

Report and Opinion

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1	<p>The Intelligent Hybrid M.F.A. Alrazak Email: theintelligenthybrid@yahoo.co.uk</p> <p>Abstract: The origin of the human species has been a constant research of both science and religions for countless years, with both sides offering their own unique perspectives. However a new theory has come into light which presents itself from both science and religious facts, with each providing evidence to aid the other. This distinguishes the theory from many others, as it removes the common assumption that science and religion are in constant opposition regarding human origin and evolution. Human Beings are an Intelligent Hybrid species, an offspring of reproduction between Mankind (who in this case descendants of Adam) and Humankind (who in this case descendants of Homo sapiens).” The recent discovery of the IDA fossil in Germany plans is another evidence and an important part in the scientific chain of events, as its presence implies that it most likely the renowned “missing link”. Knowledge gathered and combined from such figures as the Greek philosopher <u>Empedocles</u>, the <u>Arabic</u> biologist <u>Al-Jahiz</u> and <u>the Muslim philosopher Ibn Miskawayh</u> and the Chinese philosopher <u>Zhuangzi</u> and others was the core of any evolution idea that emerge later and tried to explained the origin, the adaptation, the existence of the species including mankind and human species. The idea of evolution and <u>transmutation of species</u> by <u>Al-Jahiz</u>, <u>Ibn Miskawayh's al-Fawz al-Asghar</u> and the <u>Brethren of Purity's Encyclopedia of the Brethren of Purity (The Epistles of Ikhwan al-Safa)</u> developed theories on evolution was most likely studied by Charles Darwin, Alfred Wallace and many others. [Report and Opinion. 2010;2(1):1-5]. (ISSN: 1553-9873).</p>	<p>1-5 Full Text</p>
2	<p>The Macrobenthos And The Fishes Of A Tropical Estuarine Creek In Lagos, South-Western Nigeria Babatunde E. Emmanuel* and Christiana A. Ogunwenmo Department of Marine Sciences, Faculty of Science, University of Lagos, Akoka, Lagos, Nigeria monetemi@yahoo.com</p> <p>Abstract: The physico – chemical parameters, macrobenthos and the fishes of Abule Agege creek were examined between January and July 2004. The creek exhibited the usual alkaline properties with pH values ranging between 7.30 and 9.20. The physical and chemical and sediment parameters exhibited known ranges and regimes for a tropical estuarine system. Five species belonging to the phyla mollusca and annelida were recorded. The species richness or evenness for the macrobenthos was highest in July (0.73) and the least value was recorded in April (0.38). Furthermore, Margalef’s species richness was highest in January (1.12) and lowest in May and June (0.54). Likewise, the species diversity was highest in January (1.11) and lowest in April (0.61). The most abundant fin fish was <i>Sarotherodon melanotheron</i> (70.34%) and the least occurring were <i>Clarias gariepinus</i>, <i>Parachanna obscura</i>, <i>Citharus linguatula</i> and <i>Liza falcipinnus</i> which all recorded 0.13% each. The most abundant shell fish was <i>Callinectes amnicola</i> (4.82 %) and the lowest occurred was <i>Penaeus notialis</i> (1.27%) of the overall catch. The effect of anthropogenic induced stressors had resulted in an unstable physically controlled environment characterized by a low density of species for both macrobenthos and fish species. [Report and Opinion. 2010;2(1):6-13]. (ISSN: 1553-9873).</p>	<p>6-13 Full Text</p>

3	<p><u>Biomonitoring of indicator and emerging pathogens in piped drinking water in Ludhiana</u> P. Sahota and G. Pandove Department of Microbiology, Punjab Agricultural University, Ludhiana-141 004, India Email: psahota5@yahoo.com and gpandoveg@yahoo.co.in</p> <p>Abstract: The coliform group of bacteria has remained the corner stone of national drinking water regulation. Epidemiological surveillance of 110 samples in Ludhiana city included treated source water, treated piped water and treated piped filtered water. A total of 73 (66%) of samples were non-potable. The piped water tested potable by conventional indicator technique were positive for emerging pathogens so researchers has focused on safe drinking water regulation amendment. The emerging and environmental contaminants isolates were <i>Aeromonas hydrophila</i>, <i>Yersinia enterocolitica</i> <i>Proteus mirabilis</i> and <i>Pseudomonas</i>. These contaminants capable of growth in low nutrient condition, (similar to water distribution system) should be proposed as indicators of distribution system integrity. The occurrence is suggestive of inadequate chlorination and potential biofilm formation in pipes. [Report and Opinion. 2010;2(1):14-21]. (ISSN: 1553-9873).</p>	14-21 Full Text
4	<p><u>Dietary Methionine Requirement Of <i>C. Gariepinus</i> Fingerlings And Its Effect On The Growth And Body Composition</u> Ovie S. O. and Eze S. National Institute for Freshwater Fisheries Research, P.M.B.6006 New Bussa Nigeria Stella_ovie@yahoo.com; 08054504166</p> <p>Abstract: The experiment was conducted to determine the methionine requirement for <i>Clarias gariepinus</i> and its effect on growth and body composition. Hatchery bred fingerlings of <i>C. gariepinus</i> (2.97±.036g) were stocked in eighteen 54L glass aquaria. Six diets (40% crude protein) consisting of a basal diet containing 1.81g methionine/100g protein from the ingredients soyabean and guinea corn was formulated, a reference diet (3.12g methionine/ 100g protein) and others having graded levels of crystalline methionine (2.87, 2.97, 3.00 and 3.07g/100g protein). Each diet was fed to three aquaria twice daily (8.00 – 18.00hrs) for 56 days. The mean weight gain, specific growth rate, food conversion efficiency and protein efficiency ratio were significantly influenced by the level of methionine (P<0.05). Second order polynomial regression analysis showed that the requirement of <i>C. gariepinus</i> for methionine is 2.97g/100g protein. Carcass protein showed an increase above that of the initial fish stocked before feeding commenced. The percentage lipid also increased except for the fish fed 3.07g methionine/ 100g protein. [Report and Opinion. 2010;2(1):22-27]. (ISSN: 1553-9873).</p>	22-27 Full Text
5	[Report and Opinion 2010;2(1):28-32]. (ISSN: 1553-9873).	28-32 Full Text
6	<p><u>Performance and Egg Quality Characteristics of Layers Fed Diets Containing Combinations of Brewers Dried Grains, Jack Bean and Cassava Root Meal</u> Martins Chukwudi Uchegbu¹, Udo Herbert², Ifeanyi Princewill Ogbuewu^{1*}, Chibuzo Hope Nwaodu¹, Babington Onyemaechi Esonu¹, Adiva Boniface Ikeli Udedibie¹ 1. Department of Animal Science and Technology, Federal University of Technology, P.M.B.1526, Owerri, Imo State - Nigeria. 2. Department of Animal Production and Management, College of Animal Science and Animal Production, Michael Okpara University of Agriculture, Umudike, Abia State - Nigeria. Princiano2001@yahoo.com</p> <p>Abstract: The performance, egg quality characteristics and feed cost of layers fed combinations of maize/sorghum-based brewers dried grains (MSBDG), jack bean (JB) and cassava root meal (CRM) in replacement of maize. Four treatment diets: LD₁, LD₂, LD₃ and LD₄ were formulated such that they contained maize, MSBDG, JB and CRM in the following proportions: 50, 0, 0, 0%; 0, 10, 15, 25%; 0, 10, 20, 20% and 0, 10, 25, 15% respectively. Ninety six Shika brown layers were divided into 4 treatment groups of 24 birds each and each group subdivided into 3 replicates of 8 birds. The birds were randomly assigned to the diets in a completely randomized design experiment. Nine eggs were selected from each treatment group on the last day of the 4th, 8th, 12th and 16th week for egg quality analysis. The egg weight of LD₂ birds was significantly (p<0.05) higher than that of LD₃ birds. The birds on LD₁ had superior feed conversion ratio value which was significantly (p<0.05) lower than those of LD₂ and LD₃ birds. The Haugh unit for LD₁ and LD₂ birds were significantly (p<0.05) higher than that of LD₃. The shell thickness value for LD₁ birds differed significantly</p>	33-37 Full Text

	<p>($p < 0.05$) with that of LD₄ birds. All the other parameters measured were similar among the groups. In terms of cost of feed required to produce 1kg egg, MSBDG/JP/CRM diets were cheaper, being 6.27%, 5.59% and 14.42% lower than the cost of feed required to produce 1kg egg for LD₁ diet. [Report and Opinion. 2010;2(1):33-37]. (ISSN: 1553-9873).</p>	
7	<p><u>Autoregressive model of Sweet orange (<i>Citrus sciensis</i> L. osbeck) productivity in Ibadan, Nigeria</u> *Oludare, O.Ariyo¹, Taofeek.O.Dauda² Abayomi, A.Olaniyan¹ and Bernard, O. Okafor¹ 1. National Horticultural Research Institute, Citrus Programme, PMB, 5432, Jericho Idi Ishin, Ibadan, Nigeria. 2. Institute of Agricultural Research and Training, Obafemi Awolowo University PMB 5029, Moor Plantation. Ibadan, Nigeria. *.Corresponding Author E-mail ariyosam@yahoo.com; Tel:+234-08035206932.</p> <p>Abstract: Autoregressive model of citrus productivity is important in view of the need to strike a balance between its meeting consumers' demand as well as justifying farmers' input. This study was carried out to evaluate citrus productivity through an autoregressive model using data from the citrus orchard established by the National Horticultural Research Institute, Ibadan in 1977. The citrus orchard covered 20ha of alfisoi, composes of twelve varieties of sweet oranges which represents the blocks while the annuals yield represents the treatments. The results of the analysis of variance showed that the annual yields of citrus regardless of the variety are significantly different from one another because the F- statistics 1578120 returned for the year is greater than $F_{(23, 576; 0.01)} = 2.26$. Also, there exist significant difference in the mean yield of the variety irrespective of the year because, the 369479 returned for the variety is greater than $F_{(11, 576; 0.01)} = 3.60$. The interaction of the year by variety of the yield of citrus clearly indicated a significantly different result since the mean (9095.06) returned for the interaction was greater than $F_{(253, 576; 0.01)} = 1.00$. Yield extension rate (YER) of the citrus yield does not follow a regular pattern and it differs across the different period with no two periods (x_{ij}) having the same mean YER. The auto regression analysis of the citrus yield gave a linear relationship between the current yield and preceding year's yield of citrus with a very high coefficient of determination (0.993) and a very low residual ($\sum Y_r = 0.0022$).. [Report and Opinion. 2010;2(1):38-42]. (ISSN: 1553-9873).</p>	<p>38-42 Full Text</p>
8	<p><u>Effect of Mass of Flowing Oil on Its Erosional Velocity and Corrosion in Pipeline</u> Chukwuka Ikechukwu Nwoye Department of Materials and Metallurgical Engineering, Federal University of Technology, Owerri, Nigeria. chikeyn@yahoo.com</p> <p>Abstract: Studies carried out to investigate the effect of mass of flowing oil on its erosional velocity and corrosion in pipeline. The result of the investigation reveals that increase in both volume of oil flow and internal radius of pipeline increases the erosional velocity and invariably enhance erosion corrosion due to mechanical wears resulting from relative movement between the fluid and wall of the pipe. It was discovered that increase in mass of flowing oil slows down the erosional velocity due to the gliding effect of oil particles on each other, hence reducing the tendency for erosion corrosion. [Report and Opinion. 2010;2(1):43-45]. (ISSN: 1553-9873).</p>	<p>43-45 Full Text</p>
9	<p><u>Oral Vaccination of Nile Tilapia (<i>Oreochromis niloticus</i>) Against Motile Aeromonas Septicaemia</u> Noor El Deen Ahmed Ismail⁽¹⁾, Nagwa Sad. Atta I⁽²⁾ and Abd E Aziz, Mohamed .Ahmed⁽³⁾ ⁽¹⁾ Dept. of Hydrobiology, National Research Centre, N.R.C). ⁽²⁾ Dept. of Microbiology, N.R.C. ⁽³⁾ Dept. of Fish Diseases, Fac.of Vet Med. Cairo. dr_ahmednoor2002@yahoo.com</p> <p>Abstract: The present study was planned for preparation of formalin inactivated wet-packed whole cells <i>Aeromonas hydrophila</i> bacterin for oral vaccination. The humeral antibody response of vaccinated Nile tilapia (<i>Oreochromis niloticus</i> (<i>O. niloticus</i>)) was determined by micro-agglutination test. Moreover efficacy of the prepared bacterin against infection with <i>Aeromonas hydrophila</i> was detection and calculated as a relative level of protection. Nile tilapia (<i>O. niloticus</i>) immunized orally with formalin-inactivated <i>Aeromonas hydrophila</i> .wet-packed while cells had low level of antibody titer reached 2 and 3 by log₂ at first and fourth week post-immunization respectively while Nile tilapia (<i>O. niloticus</i>) fed on minced meat without vaccine had antibody titer reached 1 by log₂ throughout the experimental period . The relative level of protection among Nile tilapia (<i>O. niloticus</i>) immunized orally were 86.8. [Report and Opinion. 2010;2(1):46-51]. (ISSN:</p>	<p>46-51 Full Text</p>

	1553-9873).	
10	<p><u>Technical Efficiency and Cost of Production among Gum Arabic Farmers in Jigawa State, Nigeria</u> Giroh, D.Y. Waizah, Y, and H.Y.Umar Rubber Research Institute of Nigeria, PMB 1049, Benin City, Nigeria. girohdengle@yahoo.com , zyer338@yahoo.com , uhaliru@yahoo.com</p> <p>Abstract: The paper investigated the cost of gum arabic production with a view to understanding the functional relationship between cost of production and technical efficiency of gum arabic farmers as well as some socio- economic variables. The study covered some selected local government areas of Jigawa State. Stochastic and cost functions were fitted to the data. The results showed that the variance parameters (sigma squared (σ^2) and gamma(γ) are statistically different from zero at 1 percent. The coefficients for farm size and hired labour are statistically significant. Farmers were efficient in the use of resources with greater reduction in cost which can be achieved through efficiency improvement. It is therefore recommended that improvements in the efficiency levels of farmers by training them at minimal cost would sustain gum arabic production. [Report and Opinion. 2010;2(1):52-57]. (ISSN: 1553-9873).</p>	52-57 Full Text
11	<p><u>Effects Of Supplementing Fish Meal With Garden Snail (<i>Limicolaria Spp.</i>) In <i>Clarias gariepinus</i> Diets</u> Ovie SO¹, Adejayan AB¹ National Institute For Freshwater Fisheries Research, P. M. B. 6006 New Bussa Niger State, Nigeria stella_ovie@yahoo.com</p> <p>Abstract: Fingerling <i>C. gariepinus</i> of mean weight 3.0g were stocked 20 fish per through in a mini flow-through system consisting of fifteen troughs and fed diets containing 0%, 25%, 50%, 75%, 100% of garden snails as replacement for fish meal for 42 days. Each treatment was replicated thrice. It was observed that garden snails were better utilized than fish meal as the fish fed 25% garden snail had a superior growth to the control. There was no significant difference (P.0>05) in the mean weight gain, food conversion ratio, specific growth rate, gross feed conversion efficiency and condition factor of fish fed the varying levels of garden snail. The fish fed 75% garden snail had a lower growth as a result of mortality. It is suggested that 25% garden snails can be efficiently utilized in <i>C. gariepinus</i> diets. This study also showed that the protein quality of garden snails compares well with that of fish meal. [Report and Opinion. 2010;2(1):58-62]. (ISSN: 1553-9873).</p>	58-62 Full Text
12	<p><u>SOCIO-ECONOMIC VIABILITY OF CATFISH, <i>CLARIAS GARIEPINUS</i> PRODUCTION IN LAGOS, NIGERIA</u> *Emmanuel, B.E. and Omotoriogun, W.M. Department of Marine Sciences, Faculty of Science, University of Lagos, Akoka – Yaba, Lagos. monetemi@yahoo.com</p> <p>ABSTRACT: The socio-economic viability of catfish, <i>Clarias gariepinus</i> culture was investigated in some farms in Lagos State between October, 2006 and March, 2007. Two of the farms operated earthen ponds while other used concrete ponds. The market fish price (N400 – N1, 200), revealed that fish business is more viable for fish mongers than the growers (farmers). The debt/asset ratio of the farms was less than one indicates a solvent business. The net worth of the farms indicated that the farms were growing. The equity/asset ratio of the farms was equal to 1. The financial outcome of the farm ranged between N48, 210 (USD 401.75) and N1, 841,002 (USD 15,341.68) depending on the size of the farm. The larger the farm, the higher the profit catfish culture is economically viable in Lagos State. [Report and Opinion. 2010;2(1):63-73]. (ISSN: 1553-9873).</p>	63-73 Full Text
13	<p><u>Exploitation of Genetic Variability in Cowpea Improvement to High Soil Moisture Tolerance:</u> <u>1. Effects on growth and yield in diverse environments</u> D. O. Idahosa¹ J. E. Alike² and A. U. Omoregie¹ 1. Department of Crop Science, Ambrose Alli University, Ekpoma, Nigeria 2. Department of Crop Science, University of Benin, Nigeria. E-mail: danielidahosa@yahoo.com</p> <p>Abstract: The adaptability of a genotype over diverse environments is evaluated by the degree of its interaction with different environments in which it is grown. In this paper, twenty-five germplasm lines together with three local cultivars of cowpea were assessed in four environments (E1, E2, E3 and E4) for vegetative, grain yields and related traits. Variance mean squares indicated highly substantial significant differences among germplasm for all characters and resulted in genotype-environment interaction for days to 50%</p>	74-77 Full Text

	<p>earliness, pods per plant, pod length, seeds per pod, seed size and grain yield. Mean effects for yield and its attributes over the four pooled environments revealed substantial genotypic difference as influenced by high soil moisture in the expression of the characters with changes in environments. Most of the characters expressed highest mean performance in E2 for plant height (87.47 cm), leaf area index (LAI) (7.08), days to 50% maturity (84.33), pod length (21.87g), seeds per pod (16.87) and grain yield (541.8kg/ha). The wide genotypic variations observed in characters in the diverse environments in the germplasm tested can be explored in improvement and selection programmes to high moisture tolerance in cowpea. [Report and Opinion 2010:2(1):74-77] (ISSN: 1553-9873).</p>	
14	<p><u>Radius of photon orbit of rotating Black hole</u> Manjunath.R #16, 8th Main road, Shivanagar, Rajajinagar, Bangalore-560010 Karnataka, India manjunathr1988@yahoo.in</p> <p>Abstract: A photon sphere is a spherical region of space where gravity is strong enough that photons are forced to travel in orbits . As photons travel near the event horizon of a black hole they can escape being pulled in by the gravity of a black hole by traveling at a nearly vertical direction known as an exit cone. A photon on the boundary of this cone will not completely escape the gravity of the black hole. Instead it orbits the black hole. These orbits are not stable. Radius of photon orbit around the rotating black hole is defined as a function of intense gravitational field intensity of rotating blackhole ,Spin parameter of rotating blackhole and Angular momentum of rotating blackhole. The above equation was developed based on the newton gravitational concepts,basic concepts of blackhole and Einstein’s famous mass energy equivalence relationship. [Report and Opinion 2010:2(1):78-81] (ISSN: 1553-9873).</p>	78-81 Full Text
15	<p><u>ASSESSMENT OF THE HAZARDOUS EFFECT OF LEAD POLLUTION ON <i>Tilapia zilli</i> , INCLUDING HEMATOLOGICAL, BIOCHEMICAL AND IMMUNOLOGICAL PARAMETERS</u> Mona S. Zaki: Department of Hydrobiology, N.R.C. Susan Moustafa: Department of Biochemistry, N.R.C. Olfat M. Fawzi: Department of Biochemistry, N.R.C H. El Bellbasi: Department of Biochemistry, Vet Medicin, Zagazig Univ. Sohier, M. Syame: Department of Bactroiology and immunology, N.R.C. Isis M Awad Department of Biochemistry, N.R.C. dr_mona_zaki@yahoo.co.uk</p> <p>Abstract: Heavy metals are persistent contaminants in the environment causing serious illness in fish, animals and human. Lead represents the main toxic element in nature. Lead has a tendency to accumulate in tissue and organs of exposed fish. The present study aimed to investigate the effect of lead pollution on fish with special reference to the hematological, immunological, serum biochemical parameters, where fifty healthy Nile tilapia zilli fish were divided into 3 groups. Fish of gp1 served as a control. Fish of gp. 2 & 3 were used for the determination of acute lethal concentration dose and the pathological effect of lead on the exposed Nile tilapia. Blood samples were collected to obtain serum for biochemical studies and heparinized blood for hematological investigations. RBCs, Hb, HcT, and MCHC showed significant elevations, the serum GPT and GOT were increased significantly. L.D.H, glucose and cortisol were elevated, while serum cholesterol concentration was reduced significantly when tilapia exposed to height temperature 30 and lead pollution. [Report and Opinion. 2010;2(1):82-87]. (ISSN: 1553-9873).</p>	82-87 Full Text
16	<p><u>Response to Sulfur and Organic Matter Status by the Application of Sulfidic Materials in S-Deficient Soils in Bangladesh: Possibilities and Opportunities</u> Abul Hasnat Md. Shamim^{1,2} and Farook Ahmed¹ ¹Graduate School of environmental Science, Okayama University, Okayama 700-8530, Japan ²School of Agriculture and Rural Development, Bangladesh Open University, Gazipur-1705, Bangladesh abulhasnats@yahoo.com</p> <p>Abstract: The sulfidic materials (SM)/layers of acid sulfate soils deserve attention to use these soil materials for the reclamation of sulfur deficient soil and other poor soils such as saline, alkaline, or calcareous (Khan et al. 2002). The availability of land for growing crops is limited; it may become inevitable to utilize marginal and problem soils. Sulfur deficiency has become widespread over the past several decades in most of the agricultural areas of the world including Bangladesh, which have need of sustainable measures for their</p>	88-93 Full Text

	<p>reclamation. The content of available sulfur in the soils were increased by the application of SM, regardless of soil conditions and the effects were significantly positive (p 0.05) with the ahead of time in compared to other treatments like gypsum, magnesium sulfate etc. At the same time, all the rates of SM showed the significantly (p 0.05) positive effects on organic matter status in the soils and increments were more striking with the higher rates. This means the SM has potential and effective impacts than that of gypsum or magnesium sulfate not only as a source of fertilizer but also to enrich the fertility and productivity status of soil. Moreover, the SM treatment was found to be maintained the high nutrient status in the soil till the final harvest at maturity of different crops, reflecting a good indication for its long term use. It is mentioned that the use of SM did not show any harmful effect on the plant and soil in Bangladesh so far. [Report and Opinion 2010;2(1):88-93] (ISSN:1553-9873).</p>	
17	<p><u>Effect of Sacrificial Anode Power Dissipation on Its Anode Life</u> Chukwuka Ikechukwu Nwoye¹, Udeme Okure¹, Uzoma Odumodu² and Chizoba Chinedu Nwoye³ 1 Department of Materials and Metallurgical Engineering, Federal University of Technology, Owerri, Nigeria. 2 Pipeline Maintenance Department, M. F. Kent Services Nig. Ltd. Port-Harcourt Nigeria. 3 Pipeline Maintenance Department, Weatherford Nig. Ltd. Port-Harcourt Nigeria. chikeyn@yahoo.com Abstract: Studies have been carried out to investigate the effect of sacrificial anode power dissipation on its anode life. The results of the investigation show that decrease in the power dissipated by the sacrificial anode during the discharge of current, increases the anode life. This resulted from the fact that decrease in the power dissipation implies increased resident energy of the sacrificial anode hence, the greater the length of time the sacrificial anode can perform its protective function. It was also found that increase in the electrical resistance of the sacrificial anode increases the anode life. This results from reduction in the discharged current and minimization of power dissipation. [Report and Opinion. 1010;2(1):94-97]. (ISSN: 1553-9873).</p>	<p>94-97 Full Text</p>

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