivalent to 0.31 ml culture filtrate/ml, or greater. In a disc assay, extracts equivalent to 0.31 ml supernatant gave inhibition zones of 15 mm and 25 mm for the Gram-positive bacteria Bacillus subtilis and Paracoccus paratrophus, respectively. Fractionation of extracts of supernatants by TLC and HPLC with diode array detection allowed the identification of phenazine carboxylic acid as one of the antimicrobial compounds and the tentative identification of two others as 2-hydroxy phenazine carboxylic acid and 2-hydroxy phenazine.

18-SUPPORTING THE LMD SYSTEM THROUGH TUTORING: THE "CAN DO" CULTURE IN THE ALGERIAN CONTEXT

By: Abdellatif-Mami, Naouel
Edited by: Chova, LG; Martinez, AL; Torres, IC
Conference: 6th International Conference of Technology, Education and Development (INTED) Location: Valencia, SPAIN Date: MAR 05-07, 2012
INTED2012: INTERNATIONAL TECHNOLOGY, EDUCATION AND DEVELOPMENT CONFERENCE Book Series: INTED Proceedings Pages: 4386-4391 Published: 2012

The LMD system has been introduced in the Algerian context since the year 2004-2005. Since then, many shortcomings pertaining to its implementation as well as to the organisation of courses have been the weakest link in the success of the programme.
The Large number of classes and the lack of human and material resources have hindered a successful approach to the values set by the Bologna Declaration. However, a number of measures have been taken by the Ministry of Higher Education and Scientific Research to appease the pressure of the many strikes witnessed by the university community.
In this research, however, I shall demonstrate how an effective system of tutoring may help in improving customer service and integrate new starters effectively.
Tutoring is the basic line of the LMD system. In Algeria, this notion lacks employability and focus to engage learners in self-directed and self-tested learning. Throughout an investigation conducted at Ferhat ABBAS University, Setif, I shall try to explain how developing people's management through academic tutoring may encourage leadership fundamentals in developing an internal coaching service.
On the other hand, major changes in the Higher Education Area required a more qualified workforce with different skills. The LMD system was commissioned to design a one-day-

career and to create an appreciative "can do" culture. In this research I shall explain how we can make this "can do" culture relevant in the Algerian context.

19-The antagonism activity of bacteria isolated from potato cultivated soil.

By: Mezaache-Aichour, S; Sayah, N; Zerroug, M M; et al.
Communications in agricultural and applied biological sciences Volume: 77 Issue: 3 Pages: 259-64 Published: 2012

Soil-borne fungal and bacterial root pathogens can cause serious losses to agricultural crops. Resistant plant varieties are not available for several soil-borne pathogens and chemical control is often insufficiently effective in soil. The enhancement of disease suppressive properties of soils will limit disease development, thus, being of great importance for sustainable agriculture as well as organic farming systems. The aim of this research is to find and identify suppressive soils in the Setif's areas (potato field located in different regions of Setif); this allows the selection of the indigenous soil bacteria that are able to develop several mechanisms of action related to biocontrol of phytopathogenic fungi affecting potato crops. Among 50 bacterial strains only 14 showed a wide range of antifungal action against the tested phytopathogenic fungi. With a range of inhibition percent from 0 to 92.30% especially Fusarium oxysporum f. sp. albedinis with 92% inhibition.

20-Microstructure Characterization of Low Carbon Steel used for Galvanization

By: Larouk, Z.; Yakhlef, F.
Edited by: Yigit, F; Hashmi, MSJ
Conference: 14th International Conference on Advances in Materials and Processing Technologies (AMPT) Location: Istanbul, TURKEY Date: JUL 13-16, 2011 Sponsor(s): Turkish Airlines; TTNET; Gedik Hold; Istanbul Dev Agcy
MATERIALS AND MANUFACTURING TECHNOLOGIES XIV Book Series: Advanced Materials Research Volume: 445 Pages: 703-708 Published: 2012

The present study deals with a low carbon steel containing 0.09%C (weight %). This steel is produced by Trifisoud El-elma-Setif-Algeria as wires and used for galvanization. Tensile tests are carried out on the material in as received conditions, i.e before, after deformation and after galvanization. Optical microscope and Secondary Electron Microscope (SEM) are used for microstructure characterization of the material. The results show that the initial microstructure is ferrite -pearlite with 11 mu m of ferrite grain size. SEM observations show that the galvanization layer is not regular and it thickness varies between 5 and 13 mu m. It has been found that the mechanical properties are affected by the rate of deformation. The annealing treatment at 530 degrees C for different time follows the Avrami law. The two constants in Avrami law (n, k) are determined. The obtained results are compared with other published works.

21- Decadal Evaluation of Durum Wheat Water Requirements to Improve Rainfed Agriculture under Semi-Arid conditions

By: Houria, Chennafi
Edited by: Salame, C; Aillerie, M; Khoury, G
Conference: International Conference on Clean Energy Solutions for Sustainable Environment (TerraGreen) Location: Beirut, LEBANON Date: FEB 16-19, 2012
TERRAGREEN 2012: CLEAN ENERGY SOLUTIONS FOR SUSTAINABLE ENVIRONMENT (CESSE) Book Series: Energy Procedia Volume: 18 Pages: 896-904 Published: 2012

The estimating water requirement of durum wheat is a technical tool which seats a practical water management. The water needs of durum wheat grown on the High Plains of Setif raised sharply by the first decade of march. In fact, it reached 46 mm from the mid of the tillering to the mid of jointing (march - april) and raised to 103 mm during the booting - heading growth phase. For a crop cycle lasting from the mid-november to the third decade of may, the crop water requirements were estimated to 672 mm. The periods with the high water demand coincide with limited offer. These results suggested applying limited water quantities to reduce water deficit effect on the crop. This contributes to stabilize wheat production through soil conservation and durable management of the scarce water resources in semi-arid area. (C) 2012 Published by Elsevier Ltd. Selection and/or peer-review review under responsibility of The TerraGreen Society.

22-Environmental effects on the performance of nanocrystalline silicon solar cells

By: Guechi, A.; Chegaar, M.; Aillerie, M.
Edited by: Salame, C; Aillerie, M; Khoury, G
Conference: International Conference on Clean Energy Solutions for Sustainable Environment (TerraGreen) Location: Beirut, LEBANON Date: FEB 16-19, 2012
TERRAGREEN 2012: CLEAN ENERGY SOLUTIONS FOR SUSTAINABLE ENVIRONMENT (CESSE) Book Series: Energy Procedia Volume: 18 Pages: 1611-1623 Published: 2012

In this paper the global, direct and diffuse solar radiation incident on solar cells is simulated using the spectral model SMARTS2, for varying environmental conditions on the site of Setif. The effect of changes in total intensity and spectral distribution on the short circuit current and efficiency of nanocrystalline silicon (nc-Si: H) is examined. The results show a reduction in the short circuit current due to increasing turbidity. It is 27.06% and 67.97% under global and direct radiation respectively. However it increases under diffuse radiation. This increase is about 53.97%. Increasing albedo leads to an increase in the short circuit current of 5.70% and 27.05% for global and diffuse solar radiation, respectively and it is not influenced under direct solar radiation. The performance of the cells is notably reduced, both in terms of efficiency and open circuit voltage, with increasing air mass. It is about 81.86%, 37.47% and 94.18% for global, diffuse and direct solar radiation respectively. (C) 2012 Published by Elsevier Ltd. Selection and/or peer-review under responsibility of The TerraGreen Society.

23- URANIUM CONTENT AND DOSE ASSESSMENT FOR PHOSPHATE FERTILISER AND SOIL SAMPLES: COMPARISON OF URANIUM CONCENTRATION BETWEEN VIRGIN SOIL AND FERTILISED SOIL

By: Boukhenfouf, Wassila; Boucenna, Ahmed

RADIATION PROTECTION DOSIMETRY Volume: 148 Issue: 2 Pages: 263-267 Published: JAN 2012

Specific activity of U-235 and U-238 in soil and fertiliser samples from Guellal region in Setif (Algeria) was determined by gamma-ray spectrometry. The selected phosphate fertilisers samples were collected from two types of fertilisers NPK (N, nitrogen; P, phosphorus; K, potassium) and NPKs (sulphate-based NPK). These last ones are used to fertilise the studied area as well as a radioactivity comparison between the soils before and after fertilisation. NPK and NPKs fertilisers have presented higher concentrations of the radionuclide U-238, up to 1125 and 1545 Bq kg(-1), respectively. For soils before and after fertilisation, the concentrations of U-238 were, respectively, 252.8 and 316.2 Bq kg(-1). The average value and range of measured concentration of U-235 for soils before fertilisation was 12.16 +/- 1.4 Bq kg(-1) and for the fertilised soils was 15.16 +/- 1.8 Bq kg(-1), whereas the corresponding values for NPK and NPKs fertilisers were, respectively, 49.38 +/- 5.7 and 50.61 +/- 5.2 Bq kg(-1).

24- Geographical patterns of Kaposi's sarcoma, nonHodgkin lymphomas, and cervical cancer associated with HIV infection in five African populations

By: Chaabna, Karima; Boniol, Mathieu; de Vuyst, Hugo; et al.
EUROPEAN JOURNAL OF CANCER PREVENTION Volume: 21 Issue: 1 Pages: 1-9 Published: JAN 2012

The objective of this study is to describe the most recent geographical patterns of incidence of AIDS-related cancers, Kaposi's sarcoma (KS), nonHodgkin lymphoma (NHL), and cervical cancer in North African and subSaharan African populations. Data were extracted for the period 1998-2002 from five African population-based cancer registries: Kyadondo, Harare, Setif, Sousse, and Gharbiah. Age-standardized rates were calculated using the African standard population; a comparison was made between these populations by computing the standardized incidence ratio and 95% confidence intervals. The KS rate was found to be significantly higher in men than in women, and higher in Harare (women: 26.3/100 000; men: 50.4/100 000) and Kyadondo (women: 23.6/100 000; men: 30.2/100 000) than in the North African sites for both sexes (< 0.3/100 000). In addition, the KS rate in women from Harare was similar to that for Kyadondo. Gharbiah presented the highest rates for NHL (women: 7 per 100 000; men: 11.9/100 000) for both sexes. We observed that Harare and Kyadondo had similar age-specific incidence in the high-risk age group for HIV/AIDS (15-49 years), and these rates were 4.5-fold higher in subSaharan populations than those in the North African sites. Thus, it was observed that the pattern of HIV prevalence is variable with the lowest prevalence in North African countries, intermediate prevalence in Uganda, and the highest prevalence in Zimbabwe. Our findings show that the incidence of NHL and cervical cancer, considered to be HIV/AIDS-related cancers, does not follow the pattern of HIV prevalence in the five studied African populations. Thus, the highest NHL incidence rate in both sexes in Gambia may be explained, at least in great part, by the highest hepatitis C virus prevalence observed there. Indeed, factors other than HIV infection likely contribute to their geographical patterns. European Journal of Cancer Prevention 21:1-9 (C) 2011 Wolters Kluwer Health vertical bar Lippincott Williams & Wilkins.

25- Effect of Spectral Irradiance Distribution on the Performance of Solar Cells

By: Guechi, A.; Chegaar, M.; Merabet, A.
Conference: Fall Meeting of the European-Materials-Research-Society (E-MRS)/Symposium H - Novel Materials for Electronics, Optoelectronics, Photovoltaics and Energy Saving Applications Location: Warsaw, POLAND Date: SEP 19-23, 2011 Sponsor(s): European Mat Res Soc (E-MRS)
ACTA PHYSICA POLONICA A Volume: 120 Issue: 6A Special Issue: SI Pages: A43-A46 Published: DEC 2011

In this paper, the global and diffuse solar radiation incident on solar cells is simulated using a spectral model SMARTS2, for varying atmospheric conditions on the site of Setif. The effect of changes in total intensity and spectral distribution on the short circuit current and efficiency of different kinds of thin film solar cells (CdTe, nc-Si:H and copper indium gallium selenide, CIGS) is examined. The results show a reduction in the short circuit current due to increasing turbidity. It is 18.82%, 27.06% and 26.80% under global radiation and for CdTe, nanocrystalline silicon (nc-Si:H), and CIGS solar cells, respectively. However it increases under diffuse radiation. Increasing water vapor in the atmosphere leads to a reduction in the short circuit current of 3.15%, 2.38%, and 2.45%, respectively, for CdTe, nc-Si:H, and CIGS cells under global radiation and it is not influenced under diffuse radiation. The performance of the solar cells is notably reduced, both in terms of efficiency and open circuit voltage, with increasing air mass.

26- Plant communities belonging to the temporary ponds of the High Plateaus within the Setif Province (Djebel Megriss, Northern Tell Atlas, Algeria)

By: Boulaacheb, Nacira; Clement, Bernard; Gharzouli, Rachid
BULLETIN MENSUEL DE LA SOCIETE LINNEENNE DE LYON Volume: 80 Issue: 7-8 Pages: 149-169 Published: SEP-OCT 2011

Djebel Megriss is a mountain range in the Tell Atlas, situated in the vicinity of Constantine. Its ecosystem is extremely heterogeneous in terms of environment, with characteristic grassland, meadows, low shrubland consisting of Quercus ilex and low shrubland consisting of Calicotome and Ampelodesmos ("diss grass"); a peculiarity is the presence of temporary ponds. The ponds are host to extremely diverse vegetation, the majority of which is helophyte. Of the 110 species typical of Mediterranean temporary ponds 13 species, 5 of which are extremely rare (Cardamine parviflora L., Oldenlandia capensis L. F., Pulicaria sicula (L.) Moris, Myosotis sicula (Guss.) Batt. and Solenopsis laurentia (L.) C. Presl.), are found in the site we studied. Species considered as rare, with a range confined to Numidia (Btaomus umbellatus L. and Oldenlandia capensis L. F.) and the area around Algiers (Butomus umbellatus L.), are found in the ponds.
90 phytosociological plots were made in the ponds, from which 129 species were identified. Using the technique of correspondence analysis, the plots were able to be divided into six groups. The plots may be defined as class Agrostietea stoloniferae Th. Mull. et Gors 1969, order Eleocharetalia palustris de Fouc. 1984 and alliance Oenanthion fistulosae de Fouc. 1984. They contain a single association, Eleocharo-Oenanthetum vitgatae nov. ass. which is a vicariant of the French association Eleocharo-Oenanthelum fistulosae. Such mesoeutrophic small-helophyte formations yield numerous sub-associations on Djebel Megriss. The formations are trampled down by the repeated passage of herds and are affected by cultivation and pollution.

27- TRENDS IN BREAST CANCER INCIDENCE IN SETIF, ALGERIA BETWEEN 1987 AND 2007

By: Zoubida, Z.; Djemal, A.; Aicha, D. D.; et al.
JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH Volume: 65 Supplement: 1 Pages: A405-A405 Published: AUG 2011

28-TRENDS IN PROSTATE CANCER INCIDENCE IN SETIF, ALGERIA BETWEEN 1987 AND 2007

By: Zoubida, Z.; Djemal, A.; Aicha, D. D.; et al.
JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH Volume: 65 Supplement: 1 Pages: A404-A405 Published: AUG 2011

29-LUNG CANCER INCIDENCE AND TRENDS IN SETIF, ALGERIA BETWEEN 1986 AND 2008

By: Zoubida, Z.; Abdehak, M.; Slimane, L.; et al.
JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH Volume: 65 Supplement: 1 Pages: A405-A405 Published: AUG 2011

30- BREAST CANCER IN SETIF, ALGERIA: EPIDEMIOLOGY AND TRENDS

By: Zoubida, Z.; Abdellouche, D.; Djazia, A. Djema; et al.
Conference: Conference on Improving Care and Knowledge through Translational Research (IMPAKT) Breast Cancer Location: Brussels, BELGIUM Date: MAY 05-07, 2011
ANNALS OF ONCOLOGY Volume: 22 Supplement: 2 Pages: 40-40 Published: MAY 2011

31- The radioactivity measurements in soils and fertilizers using gamma spectrometry technique

By: Boukhenfouf, Wassila; Boucenna, Ahmed
JOURNAL OF ENVIRONMENTAL RADIOACTIVITY Volume: 102 Issue: 4 Pages: 336-339 Published: APR 2011

Because of their mineral content, soils are naturally radioactive and one of the sources of radioactivity other than those of natural origin is mainly due to the extensive use of fertilizers. The main aim of this paper is to evaluate the fluxes of natural radionuclides in local production of phosphate fertilizers to determine the content of radioactivity in several commercial fertilizers produced in Algeria and to estimate their radiological impact in a cultivated soil even for the long-term exposure due to their application.
For these purposes, virgin and fertilized soils were collected from outlying Setif region in Algeria and from phosphate fertilizers used in this area.
Gamma spectrometry was exploited to determine activity concentration due to naturally occurring (226)Ra, (232)Th and (40)K in five types of samples (two different sorts of

fertilizers, virgin and fertilized soils and well water used for irrigation) taken from Setif's areas.
The results show that these radionuclides were present in an average concentration of 134.7 +/- 24.1, 131.8 +/- 16.7, 11644 +/- 550 Bq/kg for the first fertilizer NPK and 190.3 +/- 30, 117.2 +/- 103, 5312 +/- 249 Bq/kg for the second fertilizer (NPKs). For the virgin and the fertilized soils, the corresponding values were respectively 47.01 +/- 7.3, 33 +/- 7, 329.4 +/- 19.7 Bq/kg and 53.2 +/- 10.6, 50.0 +/- 7, 311.4 +/- 18.7 Bq/kg. For well water, the values were 1.93 and 0.12 Bq/kg; however the third value was below the Minimum Detectable Activity (MDA).
The radium equivalent activity (Raeq) and the representative level index I(gamma r) for all samples were also calculated. The data were discussed and compared with those given in the literature.

32- INCIDENCE OF LUNG CANCER INCREASING IN SETIF, ALGERIA, 1986-2006

By: Zoubida, Z. Z.; Dib, A.; Abdellouche, D.; et al.
LUNG CANCER Volume: 71 Supplement: 2 Pages: S30-S30 Published: FEB 2011

33-Dimensioning and realization of a low power air plasma arc generator (2 kW)

By: Halis, Abderrahmane; Pateyron, Bernard; El Ganaoui, Mohammed
MECANIQUE & INDUSTRIES Volume: 12 Issue: 4 Pages: 325-330 Published: 2011

Dimensioning and realization of a low power air plasma arc generator (2 kW). An air plasma arc torch less than 2 kW was designed and constructed in the research laboratory QUERE of Setif University (Algeria) to meet all the needs that require the use of a plasma torch: welding, cutting, reloading metal surface treatment, pilot incineration burner, heating gas, etc. It is also a model of torches with the same concept but higher powers. It will also allow studying concentric electrodes plasma torches and hollow electrodes in many original configurations. A description of this generator plasma is presented with the results of the first experimental tests at reduced power. Heat and mass transfer are also identified to be quantified by using a numerical simulation approach.

34- Colonial Violence in Algeria and the Distorted Logic of State Retribution: The Setif Uprising of 1945

By: Thomas, Martin
JOURNAL OF MILITARY HISTORY Volume: 75 Issue: 1 Pages: 125-157 Published: JAN 2011

This article addresses the reasons behind the rapid escalation of French security force and vigilante violence employed to suppress the Setif uprising that broke out in colonial Algeria on VE-Day, 8 May 1945. Recourse to overwhelming military force to put down the uprising illustrated French capacity to terrorize Algerian civilians, but it should not conceal the structural weakness of the colonial state. Political initiative passed inexorably to France's anticolonial opponents, precisely the outcome that state coercion was intended to avoid.

Algeria's nationalists may have lost the battle in May 1945, but, thanks to colonial authorities' failings, they were already winning the war.

35- Evaluation of the toxicity of cypermethrin pesticide on organs weight loss and some biochemical and histological parameters.

By: Dahamna, S; Belguet, A; Bouamra, D; et al.
Communications in agricultural and applied biological sciences Volume: 76 Issue: 4 Pages: 915-21 Published: 2011

An increase in global food demand has resulted in a significant increase in the use of pesticides in agriculture. Synthetic pyrethroid pesticides account for over 30% of the global pesticide use; Pyrethroid pesticides were used preferably over organochlorines and organophosphates due to their high effectiveness, low toxicity to non-target organisms and easy biodegrability. It has widespread applications in agriculture through the world and as well in Algeria. Cypermethrin is one of the most insecticidal pyrethroids widely used in agriculture regions of Setif. to control wide range of insect pests in a variety of crops. The aim of this study is to investigate the effects of cypermethrin (Cyper-Ac 271 g/l from the active substance of the cypermethrin) on hematological, biochemical parameters, body weight loss, and histopathological study of some organs. Male mice weighing 30-40g were used, separated in 5 groups, n=6, two groups controls given vehicle (oil vegetable) and three experimental groups (Cypermetherin and vegetable oil). The animals were gavaged by 1/5 LD50 (LD50 = 485 mg/kg b/w) for 2 and 4 weeks respectively, and with 1/20 LD50 for 12 weeks, then the animals sacrificed at the end of the experiment.. Blood was collected. Enzyme activities were assayed in the plasma samples obtained. Glutamate oxaloacetate transaminase (GOT), Glutamate pyruvate transaminase (GPT), Alkaline phosphatase (ALPH) and Glucose. Red blood cells, (RBC), and white blood cells (WBC) were calculated too. The samples of liver and kidney were processed for histology. The results indicated a significant increase in transaminases GOT, GPT, and AlP. The decrease in Hb, RBC and WBC which are related to the immunity, this is probably due to cell lyses explain the effect of Cypermetherin on erythropoeisis. cypermethrin treatment exhibited severe histopathological changes, especially in the liver and kideney accompanied by weight loss of some organs. We conclude that cypermethrin induces oxidative stress and modifies biochemical parameters and histological aspects of liver and kidney.

36- DETECTION OF Hb SETIF IN NORTH IRAN AND THE QUESTION OF ITS ORIGIN: IRANIAN OR MULTIETHNIC?

By: Mahdavi, Mohammad Reza; Karimi, Mehran; Yavarian, Majid; et al.
HEMOGLOBIN Volume: 35 Issue: 2 Pages: 152-156 Published: 2011

Hb Setif is a rare type of hemoglobinopathy resulting from an aspartic acid to tyrosine substitution at codon 94 (GAC> TAC) of the alpha 2-globin gene. In manual and automated hemoglobin (Hb) electrophoresis examination of the case, an unusual band was detected and the result of subsequent capillary electrophoresis suggested that to be Hb Setif. Carrying out polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) and DNA sequencing, a typical Hb Setif mutation (GAC> TAC) was identified. The haplotype of the a cluster was + + - M PZ + - - - -. This is the first report of such a hemoglobinopathy in North

Iran. Various reports of such Hb variants in Iran and countries in the Mediterranean region and North Africa, suggest that the mutation may have occurred around 6,000 years ago, prior to colonization of Aryans on the Iranian plateau.

37- The Effect of Water Vapor on the Performance of Solar Cells

By: Guechi, A.; Chegaar, M.; Merabet, A.
Edited by: Hamieh, T
Conference: 7th International Conference on Material Sciences Location: Beirut, LEBANON Date: MAY 20-22, 2010
SEVENTH INTERNATIONAL CONFERENCE ON MATERIAL SCIENCES Book Series: Physics Procedia Volume: 21 Published: 2011

The objective of this study is to determine the effect of variations in global spectral distribution due to the variation of water vapor on the performance of two types of solar cells, nanocrystalline silicon (nc-Si:H) and cadmium telluride (CdTe) using the spectral irradiance model for clear skies SMARTS2 over a typical rural environment in Setif. Water vapor can reduce the amount of sunlight reaching a solar cell, and thereby cause a reduction in the electrical current, fill factor, open circuit voltage. The results indicate that water vapor increase in the atmosphere reduces the short circuit current of the CdTe cell by 3.15% while this reduction is about 2.38% for the (nc-Si:H) cell. The efficiency for both cells increases with increasing water vapor. These findings should be taken into consideration by solar cell engineers for better sizing of these types of solar cells. (C) 2010 Published by Elsevier B. V. Selection and/or peer-review under responsibility of the Organizer.

38- The incidence of alpha-thalassemia in Setif, Algeria

By: Ozturk, Aysenur; Houcher, Bakhouche; Akar, Nejat
TURKISH JOURNAL OF HEMATOLOGY Volume: 27 Issue: 4 Pages: 322-323 Published: DEC 2010

39- Association of Methylenetetrahydrofolate Reductase C677T and Cystathionine beta-Synthase Polymorphisms in Cardiovascular Disease in the Algerian Population

By: Houcher, Bakhouche; Houcher, Zahira; Touabti, Abderrezak; et al.
GENETIC TESTING AND MOLECULAR BIOMARKERS Volume: 14 Issue: 6 Pages: 775-780 Published: DEC 2010

Aim: Polymorphisms in the methylenetetrahydrofolate reductase (MTHFR) and cystathionine beta-synthase (CBS) genes, involved in the intracellular metabolism of homcysteine, can result in hyperhomocysteinemia. The objective of this study was to evaluate prevalence estimates of MTHFR C677T and the CBS insertion of 68-bp (844ins68) polymorphisms among individuals with cardiovascular disease (CVD). Methods: In total, 131 patients (61 men and 70 women) were hospitalized in the Cardiology Department in CHU of Setif, Algeria. The control group included 147 apparently healthy adults (82 women and 65 men). The genetic analysis of the MTHFR C677T polymorphism was performed by real-time polymerase chain reaction on a Light Cycler; the CBS genotype was analyzed by polymerase chain reaction in a thermal cycler. Results: The frequency of the TT genotype was 16.1% in

the patient group and 14.3% in the control group. The CT genotype constituted 43.5% and 40.1% in the patient group and the control group, respectively. There was no significant difference in the occurrence of the TT genotype between the studied groups. The frequency of C677T/MTHFR in male and female patients was 16.4% and 15.7% for the TT genotype, respectively. There was no significant difference in T allele frequencies between sexes. However, the frequency of C677T homozygotes in the patients was higher in men with CVD than that in corresponding control subjects (40.2% vs. 29.2%), but the difference was not statistically significant. The coexistence of the MTHFR 677TT genotype and the common CBS 844ins68 variant was lower among patients. Conclusions: The MTHFR C677T and CBS 844ins68 variants tested in this study, individually or combined, are not associated with CVD in the Algerian population.

40- An evaluation of the SPIFE (R) 3000 semi-automated gel electrophoresis system for the identification of hemoglobin variants and comparison of relative electrophoretic mobilities with manual gel electrophoresis methods

By: Hoyer, J. D.; Markley, K. M.; Savedra, M. E.; et al.
INTERNATIONAL JOURNAL OF LABORATORY HEMATOLOGY Volume: 32 Issue: 3 Pages: 307-311 Published: JUN 2010

P>Laboratory identification of hemoglobin (Hb) variants can involve multiple techniques. The use of semi-automated instruments that perform gel electrophoresis and staining, such as the SPIFE (R) 3000 electrophoresis system, can greatly reduce the labor required for these commonly used techniques. We performed a comparison of the method involved in SPIFE (R) 3000 system with those of manual gel electrophoresis. A total of 22 540 samples were analyzed using the SPIFE (R) 3000, and compared with mobilities on cellulose acetate and citrate agar gels using standard manual methods. The results were compared using relative electrophoretic mobilities (REM). Of the 191 Hb variants identified, only 13 had REM that differed from manual electrophoresis when analyzed using the SPIFE (R) 3000 system. One variant (Hb O-Indonesia) showed different mobility on both acid and alkaline gels, two (Hb E, Hb Sunshine Seth) on alkaline gel only, and 10 (Hbs N-Baltimore, N-Seattle, O-Arab, Shelby, Summer Hill, Tak, Hasharon, M-Iwate, Q-Iran, and Setif) on acid gels only. The SPIFE (R) 3000 semi-automated electrophoresis system produces similar results when compared with those of standard manual electrophoresis methods.

41- Neurobrucellose: 5 observations a l'hopital de Setif, Algerie.

[Neurobrucellosis: description of 5 cases in Setif Hospital, Algeria].
By: Guenifi, W; Rais, M; Gasmi, A; et al.
Medecine tropicale : revue du Corps de sante colonial Volume: 70 Issue: 3 Pages: 309-10 Published: 2010-Jun

PURPOSE: Brucellosis is a major ubiquitous zoonosis transmitted from livestock to humans. It is a public health problem in developing countries. Between 2003 and 2005, the incidence of brucellosis in Algeria showed a 181% increase from 8.79 to 24.71. Between 2005 and 2007, the incidence remained almost stable. The estimated mean incidence of neurobrucellosis is 4% with clinical manifestations that are variable and often multi-focal in

the same patient. The purpose of this retrospective study is to describe 5 cases of neurobrucellosis managed in our department between 2001 and 2007.
MATERIALS AND METHODS: It was a retrospective study 5 patients. There were 2 women and 3 men with a mean age of 20 years.
RESULTS: Neurological involvement occurred immediately in all patients. Clinical manifestations were variable with meningoencephalitis in 2, meningoencephalitis associated with a polyperipheral neuropathy in 1, meningomyeloradiculitis in 1, and acute diffuse encephalitis in 1. Definitive diagnosis was based on isolation of bacteria from a blood specimen in 1 case and detection of antibodies in blood and cerebrospinal fluid in 4. All patients were treated using a combination of 3 of the following 4 drugs: doxycycline, rifampicine, cotrimoxazole and aminoside. Treatment was associated with corticosteroid therapy in 3 cases.
DISCUSSION: Neurobrucellosis can affect any part of the nervous system and can mimic any neurological disease. Early detection and treatment is the only predictor of favorable outcome of neurobrucellosis, but there is no standardized treatment protocol. Neurobrucellosis should be included in differential diagnosis for any patient presenting central or peripheral neurological manifestations especially in endemic zones.

42- HIV/AIDS epidemic features and trends in setif city (Algeria) from 1986 to 2009

By: Ouyahia, Amel; Rais, Mounira; Gasmi, Abdelkader; et al.
RETROVIROLOGY Volume: 7 Supplement: 1 Pages: 46-46 Article Number: P99 Published: MAY 11 2010

43- COASTAL PALAEOENVIRONMENTS DURING THE LAST 8000 YEARS ON THE LION GULF WESTERN SIDE: THE SAND BAR OF THE THAU COASTAL LAGOON (SETIF CORING, SETE, HERAULT)

By: Court-Picon, Mona; Vella, Claude; Chabal, Lucie; et al.
Conference: Symposium on Biodiversity in Quaternary Climate, Environment and Populations Location: Univ Paul Valery, Montpellier, FRANCE Date: FEB, 2008 Sponsor(s): AFEQ
QUATERNAIRE Volume: 21 Issue: 1 Pages: 43-60 Published: MAR 2010

COASTAL PALAEOENVIRONMENTS DURING THE LAST 8000 YEARS ON THE LION GULF WESTERN SIDE: THE SAND BAR OF THE THAU COASTAL LAGOON (SETIF CORING, SETE, HERAULT) The present active lagoon system of the Than lagoon has begun shortly alter 7050 BP (5580-5255 cal BC). However, the setting up of the coastal system coupling sand bar and coastal lagoon took place probably before. This system belongs to a morphosystem dominated by the waves within a sedimentary context poor in sedimentary sources. The present erosion of this littoral echoes back to an ancient dynamics showing a backing of the sand bar joining the Mount Saint-Clair to the Pioch (Agde volcano) shortly after 6500 BP (5068-4660 cal BC). The pollen analysis of sequence SETIF reports this dynamic instability and allows its to outline the coastal vegetation evolution. The pollen sequence shows both the global warming and the palaeoecological and palaeogeographical changes that are characteristic of this coastal area. The local thermophilous feature of the life conditions linked to the Mount Saint-Clair, the perception of the offshore bar arrival, the fluctuations of the unsteady environments (sand bar, lagoon banks) and the different stages of human activities recorded since the ancient Neolithic are the main contributions of the SETIF

palynological results. The observations related to the local relative sea level are consistent with the regional data. but show some peculiarities such as the perched characteristic of the salt water table forming the Than coastal palaeo-lagoon until 6540 40 BP (5068-4660 BC).

44- New data tells us more about cancer incidence in North Africa

By: Zanetti, Roberto; Tazi, Mohammed Adnane; Rosso, Stefano
EUROPEAN JOURNAL OF CANCER Volume: 46 Issue: 3 Pages: 462-466 Published: FEB 2010

Over the last few years, Cancer Registries in North Africa (Morocco, Algeria, Tunisia, Libya, Egypt) increased in number from one to nine, and now covers 13% of the total regional population. Their data can be considered of good or acceptable quality, according to available indicators. The pattern of risk shown by these Registries is quite unique. The total cancer burden in North Africa countries is between one third and one half of what is observed in Europe. The overall incidence rate in men (world age standardised, per 100,000) ranges from 86.3 in Setif, Algeria, to 156.1 in Garbiah, Egypt. The range is similar in women: from 80.3 in Setif to 164.0 in Algier, both Algeria. The case mix and the level of rates are quite homogeneous in the countries considered. The most frequent cancers are the same as in Europe (Lung, Breast, Prostate). This pattern completely differs from that of Central and Southern Africa countries, where infection-related cancers are predominant. The well-known excess risk for nasopharyngeal carcinoma in this area is confirmed, with rates reaching the level of 5.4 in men and 1.9 in women, which is 10 times higher than in Europe.

45- What are we learning from the new data on cancer incidence in North Africa

By: Sobrato, Irene; Busso, Paola; Zanetti, Roberto
EPIDEMIOLOGIA & PREVENZIONE Volume: 34 Issue: 1-2 Pages: 23-26 Published: JAN-APR 2010

Over a period of a few years, Cancer registries in North Africa (Morocco, Algeria, Tunisia, Libya, Egypt) increased in number from one to seven. Currently they serve 9.7% of the total regional population.
The pattern of risk presented by their data (which appear to be good enough, according to the available indicators) is unique. The total cancer burden in different North Africa countries is between one fourth and one half (on average one third) of the corresponding risk in Europe. The overall rate, age standardized on world population, ranges in men from 94.0/100,000 in Setif Algeria, to 162.9/100,000 in Garbiah, Egypt. Similar is the range of the risk between countries in women (from 84.7 and 164.0/100,000). The case mixing and the level of the site specific rates are quite homogeneous between the considered countries. The most frequent cancers are those observed in Europe (lung, breast, colon, prostate). This pattern completely differs from that of black Africa countries, where infection-related cancers predominate.
The clinically well known excess risk for nasopharyngeal carcinoma in Maghrebi countries is confirmed and quantified by the presented data (with rates as high as 5.4/100,000 in men and 1.9/100,000 in women, ten times higher than in Europe) (Epidemiol Prev 2010; 34(1-2): 23-26)

46- Abnormal hemoglobins among Kurdish population of Western Iran: hematological and molecular features

By: Rahimi, Zohreh; Muniz, Adriana; Mozafari, Hadi
MOLECULAR BIOLOGY REPORTS Volume: 37 Issue: 1 Pages: 51-57 Published: JAN 2010

The type and frequency of structural hemoglobin variants and their hematological and molecular characteristics were identified using PCR-RFLP and sequencing techniques in 66 individuals from 33 unrelated families who referred to the two clinics of Kermanshah University of Medical Sciences from 2005 to 2006. We detected 28 subjects carrier for Hb D-Punjab (42.4%), 21 individuals carrier of Hb Q-Iran (31.8%), 12 subjects heterozygous for Hb Setif (18.2%), four cases with sickle cell disease (6.1%), and one case with Hb C (1.5%). All beta(S) genes (4 genes) were linked to the Benin haplotype with negative Taq I site 5' to gamma(A) gene. All beta(D)-Punjab genes (29 genes) were in linkage disequilibrium with haplotype I. The only beta(C) chromosome was linked to haplotype II. Both beta(0)-thalassemia chromosomes with CD15 (G -> A) mutation had haplotype background I. Three beta(+)-thalassemia chromosomes with IVSI.110 (G -> A) mutation were associated with haplotype I [+ - - - - + +]. In turn, the three beta-thalassemia chromosomes with IVS II.1 G -> A mutation were associated with atypical haplotype [- + + + + + -]. Hematological indices of carriers of Hb D-Punjab, Hb Q-Iran and Hb Setif were lower than those reported for normal individuals. For the first time, we have reported the haplotype background of beta(S) gene among Kurdish population of Iran. Our results revealed that Hb D-Punjab is the most prevalent beta-globin chain structural variant in this area and that is followed in frequency by an alpha-chain variant, Hb Q-Iran. The result of present study is useful for clinical management and the establishment of screening programmes in Western Iran.