

أنموذج ( ب ) الخاص بالبحوث للفترة من 2013/9/2-2014/11/1

|                                  |  |   |   |
|----------------------------------|--|---|---|
| University of Baghdad            |  |   |   |
| College Name                     | Science of Women   |   |   |
| Department                       | Biology  |   |   |
| Full Name as written in Passport | Fikrat Majeed Hassan   |   |   |
| e-mail                           | Fikrat@csu.uobaghdad.edu.iq  |   |   |
| Career                           | <input type="radio"/>  | <input checked="" type="radio"/> Lecturer | <input type="radio"/> Assistant Professor |
| Research Title                   |  |   |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name   | Jasim M Salman, Atheer S N Al-Azawey      | <input type="radio"/> Single              |
| Published Journal title          | <i>Hydrol Current Res</i>  |   |   |
|                                  | <b>S13</b>   |   |   |
| Page                             | (doi: 10.4172/2157-7587.S13-001 )  |   |   |
| Year                             | 2013   |   |   |
| Abstract                         | <p>The present study was conducted to study of some microbial pollution indicators such as - total count, total coliforms, fecal coliforms, E.coli and fecal streptococci from water and sediment of Al-Hilla River in middle of Iraq. Samples were collected over a period of twelve months from March, 2010 to February, 2011. The results showed variation in the number and density of microbial indicators between seasons and study sites. A highest number of bacterial pollutants recorded through spring and summer seasons. Many environmental factors affect the bacterial indicators such as solar radiation, temperature, water flow and organic matter. The present study showed high variation in quantitative and qualitative of bacterial indicators, also they could be used as a bio-indicator for pollution of both water and sediment in Hilla River.</p> |   |   |

|                                  |   |  |   |
|----------------------------------|---|--|---|
| University of Baghdad            |   |  |   |
| College Name                     | Science of Women  |  |   |
| Department                       | Biology   |  |   |
| Full Name as written in Passport | Fikrat Majeed Hassan  |  |   |
| e-mail                           | Fikrat@csw.uobaghdad.edu.iq   |  |   |
| Career                           | <input type="radio"/>   | <input checked="" type="radio"/> Lecturer          | <input type="radio"/> Assistant Professor |
| Research Title                   | A Study of Phytoplankton Communities and Related Environmental Factors in Euphrates River (between Two Cities: Al-Musayyab and Hindiya), Iraq   |  |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name ✓  | Jasim M. Salman, Hassan J. Jawad, Ahmmed J. Nassar | <input type="radio"/> Single              |
| Published Journal title          | J. Environmental Protection   |  |   |
|                                  | 4   |  |   |
| Page                             | 1071-1079   |  |   |
| Year                             | 2013  |  |   |
| Abstract                         | <p>The phytoplankton communities and related physical-chemical features of the Euphrates River at its middle region inside Iraqi territory were studied during the study period from October 2011 to September 2012. Samples were taken from Al-Musayab district extending to Al-Hindia district. The phytoplankton community (quantitative, qualitative and Chlorophyll-a) have been studied, in addition to many environmental parameters such as temperature, pH, electric conductivity (EC), Salinity (‰), TDS, TSS, dissolved oxygen, BOD5. A total of 105 phytoplankton taxa belonging to Bacillariophyta (69), Chlorophyta (19), Cynophyta (12), Euglenophyta (3), and Dinophyta (2) were recorded within the present study period. Some algal genera dominated mostly in the study period and sites such as <i>Scendesmus</i>, <i>Melosira</i>, <i>Cymbella</i>, <i>Diatoma</i>, <i>Navicula</i>, <i>Nitzschia</i> and <i>Syndera</i>. A statistical analysis was done using the canonical correspondence analysis (CCA).</p> |  |   |

|                                  |   |   |   |
|----------------------------------|---|---|---|
| University of Baghdad            |   |   |   |
| College Name                     | Science of Women  |   |   |
| Department                       | Biology   |   |   |
| Full Name as written in Passport | Fikrat Majeed Hassan  |   |   |
| e-mail                           | Fikrat@cs.w.uobaghdad.edu.iq  |   |   |
| Career                           | <input type="radio"/>   | <input checked="" type="radio"/> Lecturer     | <input type="radio"/> Assistant Professor |
| Research Title                   | An ecological assessment for Tigris River within Baghdad, Iraq  |   |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name  | Najm A. J. AL-Zubaidi Weeam A. A. Al- Dulaimi | <input type="radio"/> Single              |
| Published Journal title          | <b>Jornal of Babylon Univ. Special Issue - Proceiding of 5th International Conference of Environmental Scince University of Babylon / Environmental Research Center 3-5 December 2013</b>   |   |   |
|                                  | <b>Proceiding of 5th International Conference of Environmental Scince University of Babylon / Environmental Research Center 3-5 December 2013</b>   |   |   |
| Page                             | 26-39   |   |   |
| Year                             | 2013  |   |   |
| Abstract                         | <p>The present study has been conducted to assess the Tigris River within Baghdad City during one year from October 2011 to December 2012. Four sites along the studied river were selected; the study included measuring physiochemical factors of the Tigris River, such as: temperature (air and water), electrical conductivity (EC), salinity (S‰), current flow, total dissolved material (TDS), total solid suspended (TSS), total alkalinity (TA), dissolved oxygen (DO), biochemical oxygendemand (BOD5) , total nitrogen (TN) and total phosphorus (TP). The water quality of Tigris River</p> <p>was assessed using the Canadian Council of Ministry of the Environment Water Quality Index (CCME WQI). Seven environmental factors were used to assess the WQI, they are temperature, pH, TDS, DO, BOD5, TN and TP. The mean ranges of the studied factors were recorded: air temperature ( 13.00-43.20 C°), water temperature (10.80-32.43 C°), current flow (0.07-0.303)m/Sec, pH (7.94-8.62), EC ( 214.33-319.67 μS/cm), S‰ (0.130-0.191), TDS (154.50-211.83 mg/l), TSS (1.52-1.72 mg/l), TA (44.33-80.17 mg/l), DO (6.70-13.50 mg/l), BOD5 (0.04-4.26 mg/l), TN (14.01-19.65μg/l) and TP (0.005-0.023 μg/l ). The WQI values ranged 20.32 - 60.48. Hence, the water quality of the Tigris River is rated as poor- marginal. A statistical analysis was done using the canonical correspondence analysis (CCA).</p> |   |   |

|                                  |  |  |   |
|----------------------------------|--|--|---|
| University of Baghdad            |  |  |   |
| College Name                     | Science of Women   |  |   |
| Department                       | Biology  |  |   |
| Full Name as written in Passport | Fikrat Majeed Hassan   |  |   |
| e-mail                           | Fikrat@csw.uobaghdad.edu.iq  |  |   |
| Career                           | <input type="radio"/>  | <input checked="" type="radio"/> Lecturer                          | <input type="radio"/> Assistant Professor |
| Research Title                   | The Study of Pollution of PAHs (Polycyclic Aromatic Hydrocarbons) in Al-Hilla River, Iraq by Using Bioindicator Freshwater Crab ( <i>Sesarma bouleengeri</i> Calman)   |  |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name   | Jasim M. Salman <sup>1</sup> , Atheer S. N. Al-Azawey <sup>1</sup> | <input type="radio"/> Single              |
| Published Journal title          | Journal of life Sciences, USA  |  |   |
|                                  | 8  |  |   |
| Page                             | 351-357  |  |   |
| Year                             | 2014   |  |   |
| Abstract                         | <p><b>Abstract:</b> The present study was used freshwater Crab (<i>Sesarma bouleengeri</i> Calman) as bioindicator to measured the PAHs levels in Al-Hilla River, Iraq, during the period from March 2010 to February 2011. Crab samples were collected from two sites on the Al-Hilla River. Sixteen of PAHs compounds were identified seasonally in these samples. High mean value was (72.06 µg/g), recorded by Dibenzo (a, h) anthracene (DbA) in Site 1 and low mean value was (0.36 µg/g) recorded by Anthracene (Ant) in Site 2. The study showed a clear variation in PAHs concentration independent from the seasons and locations. Site 1 recorded high value of HMW (high molecular weight) and LMW (low molecular weight) more than Site 2. The present study revealed that all PAHs compounds were from Pyrogenic Origin. Seven carcinogenic PAHs (cPAHs) were recorded in crab tissues that were collected from the Al-Hilla River. The TEF (toxicity equivalency factor) was calculated to toxicity equivalent crab concentration. From the results, the fresh water Crab <i>Sesarma bouleengeri</i> is a good bioindicator to water pollution by PAHs.</p> |  |   |

|                                  |  |   |   |
|----------------------------------|--|---|---|
| University of Baghdad            |  |   |   |
| College Name                     | Science of Women   |   |   |
| Department                       | Biology  |   |   |
| Full Name as written in Passport | Fikrat Majeed Hassan   |   |   |
| e-mail                           | Fikrat@csw.uobaghdad.edu.iq  |   |   |
| Career                           | <input type="radio"/>  | <input checked="" type="radio"/> Lecturer | <input type="radio"/> Assistant Professor |
|                                  |  |   | <input type="radio"/> Professor           |
| Research Title                   | Ecological Observation on Phytoplankton Species Composition in Wastewater Treatment Plant / Iraq   |   |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name   | Jasim M. Salman, Thura M.H. Al-Yassiry    | <input type="radio"/> Single              |
| Published Journal title          | International Journal of Advanced Research   |   |   |
|                                  | 2  |   |   |
| Page                             | 344-356  |   |   |
| Year                             | 2014   |   |   |
| Abstract                         | <p>The present study focuses on phytoplankton species composition in wastewater treatment plant. Semi-monthly sampling was collected from three selected sites to implement in the study plant from November, 2012 to April, 2013. Phytoplankton and physicochemical parameters investigated in the present study.</p> <p>The results showed the dominance of non-diatomic algae qualitatively and quantitatively. The non diatomic algae represented 55.7% of the total identified algae, where Cyanophyceae, Chlorophyceae and Euglenophyceae represented 31.2%, 11.5% and 6.1%, while each of Xanthophyceae and Chrysophyceae represented 2.04% and 0.68% for Rhodophyceae. Diatomic algae represented 44.2% of the total identified phytoplankton during the</p> |   |   |

|                                  |   |  |   |
|----------------------------------|---|--|---|
| University of Baghdad            |   |  |   |
| College Name                     | Science of Women  |  |   |
| Department                       | Biology   |  |   |
| Full Name as written in Passport | Fikrat Majeed Hassan  |  |   |
| e-mail                           | Fikrat@csu.uobaghdad.edu.iq   |  |   |
| Career                           | <input type="radio"/>   | <input checked="" type="radio"/> Lecturer                                | <input type="radio"/> Assistant Professor |
|                                  |   |  | <input type="radio"/> Professor           |
| Research Title                   | Quality, Quantity and Origin of PAHs (Polycyclic Aromatic Hydrocarbons) in Lotic Ecosystem of Al-Hilla  |  |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name  | Jasim M.Salman, Atheer S.N. Al-Azaway, Nadhir Al-Ansari and Sven Kutsson | <input type="radio"/> Single              |
| Published Journal title          | Journal of Civil Engineering and Architecture, USA  |  |   |
|                                  | 8   |  |   |
| Page                             | 1026-1038   |  |   |
| Year                             | 2014  |  |   |
| Abstract                         | <p><b>Abstract:</b> The Euphrates River is one of the major rivers in Iraq. When it reaches north of Hilla city, it will be divided in two branches. One of these braches flows toward Hilla city. On this branch, six locations were studied for the water quality of the Euphrates water. The present paper is aimed to fill the gap of information of the presence of PAHs (poly aromatic hydrocarbons) in water and sediment of Al-Hilla River, as well as to determine the quality and quantity of some PAHs. The depth of the river ranges from 2 m to 6 m. The quality, quantity and the origin of PAHs were studied in the water and sediment of Al-Hilla River. In addition, some physical and chemical properties were studied at six sites along the studied area, for the period March, 2010 to February, 2011. Sixteen PAHs that are listed by USEPA (US Environmental Protection Agency) as priority pollutants (Nap (naphthalene), Acpy (acenaphthylene), Acp (acenaphthene), Flu (fluorine), Phen (phenanthrene), Ant (anthracene), Flur (fluoranthene), Py (pyrene), B(a)A (benzo(a)anthracene), Chry (chrysene), B(b)F (benzo(b)fluoranthene), B(k)F (benzo(k)fluoranthene), B(a)p (benzo(a)pyrene), BbA (dibenzo(a,h)anthracene), B(ghi)P (benzo(ghi)perylene) and Ind (indeno (1,2,3-cd) pyrene)) were detected in Al-Hilla river. High concentrations of PAHs were detected in the sediment relative to that within the water. The present study revealed that the</p> |  |   |

University of Baghdad

College Name Science of Women

Department Biology

Full Name as written in Passport Fikrat Majeed Hassan

e-mail Fikrat@csw.uobaghdad.edu.iq

Career



Lecturer

Assistant Professor

Professor

Research Title

**TAXONOMIC STUDY OF SOME EPIPHYTIC DIATOMS ON AQUATIC PLANTS FROM AL-HAWIZAH MARSHES, SOUTHERN OF IRAQ**

Shared or Single

Shared name

Jinan S. Al-Hassany

Single

Published Journal title

*Asian Journal of Natural & Applied Sciences*, Japan

3

Page

1-11

Year

2014

Abstract

Sampling of epiphytic diatoms was collected from four species of host aquatic plants (Phragmites australis Trin ex., Typha domengensis Pers., Ceratophyllum demersum L. and Potamogeton pectinatus L.), from restored marshes in Al-Hawizah, southern Iraq. Total number of (29) epiphytic diatoms of seventeen genera, twenty-nine species and, eight varieties belonging to eight families of class Bacillariophyceae were recorded. The present study recorded *Synedra ulna* var. *oxyrhynchus* f. *contracta* as new record to Iraq algal flora.

University of Baghdad

College Name Science of Women

Department Biology

Full Name as written in Passport Fikrat Majeed Hassan

e-mail Fikrat@csw.uobaghdad.edu.iq

Career



Lecturer



Assistant Professor



Professor

Research Title

**Ecological Observations on Epipellic Algae in Euphrates River at Hindiya and Manathira, Iraq**

Shared or Single

Shared name ✓

**Jasim M. Salman Foad A. Alkam Hassan J. Jawad**

Single

Published Journal title

International Journal of Advanced Research

2

Page

1183-1194

Year

2014

Abstract

An environmental study conducted on epipellic algae in Euphrates River between two districts (Hindiya and Manathira). Four sites selected along the studied area and monthly sampling for the period between March 2010 and February 2011. The study included some physicochemical factors for water and sediment of the river. The study also conducted quality and quantity of epipellic algae. The factors were ranged as: 3-43°C, 10-32°C for air and water temperature respectively, 7.3-8.4, 3.6-10.5mg/l, 0.1-6.4 mg/l for pH, dissolved oxygen and biochemical oxygen demand respectively. Chlorophyll-a concentration was ranged ND- 11.2 µg/l, while phaeophytin a concentration was ND- 31 µg/l. Total organic carbon of the sediment ranged 0.18-1.3%. A total of 169 taxa of epipellic algae identified and comprised of Bacillariophyceae (71% and 120 species), Cyanophyceae (23 species), Chlorophyceae (14 species), Euglenophyceae (9 species) and Pyrrophyceae



|                                  |  |  |  |
|----------------------------------|--|--|--|
| University of Baghdad            |  |  |  |
| College Name                     | Science of Women   |  |  |
| Department                       | Biology  |  |  |
| Full Name as written in Passport | Fikrat Majeed Hassan   |  |  |
| e-mail                           | Fikrat@cs.w.uobaghdad.edu.iq   |  |  |
| Career                           | <input type="checkbox"/>   | <input checked="" type="checkbox"/> Lecturer             | <input type="checkbox"/> Assistant Professor |
| Research Title                   | <b>An Ecological Study of Epiphytic Algae on Two Aquatic Macrophytes in Lotic Ecosystem</b>  |  |  |
| Shared or Single                 | <input checked="" type="checkbox"/> Shared name ✓  | <b>Jasim M. Salman, Sheimmaa J. Hadi, Ahmed A. Motar</b> | <input type="checkbox"/> Single              |
| Published Journal title          | <b>Asian Journal of Natural &amp; Applied Sciences Vol. 3(3) September 2014</b>  |  |  |
|                                  | <b>3</b>   |  |  |
| Page                             | 37-52  |  |  |
| Year                             | 2014   |  |  |
| Abstract                         | <p>The epiphytic algae on some aquatic macrophytes and related physical and chemical properties of Al-Abbasyia-Euphrates river middle of Iraq were studied during the study period from March 2012 to February 2013. Four sites between the Al-Kifil districts extending to the Al-Abbasyia district selected. The quantitative and qualitative of epiphytic algae on <i>Phragmites australis</i> and <i>Ceratophyllum demersum</i> have studied. In addition to many physical and chemical parameters such as air and water temperature, water flow, transparency, pH, electric conductivity (EC), Salinity (‰), TDS, TSS, dissolved oxygen, BOD5, alkalinity, total hardness, calcium and magnesium. A total of 209 epiphytic algal taxa belonging to Bacillariophyceae (144), Chlorophyceae (39), Cyanophyceae (19) and Euglenophyceae (2) recorded within the present study. Some algal taxa noticed mostly dominant among both the study sites and periods. These were <i>Cymatopleura elliptica</i>, <i>Eunotia arcus</i>, <i>Nitzschia</i> sp., <i>Cymbella</i> sp. and <i>Gomphonema</i> sp. This study revealed the existence of some algal taxa on specific parts of the host macrophytes <i>Where Sphaerocystis attached on the stem of C. demersum; Actinoptychus sp. attached on the root of P. australis; Chaetoceros capense on the root of P. australis and Thalassiosira fluviatilis on the leaves of P. australis.</i></p> |  |  |

|                                  |  |   |   |
|----------------------------------|--|---|---|
| University of Baghdad            |  |   |   |
| College Name                     | Science of Women   |   |   |
| Department                       | Biology  |   |   |
| Full Name as written in Passport | Fikrat Majeed Hassan   |   |   |
| e-mail                           | Fikrat@cs.w.uobaghdad.edu.iq   |   |   |
| Career                           | <input type="radio"/>  | <input checked="" type="radio"/> Lecturer | <input type="radio"/> Assistant Professor |
| Research Title                   | An Environmental Study on Phytoplankton (Diatoms) in Al-Yusifiya River, Iraq   |   |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name   | Adel H. Talib + Wessal A. Sadoon          | <input type="radio"/> Single              |
| Published Journal title          | J. Baghdad for Science   |   |   |
|                                  | 11   |   |   |
| Page                             | 1031-1031  |   |   |
| Year                             | 2014   |   |   |
| Abstract                         | <p>An environmental study conducted on diatoms in Al Yusifiya river beyond its branching from Euphrates river. Four sites were selected along the river for the period from march 2013 to September 2013. The present study involved the measurement of physicochemical parameters, also the qualitative and quantities of diatoms. The studied parameters values ranged as follows: 19-44C° and 16-30 C° for air and water temperature respectively, 6.9-8.7, 595-1248 μS/cm, 6.4-8.0 mg/l for pH, electric conductivity and dissolved oxygen respectively. A total of 74 taxa were recorded for diatoms, where the pinnate diatom was the predominant and recorded 64 taxa while 10 taxa for centric diatoms. The total number of diatoms was 1197.55*10<sup>4</sup> cell /l. The total number values were ranged as follows:( 28.3-48.6) *10<sup>4</sup> cell /l in the first site ,( 33.6-51.5) *10<sup>4</sup> cell /l in the second site,( 39.8-67.2) *10<sup>4</sup> cell /l in the third site and ( 22.3-38.0) *10<sup>4</sup> cell /l in the fourth site. Two species <i>Asterionellaformosa</i> Hassall and <i>Diploneispuella</i> Schumann were noticed in site 2 only, while <i>C. prostate</i> Berkeley found in all studied sites expect in site 1. <i>Stephaenodiscushantzschii</i> Grunow and <i>Didymosphenia geminate</i> (lyngb.) Schmidt were recorded in sites 1 and 3, <i>Anomoeoneis</i> sp was recorded in sites 1 and 4</p> |   |   |

|                                  |  |  |  |
|----------------------------------|--|--|--|
| University of Baghdad            |  |  |  |
| College Name                     | Science of Women   |  |  |
| Department                       | Biology  |  |  |
| Full Name as written in Passport | Fikrat Majeed Hassan   |  |  |
| e-mail                           | Fikrat@cs.w.uobaghdad.edu.iq   |  |  |
| Career                           | <input type="checkbox"/>   | <input checked="" type="checkbox"/> Lecturer | <input type="checkbox"/> Assistant Professor |
| Research Title                   | Qualitative and Quantitative study of Epipellic algae in Tigris River within Baghdad City, Iraq  |  |  |
| Shared or Single                 | <input checked="" type="checkbox"/> Shared name  | <b>Saja H. Al-Bdulameer</b>                  | <input type="checkbox"/> Single              |
| Published Journal title          | J. Baghdad for Science   |  |  |
|                                  | 11   |  |  |
| Page                             | 4701-4731  |  |  |
| Year                             | 2014   |  |  |
| Abstract                         | <p>The present study conducted to study epipellic algae in the Tigris River within Baghdad city for one year from September 2044 to August 2041 due to the importance role of benthic algae in lotic ecosystems. Five sites have been chosen along the river. A total of 154 species of epipellic algae was recorded belongs to 45 genera, where Bacillariophyceae (Diatoms) was the dominant groups followed by Cyanophyceae and Chlorophyceae. The numbers of common types in three sites were 47 species. Bacillariophyceae accounted 88.31% of the total number of epipellic algae, followed by Cyanophyceae 7.14 % and Chlorophyceae 4.55%. A 85 species (29 genera) recorded in site 1, 103 species (34 genera) in site2, 112 species (35 genera) in site3, 96 species (32 genera) in site4, and 85 species (29 genera) in site5. Spatial and temporal distributions of epipellic algae were noticed in this study. The higher total number of epipellic algae (91504.01cell\ cm-2) was recorded at site 5 in spring 2012, while the lower was (37017.98cell\ cm-2) in summer 2012 at site1. Some genera have recorded higher number species during the study period; these genera were <i>Nitzschia</i>, <i>Navicula</i>, <i>Cymbella</i>, <i>Gomphonema</i>, <i>Synedra</i>, <i>Achnanthes</i>, <i>Oscillatoria</i>, and <i>Lyngbya</i>. The study revealed that Bacillariophyceae were more prominent within all study sites and followed by Cyanophyceae, while a few numbers of Chlorophyceae was appeared.</p> |  |  |

|                                  |   |   |   |
|----------------------------------|---|---|---|
| University of Baghdad            |   |   |   |
| College Name                     | Science of Women  |   |   |
| Department                       | Biology   |   |   |
| Full Name as written in Passport | Fikrat Majeed Hassan  |   |   |
| e-mail                           | Fikrat@cs.w.uobaghdad.edu.iq  |   |   |
| Career                           | <input type="radio"/>   | <input checked="" type="radio"/> Lecturer | <input type="radio"/> Assistant Professor |
| Research Title                   |   |   |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name  | Jinnan S. Al Hassany +Rawaa N. Gitan      | <input type="radio"/> Single              |
| Published Journal title          | J. Baghdad for Science  |   |   |
|                                  | 11  |   |   |
| Page                             | 1342-1353   |   |   |
| Year                             | 2014  |   |   |
| Abstract                         | <p>The present study was conducted in the Tigris River within Baghdad (University of Baghdad campus). The study included some physicochemical parameters and qualitative of epiphytic algae on the host plant (<i>Ceratophyllum demersum</i>) during summer season 2013. The results revealed that the study area was alkaline, hard and oxygenated water. A total of 105 taxa of epiphytic algae was identified. Bacillariophyceae diatoms composed 44.7% of the total and were represented by 31.3% of the order Pennales and 2..%of the order Centrales. Chlorophyceae composed 32.3%, followed by Cyanophyceae composed 22.8 % of the total. The total number of epiphytic algae was fluctuated among the study period. Most of the identified algae were benthos type and a few was phytoplankton such as: <i>Cyclotella</i> spp, <i>Coscinodiscus</i> sp, <i>Bacillaria paxillifer</i> and <i>Scenedesmus</i> spp. Seventeenth species found in all the study period.</p> |   |   |

|                                  |  |  |   |
|----------------------------------|--|--|---|
| University of Baghdad            |  |  |   |
| College Name                     | Science of Women   |  |   |
| Department                       | Biology  |  |   |
| Full Name as written in Passport | Fikrat Majeed Hassan   |  |   |
| e-mail                           | Fikrat@cs.w.uobaghdad.edu.iq   |  |   |
| Career                           | <input type="radio"/>  | <input checked="" type="radio"/> Lecturer        | <input type="radio"/> Assistant Professor |
| Research Title                   | An environmental study for Bani-Hissin stream in Holy Karbala governorate  |  |   |
| Shared or Single                 | <input checked="" type="radio"/> Shared name   | Hadeel M. T. Abdul- Ameer+ Ibrahim M.A. Alsalman | <input type="radio"/> Single              |
| Published Journal title          | J. Baghdad for Science   |  |   |
|                                  | 11   |  |   |
| Page                             | 1319-1327  |  |   |
| Year                             | 2014   |  |   |
| Abstract                         | <p>The present study conducted to study the environmental parameters of Bani-Hissin stream in Holy Karbala governorate, due to its importance through its passing in huge agricultural area and many small rural villages around it. This stream is branching from Euphrates River at Sidda city and irrigates an area of 114,000 acres. Five sites were selected for this study to measure the physical and chemical properties and chlorophyll-a for the period between December 2012 to May 2013. The mean of studied properties were: 9.5-25.4°C and 4-38°C for air and water temperature, 980-1460 µS/cm and 0.613-0.909 S‰ for electric conductivity and salinity, 1 -0.18 m/sec for current flow, 60-215 cm for light penetration depth, 7.2-8.6 pH, 115-147 mg/l, 189-401 mg/l, 78-170 mg/l, and 21-76 mg/l for alkalinity, total hardness, calcium and magnesium respectively. Dissolved oxygen and Biochemical oxygen demand were ranged 7-13 mg/l and 1-7 mg/l respectively. Reactive nutrients such as nitrite, nitrate, phosphate and silicate were ranged ND-3.6 µg/l, 7.5-98.6 µg/l, ND- 17.6 µg/l and 0.41-5.2 mg/l respectively, also chlorophyll-a was ranged ND-8.1 mg/l. According to present results the stream is alkaline, hard water and not matched with Iraqi standard for drinking water.</p> |  |   |

|                                  |   |   |   |                                 |
|----------------------------------|---|---|---|---------------------------------|
| University of Baghdad            |   |   |   |                                 |
| College Name                     | Science of Women  |   |   |                                 |
| Department                       | Biology   |   |   |                                 |
| Full Name as written in Passport | Fikrat Majeed Hassan  |   |   |                                 |
| e-mail                           | Fikrat@csu.uobaghdad.edu.iq   |   |   |                                 |
| Career                           | <input type="radio"/>   | <input checked="" type="radio"/> Lecturer | <input type="radio"/> Assistant Professor | <input type="radio"/> Professor |
| Research Title                   | Seasonal Variation of Environmental Properties and Phytoplankton Community in Al- Hussainya River, Holly  |   |   |                                 |
| Shared or Single                 | <input checked="" type="radio"/> Shared name ✓  | Jasim M . Salman + Sara H . Abdulameer    |   | <input type="radio"/> Single    |
| Published Journal title          | Mesopotamia Environmental Journal (MEJ)   |   |   |                                 |
|                                  | 1   |   |   |                                 |
| Page                             | 56-82   |   |   |                                 |
| Year                             | 2014  |   |   |                                 |
| Abstract                         | <p>A comprehensive ecological study was conducted on Al-hussainya river during the period from October , 2012 To September 2013 . This study includes measuring some chemical and physical properties of water , in addition to the study of Phytoplankton community quantitatively and qualitatively .The values of the parameters ranged between 12.7 – 31.3 C°, 8.5 – 45C° for water and air temperature respectively , 7.5 – 9.4 for PH , 840 – 1416.67 µs/cm , 413.33 – 700 mg/l , 6.33 – 55.07 mg / l , 0.54‰ – 0.91 ‰ for each of electrical conductivity (EC ) , Total dissolved solids (TDS) , Total suspended solids (TSS) and salinity respectively , 11.68 – 37.77 cm / sec. , 33.67 – 148.67 cm for each of water current velocity and water penetration respectively , 4.97 – 12.63 mg/l , 0.4 – 4.84 mg/l for dissolved oxygen (DO) and BOD5 respectively.</p> <p>Nutrients such as silica , total nitrogen and total phosphorous showed variation during this study , their values ranged between 1.63 – 6.26 mg / l , 1.4 – 3.5 mg/l and 1.33 – 17.29 µg/l for each of them respectively . A total of 242 taxa of phytoplankton identified during this study belonged to six classes of algae dominated by Bacillariophyceae which constitute 62.81 % of the total number of the species followed by Chlorophyceae by 20.66 % and Cyanophyceae by 11.16 % respectively . Dinophyceae and Euglenophyceae constitute the 2.07 % , while the the Cryptophyceae constitute the lower percentage which amounted to 1.24 % of the total species , some genera like as <i>Nitzschia</i> , <i>Navicula</i> , <i>Cymbella</i> , <i>fragilaria</i> , <i>Scenedesmus</i> and <i>Oscillatoria</i> were dominated by their species numbers in the Phytoplankton community .The total numbers of Phytoplankton cells ranged between (4468 – 9177) x 10<sup>3</sup> cell / l recorded</p> |   |   |                                 |