



Resume

Prof. SAYED MEDANY ARAFAT
NARSS, Egypt

1. PERSONAL INFORMATION:

Name: Sayed M. Arafat

Date & place of Birth: 8/01/1954, Cairo, Egypt.

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Cairo, Egypt

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2. EDUCATION:

1976 B.Sc. Agriculture Faculty, Ain Shams University, Cairo, Egypt

1983 M.Sc. in, Agriculture Faculty, Ain Shams University

1989 Ph.D. in Soil Sciences, Leningrad Agric. Ins. USSR.

3. Research Area:

Remote Sensing applications in agriculture such as yield prediction modeling, crop monitoring, crop survey, spatial analysis. The main interests are in vegetation characteristics, hyperspectral remote sensing, and spatial statistics.

4. CAREER INFORMATION:

Jan. 2014 - Emeritus Professor of Soils and RS applications in Vegetation Cover Studies

Aug.2008 – Jan 2014 Head of Agricultural applications, Soils and Marine Division, NARSS, Cairo, Egypt

Nov.2005 - Acting Member of NARSS Board Directors

Dec.2005- 2010 Acting in Charge of Secretary General of NARSS, Cairo, Egypt

Sep. 2001- 2008 Head of Scientific Training and Continuous Studies Division, NARSS, Cairo, Egypt

June 2000 - 2001 Professor of Soils, Soils and Water Use Dept., National Research Center, Cairo, Egypt

1995 - 2000 Associated professor, Soils and Water Use Department, National Research Center, Cairo, Egypt

1990 - 1995 Research Scientist, Soils and Water Use Department, National Research Center, Cairo, Egypt



4. CAREER ACTIVITIES AND ACHIEVEMENTS:

Scientific research and application demonstration projects:

Principal and Co-Investigator of the following projects:

- 2018 -- Monitor and map infringements on state territory in Beheira Governorate using satellite imagery and GIS **(PI),sponsored by Behira Governorate**
- 2017-2018 Classification of Some Strategic Crops in Egypt Using Multi Remotely Sensing Sensors and Time Series Analysis **(PI)**
- 2016-2017 Retrieval of vegetation physiological parameters using remote sensing data **(PI)**
- 2015-2016 Assessment and survey land resources and land cover for the potentiality of agriculture expansion of Egypt using remote sensing and GIS technologies **(PI)**
- 2014-2015 Crop monitoring in Egypt, Sponsored by Agriculture Ministry **(PI)**
- 2013- 2015 Capacity building of imaging radar for earth resources applications in Egypt (“SOAR-AF project” No 5128, sponsored by Canadian Space Agency) **(PI)**
- 2011-2013 Sinai Information System for Land Management and Environment Monitoring.**WP5:Agricultural Development (PI)**
- 2010-2011 Building Spectral Library for Common Crops and Soil Types in Egypt **(PI)**
- 2009- 2011 Geo-information Technology Network for the promotion of convergent strategies of agricultural and environmental management in the South East Mediterranean ((Joint Project in cooperation with Mediterranean Agronomic Institute of Chania, Greece) **(PI)**
- 2009-2011 Rice crop monitoring and assessment in Egyptian Nile Delta using remotely sensed data and GIS **(PI)**
- 2010 Delineating rice belt cultivation in the Nile pro-delta of Vertisols using remote sensing data of Egypt Sat-1**(PI)**
- 2009-2010 Modeling yield predication for the main cereal crops in Egypt using multi source of remotely sensing data **(PI)**
- 2008-2009 Land Use/ Land Cover in Egypt and Syria using Remotely Sensed Data and Geographic Information System (Joint Research Project in cooperation with General Authority of Remote Sensing , Syria) **(PI)**
- 2007-2009 Study on Validation of Crop Leave Area Index Inversion Using Multi-Source Remote Sensing Data (Joint Research Project in cooperation with Institute of Remote Sensing Application, Chinese Academy of Sciences) **(PI)**
- 2006-2007 Assessment and Monitoring of Change in Land Use and Land Cover of Toshka Area, South West Egypt **(PI)**



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- 2004-2005 Geo-environmental of the coastal zones of the gulf of Suez and gulf of Aqaba, Egypt, (Environmental and Planning) **(PI)**
- 2003-2006 Utilization of Remote Sensing and GIS in Establishing Environmental Data Network Case Study: (Sinai Peninsula), Egypt (Joint Research Project in cooperation with Czech Academy of Sciences, Czech) **(PI)**
- 2003-2004 Development of Scientific Materials of the Training Courses “Introduction to Remote Sensing “and “Principals of Satellite Images “of NARSS **(PI)**
- 2010 Change Detection of Land Use/Land Cover Categories from 1984 to 2007 in the Nile Delta and Valley Region Using Remote Sensing and GIS **(Co-Investigator)**.
- 2003-2006 Monitoring and Modeling Coastal Lagoons: Making Management Tools for Aquatic Resources in North Africa (MELMARINA) EC PROJECT No. ICA3-2001-2000 **(Co-Investigator)**.
- 2000-2003 Water Efficiency in natural vegetation and agricultural areas by remote sensing in the Mediterranean basin. EC, (Spain/France/ Denmark/ Morocco/Egypt), **(Co-Investigator)**.
- 1999-2000 Integrated Development of Halaib- Shalatiya region Using Remote Sensing and GIS technology. ASRT -NARSS, **(Co-Investigator)**.
- 1999-2000 Soil mapping of Tushka Project. GARPAD /MPWR/NARSS **(Co-Investigator)**.
- 1998 – 2001 Assessment and Evaluation of natural resources of W. El Natron – Burg El Arab – El Dabaa Area. **(Co-Investigator)**.
- 1998 Evaluation of Land resources of Darb El Arbain, Kharga Oasis. **(Co-Investigator)**.
- 1998 Landuse map of Siwa Oasis (1:25.000), NARSS – Italian Cooperation Program, **(Co-Investigator)**.



5. PROFESSIONAL ACTIVITIES AND AFFILIATIONS:

<ul style="list-style-type: none"> • Vice President of African Association of Remote Sensing and Environment (for North Africa –2006-2010 & 2010-2014).
<ul style="list-style-type: none"> • Member of the NARSS Board Directors (2005- 2014).
<ul style="list-style-type: none"> • Executive Editor of the Egyptian Journal of Remote Sensing and Space Sciences (2001-2009).
<ul style="list-style-type: none"> • Member of High leading National Committee of Integrated Coastal Zone Management (2010- 2012)
<ul style="list-style-type: none"> • Secretary General of 6th International Conference on Earth Observation & Geofomation Sciences in Support of Africa's Development, 30 October – 2 November, 2006 Cairo, Egypt
<ul style="list-style-type: none"> • Post-Doctoral Senior Scientist, University of Texas at Dallas, USA, February-August 2005
<ul style="list-style-type: none"> • Secretary General of 3rd International Symposium on Sustainable Agro-Environmental Systems: New Technologies and Applications, 26-29 October 2002, Cairo, Egypt
<ul style="list-style-type: none"> • Regular reviewer of manuscripts submitted to several scientific journals including (Remote Sensing of the Environment, International Journal of Remote Sensing, among other journals).
<ul style="list-style-type: none"> • Member of the Editorial Advisory Board of Lagos Journal of Geo-Information Sciences (LJGIS)
<ul style="list-style-type: none"> • External examiner of M.Sc. and Ph.D. students
<ul style="list-style-type: none"> • Organizer of several workshops, coordinator and session chair in several conferences and symposia

6. PUBLICATIONS:

Author and co-author of 63 peer-reviewed papers on soils and remote sensing applications in agriculture.

Author and co-author of several papers in conference proceedings

1-Awad, F., S. Fuda and **S.M. Araft** (1984). Availability of iron and manganese in some Egyptian soils. *Agrokemia Estalajtan* .33 (3-4): 443-458.

2-Awad, F., S.Fuda and **S.M. Araft** (1985). Zinc and copper in some soils of Egypt as related to other properties. *Z.Pflanzenernachr. Bodenk.*148, 225-232.

3-Aranbaef and S. M. Arafat (1989). Content and forms of zinc combination in oasis soils and its biological circulation in the system soil-cotton. *Scientific Conference, Leningrad Agric. Ins.* 24-27 April, 1989.

4-Salem, N., A.S. El-Neklawy, S.A. Hammad and **S.M. Arafat** (1991). The effect of different combinations of bitumenous emulsion or polyacrylamide



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and bentonite on growth and nutrients uptake by corn plant. J. Agric. Sci. Mansoura Univ., 16(11): 2734-2742.

5- **Arafat, S.M.**, M. Abou Seeda, M.A. Sherif and M.A. Rasheed (1992). Beneficial effect of filter mud on agrochemical characteristics of sandy soil. Zagazig J. Agric. Res. 19(4): 1907-1915.

6- Abou Seeda, M., S. soliman, **S.M. Arafat**, and a. Khater (1992). Nitrogen transformation and its uptake by rice plant in waterlogged soil. Zagazig J. Agric. Res. 19(4): 1907-1915.

7- Abou Seeda, M., S. soliman, **S.M. Arafat** and S.A. Hammad (1992). Land disposal and its effect on chemical characteristics of soil. Zagazig J. Agric. Res., 19(5): 2379- 2391.

8- Abou Seeda, M., S.M. **ARAFAT**, S. Soliman and S.A. Hammad (1992). The fate of applied Cd-109 to Lake Sediment as affected by pH and Eh. Egypt. J. Appl. Sci., 7(10): 424-437.

9- Abou seeda, M., S. Soliman, S. Hammad and **S.M. Arafat** (1992). Behavior of NO₃-N in sediment under flooded circumstances using N-15. Egypt. J. Appl. Sci., 7(10): 493-505.

10- **Arafat, S.M.**; M. Abou Seeda; A.L. saleh and F. I. Header (1993). Effect of sewage sludge treated with Cd, Ni and Pb on the dry matter. African, J. Agric. Sci. 20(1): 19-26.

11- Sherif, M. A., **S. M. Arafat** and T. M. Mosalem (1993). Using double pot technique for evaluating soil nutrient deficiency. III-Zinc. African, J. Agric. Sci. 20(1): 55-69.

12- El-Quesni, F. E., **S.M. Arafat** and S. A. Saad El-Din (1993). Effect of weed control treatments on yield, nutrient content of cowpea and associated weeds at Nobarya. J. Agric. Sci. Mansoura Univ. 18(8): 2309-2314.

13- **Arafat, S.M.** (1994). Evaluation of sugarcane filter mud on improving soil characteristics and watermelon Yield. Egypt, J. Appl. Sci. 9(9): 287-295.

14- **Arafat, S. M.**, M. A. Sherif, M. H. Enany and R. N. Saad (1995). Effect of Rhizobium and Vesicular-Arbuscular Mycorrhizal (VAM) on growth, Phosphorus and nitrogen uptake by vicia faba (L.) in hydroponic culture. Egypt, J. Soil Sci. 35 (1): 117-128.

15- Abdel, M.M. and **S.M. Arafat** (1995). Effect of solarization on broad bean seedling damping-off plus chemical and microbiological characteristics of soil. Fayoum J. Agric. Res. & Dev. 9(1): 29-40.

16- Abdel-Fattah, A.; M.R. Abdel-Moez and **S.M. Arafat** (1996). Pattern of growth and nutrients uptake by broad bean plant as affected by application of different organic wastes. J. Agric. Sci. Mansoura Univ., 21(11): 4195- 4212.



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- 17- **Arafat, S.M.**; H. El-Aila and A.Abd Elgalil. (1997).Utilization of sugarcane filter mud to minimize nitrogen fertilizers for sorghum growth. J. Agric. Sci. Mansoura Univ., 22(4): 1267- 1276.
- 18- Khater, A.; M. Abou Seeda and **S.M. Arafat** (1997). Use of sewage sludge for sustainable agriculture and pollution preservation. II- Beneficial. Effects of composted material. J. Agric.Sci. Mansoura Univ., 22(5): 1801- 1811.
- 19- Abou Seeda, M.; **S. M. Arafat** and A. Khater (1997).Effect of redox potential (Eh) and soil acidity (pH) on rice growth and nutrients uptake. J. Agric. Sci. Mansoura Univ., 22(7): 2507- 2518.
- 20- Abou Seeda, M.; **S.M. Arafat** and H. El-Aila (1997). New approaches to maximize N-use efficiency in paddy soil. J. Agric. Sci. Mansoura Univ., 22(10): 3479-3489.
- 21- El-Aila, H.I.; M. Abou Seeda and **S.M. Arafat** (1997). Evaluation of some controlled release N-fertilizers and bio inhibitors in wetland rice ecosystem. Zagazig J. Agric. Res., 24(5): 891-904.
- 22- **Arafat, S.M.** (1998). Evaluation of fertilizing efficiency of bagasse ash and its effect on faba bean growth J. Agric Sci. Mansoura Univ., 23(2): 919-926.
- 23- El-Aila, H.I.; M. Abou Seeda and **S.M. Arafat** (1998). Studies on slow release fertilizers: VI-Combined effects of available water content and slow. Release fertilizers on wheat production. J. Agric. Sci. Mansoura Univ., 23(3): 1329-1336.
- 24- Hammad, S.A.; **S.M. Arafat** and N. Atia (1998). N-efficiency as affected by algalization and N-Sources in rice soils. J. Agric. Sci. Mansoura. Univ., 23(7): 3549-3557.
- 25- **Arafat, S.M.** (1998). Uptake and distribution of cadmium in cucumber plant as affected by nitrogen form. Egypt, J. Soil Sci. 38(1-4): 441-452.
- 26- **Arafat, S.M.**, A. Abd El-Galil and M. Abou Seeda (1999). Improvement of nitrogen fertilizer efficiency with nitrification inhibitors in lowland rice. Pakistan journal of biological sciences, 2(4): 1184-1187.
- 27- Ashour, N., **S.M. Arafat.**, A. Abd El-Haleem., M. Serag., S. Mandour and B. Mekki (1999). Growing halophytes in Egypt for forage production and desertification control. Bull.N R C, Egypt, 24(3): 349-360.
- 28- Abdel Rahman, S.I., **S.M. Arafat**, M.A. Yehia, and M. A. Abou Sedera (1999) Assessment and evaluation of land resources of Darb El Arbien, southwestern desert of Egypt, Int. Conf. In Develop. Of arid lands, Cairo, 23-25 Aug. 1999.
- 29- **Arafat, S.M.** and O.A. El-Hady. (2000).Potential use of natural (manures) and synthetic (hydrogels) conditioners for improving water and fertilizers use efficiency by cotton grown in a sandy calcareous soil. Egyptian Soil Science Society ,Golden Congress on soil and sustainable agriculture in the new century, Cairo, Oct, 23-25,2000.



30- **Arafat, S.M.** (2000). Possibilities of Using Bagasse Ash as a Waste of the Cane Sugar Industry for Sustainable Agriculture and Pollution Preservation. 5th Int. Sym. On Environmental Geotechnology and Global Sustainable Development, 17-23 August, 2000, Belo Horizonte, Minas Gerais, Brazil.

31- **Arafat, S.M. (2001)**. Use and Environmental Impacts of Sludge: Land application of treated sludge and its effect on soil properties and chemical composition of olive fruits. 6th Int. Conf. On the Biogeochemistry of Trace Elements, July 29- August 2, 2001, Univ. of Guelph, Guelph, Ontario, Canada, PP. 432.

32- **Arafat, S..M** and Yassen, A.E. (2002). Agronomic evaluation of fertilizing efficiency of vinasse. 17th World Congress of Soil Science, 14-21 August 2002, Bangkok, Thailand Vol. II, Sym. 13-21, PP. 474.

33- Yassen, A., **Arafat, S.** and Zaghloul, S. (2002). Feather Meal as Potential Sources of Nitrogen as Organic Fertilizer. J. Agric. Sci. Mansoura. Univ., 27(9): 6476-6476.

34- Yassen, A.; **Arafat, S.** and Zaghloul, S.(2002). Mixmizing Use of Rinasse and Filter Mud as by Products of Suger Cane on Wheat Production. . J. Agric. Sci. Mansoura. Univ., 27(11): 7865-7873.

35- **Arafat, S.M.** (2003). The utilization of geo-information technology for agricultural development and management in Egypt. 7th International Specialized Conference on Diffuse Pollution and Basin Management 17-22 August 2003. Dublin, Ireland

36-Tayel, M.Y., **Arafat, S.M.** and Abd El-Hady, M. (2004). Increasing the role of the rainfall in agriculturei- Cereals crops (Wheat), (In press)

37- El- Nahry A.H. and **Arafat, S.M.** (2004). Terrain analyses and soil characteristics as a base for land capability assessment of arable lands, Sinai, Egypt, Egypt J. Remote Sensing & Space Sci., V. (7): 37-52.

38- Hassan, O. A.; Ahmed, M. H. and **Arafat, S.M.** (2005). Environmental Land-Cover/Land-Use Change Detection in the Coastal Zone of the Gulf of Aqaba, Egypt, Using Multi-Temporal Landsat Imagery. Egypt, Egypt J. Remote Sensing & Space Sci., V. (8): 21-38.

39- Friesen, Erik, Miller, Nathan, Stern, Robert, **Arafat, Sayed**, and Abdelsalam, Mohamed G. (2005) Remote Sensing and GIS as a Cyber reconnaissance tool in Northern Ethiopia and Southern Eritrea. Geological Society of America Annual Meeting, October 16–19, 2005, Salt Lake City, Utah, USA, Session No. 44, T41. Geologic Remote Sensing

40- **Arafat, S.M.**; Hassan, O. A. and Ahmed, M. H. (2006) land-use /land-cover change mapping for Gulf of Suez coastal by integrating remote sensing



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and geographical information techniques. , Egypt, Egypt J. Remote Sensing & Space Sci., (In Press).

41- Abdelsalam, Mohamed G., Youssef, Ahmed M., **Arafat**, Sayed M. and Alafarhan, Mohammed (2007). The rise and demise of the new lakes of Sahara. Geological Society of America (GSA) Denver Annual Meeting, 28–31 October, 2007, Colorado Convention Center • Denver, Colorado, USA.

42- El Bastawesy, M., Khalaf, Fikry and **Arafat, S. M.** (2008) The use of remote sensing and GIS for the estimation of water loss from TushkaLakes, south Western Desert, Egypt African Earth Sciences (2008), doi:10.1016/j.jafrearsci.2008.03.006

43- Afify, A.A.; S.M. **Arafat**; N.M. Afify and I.F. Ahmed 2008. Retreating rate estimation of the fertile alluvium in Nile Delta under the urban encroachment, using remote sensing data and GIS techniques. J. of Appl. Sci., 23 (1): 235-250

44- Afify A. Afify, Sayed S. **Arafat**, Aboel Ghar M. and Magdy H. Khader (2010) Physiographic soil map delineation for the Nile alluvium and desert outskirts in middle Egypt using remote sensing data of EgyptSat-1. The Egyptian Journal of Remote Sensing and Space Sciences (2010) 13, 129–135

45- Sayed M. **Arafat**, A.Afify, M.Aboelghar and A.Belal, Rice crop monitoring in Egyptian Nile Delta using Egyptsat-1 data, US-Egypt Workshop on Space Technology and Geo-information for Sustainable Development, Cairo, Egypt 14- 17 June, 2010

46- M. Aboelghar a, S. **Arafat** a, A. Saleh a, S. Naeem b, M. Shirbeny a. and A. Bela. (2010) Retrieving leaf area index from SPOT4 satellite data, Egypt. J. Remote Sensing & Space Sci.,Vol. 13.

47- Sayed, M. **Arafat.**, Afify A. Afify and Nagwan M. Afify (2010) Urban extension impact over Nile delta using remotely sensed data and GIS analysis. 17thInternational Symposium on Space Technology Management and Application General Organization of Remote Sensing GORS, Damascus, Syria, 8-10/11/2010

48- Afify A. Afify, Sayed M. **Arafat**, Aboelghar, M, Nagwan M. Afify and Mona S.Yonis (2010). Delineating rice belt cultivation in the Nile pro-delta of Vertisols using remote sensing data of Egypt Sat-1, 17th International Symposium on Space Technology Management and Application General Organization of Remote Sensing GORS, Damascus, Syria, 8-10/11/2010

49- **Arafat** S,M; Tahoun S.A; Abdel Bary E.A; and Elsayed M.A (2010) Assessment of Land Degradation Processes for Sustainable Environmental Management of Natural Resources in the coastal areas, Egypt, 8th



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International Conference African Association of Remote Sensing of the Environment (AARSE) Addis Ababa, Ethiopia, October 25- 29, 2010

50- Afify A. Afify, Sayed M. **Arafat**, Mohamed A. Aboelghar and Ashraf A. Mohamed (2011) Monitoring the Informal urban expansion over the highly productive alluvium in Nile Delta Apex using EgyptSat-1 data, Journal of Biological Chemistry and Environmental Sciences- June 2011 pp. 31- 42

51- M.A. El-Shirbeny, M.A. Aboelgher, S.M. **Arafat** and A.M. El-Gindy (2011) Mutual influence between climate and vegetation cover through satellite data in Egypt, Proceedings of SPIE, Remote Sensing for Agriculture, Ecosystems, and Hydrology XIII, 19-21 September 2011, Prague, Czech, Vol. 8174

52- A. M. Saleh & A. B. Belal & S. M. **Arafat** (2011) Identification and mapping of some soil types using field spectrometry and spectral mixture analyses: a case study of North Sinai, Egypt, Arab J Geosci, DOI 10.1007/s12517-011-0501-6

53- E.Farg, S.**Arafat**, A.El Gendy and M.S. Abd-Elwahed (2012)] Estimation of Evapotranspiration and Crop Coefficient Kc of Wheat, in south Nile Delta Egypt Using integrated FAO-56 approach and remote sensing data, Egypt. J. Remote Sensing & Space Sci., Vol.15 (1), 83-89

54- Mohammed El-Shirbeny, Mohamed Aboelghar, Sayed **Arafat** and Abdel-Ghany El-Gindy (2012) Assessment of the Mutual Impact between Climate and Vegetation Cover Using NOAA-AVHRR and Landsat Data in Egypt. Arab J Geosci, DOI 10.1007/s12517-012-0791-3

55- Mohamed Aboelghar, Sayed **Arafat**, Abdel-Raouf Ali (2012) Spectral Wheat Yield Prediction Modeling Using SPOT Satellite Imagery and Leaf Area Index, Arab J Geosci, DOI 10.1007/s12517-012-0772-6.

56- M. Aboelghar, S. **Arafat**, M. Abo Yousef, M. El-Shirbeny, S. Naeem, A. Massoud, N. Saleh (2012) Using SPOT data and leaf area index for rice yield estimation in Egyptian Nile delta. The Egyptian Journal of Remote Sensing and Space Sciences (2011) 14, 81–89

57- Nagwan M. Afify, Abdel Aziz S. Sheta, Sayed M. **Arafat**, Mohamed S. Abd-Elwahed and El-Beltagy, A.S. (2012) Study on the impact of urban encroachment over the cultivated Nile sediments using remote sensing and GIS techniques. J. Biol. Chem. Environ Sci., 7 (4), pp. 783-800

58- M.S. Yones , S. Arafat , A.F. Abou Hadid, H.A. Abd Elrahman, H.F. Dahi (2012) Determination of the best timing for control application against cotton leaf worm using remote sensing and geographical information techniques. The Egyptian Journal of Remote Sensing and Space Sciences (2012) 15, 151–160



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59- **Arafat S.M.**, Farg E, Shokr M., El-Kazaz G.(2013) Internet-based Spectral Database for Different Land Covers in Egypt. *Advances in Remote Sensing*, doi:10.4236/ars.2013.***** Published Online

60- **Arafat S. M.**, Mohamed A. Aboelghar, Eslam F. Ahmed (2013) Crop Discrimination Using Field Hyper Spectral Remotely Sensed Data. *Advances in Remote Sensing*, doi:10.4236/ars.2013.***** Published Online

61-Mohamed Aboelghar, Sayed **Arafat** and Eslam Farag (2013) Hyper Spectral Measurements as a Method for Potato Crop Characterization. *International Journal of Advanced Remote Sensing and GIS 2013*, Volume 2, Issue 1, pp. 122-129, Article ID ISSN 2320 - 0243

62-Magaly Koch, Ahmed Gaber , Mohamed H., Gereish , El-Sayed Zaghloul , Sayed M. **Arafat** ,and Mostafa AbuBakr (2013) Multisensor characterization of subsurface structures in a desert plain area in Egypt with implications for groundwater exploration. *Remote Sensing for Agriculture, Ecosystems, and Hydrology XV*, edited by Christopher M. U. Neale, Antonino Maltese, Proc. of SPIE Vol. 8887, 888712 · © 2013 SPIE · CCC code: 0277-786X/13/\$18 · doi: 10.1117/12.2029086

63- **Arafat S. M.**, Mohamed A. Aboelghar, Nasser H. Saleh, Mohamed M. Elsharkawy (2014) Mapping of North Sinai Land Cover According To FAO – LCCS. *The Egyptian Journal of Remote Sensing and Space Sciences*, 17(1), pp. 29-39

64- Ahmed Gaber, Noura Darwish, Yasser Sultan, Sayed **Arafat** and Magaly Koch (2014) Monitoring Building stability in Port-Said city, Egypt using different SAR interferometry. *International Journal of Environment and Sustainability*, Vol. 3, No 1, pp.14- 22

65- Ghada A. Khder, Usama K. Abdel-Hameed, Mohamed A. Aboelghar and **Sayed M. Arafat** (2014) Diversity and Taxonomic Implication of Angiosperms in Sinai Peninsula as Revealed by Hyperspectral Remote Sensing. *International Journal of Advanced Remote Sensing and GIS 2014*, Volume 3, Issue 1, pp. 748-768, Article ID Tech-320

66- Abdel-Hameed, U. K., Khder, G. A., Tantawy, M. E., Abo-eleinein, M. M., Arafat, S. M., & Aboelghar, M. A. (2015). A Contribution of Hyperspectral Remote Sensing Criteria versus Morphological Traits in Taxonomy of Flowering Plants. *The Egyptian Journal Of Experimental Biology (Botany)*, 11(1), 89-101.

67- Abutaleb, K., Ngie, A., Darwish, A., Ahmed, M., Arafat, S., & Ahmed, F. (2015). Assessment of urban heat island using remotely sensed imagery over



Greater Cairo, Egypt. *Advances in Remote Sensing*, 4(01), 35.

68- El-Sharkawy, M. M., Farg, E., Arafat, S. M., & El-Wahed, M. A. (2016). Applicability of Monitoring Peanut Reflectance Using Hyperspectral Data for Precision Agriculture in East Nile Delta, Egypt. *Journal of Agriculture and Ecology Research International*, 1-10.

69- Farg, E., Arafat, S., El-Wahed, M. A., & El-Gindy, A. (2016). Evaluation of water distribution under pivot irrigation systems using remote sensing imagery in eastern Nile delta. *The Egyptian Journal of Remote Sensing and Space Science*.

70- Mohamed AE Abdel Rahman, Salah A Tahoun, and Sayed M Arafat (2017) Effect of Land-Use Changes on Agricultural Soil at Northern Part of Suez Canal Region, *International Journal of Agricultural Research and Crop Sciences*, Volume 1 Issue 4.

71- Nagwan M. Afify, Abdel Aziz S. Sheta, Sayed M. Arafat, Afify A. Afify, Mohammed S. Abd-Elwahed and Adel S. El-Beltagy (2017). LAND-COVER CLASSIFICATION FOR EAST SUEZ CANAL REGION USING HYPERSPETRAL EO-1 DATA, *Eur. Chem. Bull.*, 6(11), 525-530.

72- Khdery, G., Arafat, S., Aboelghar, M., Tantawy, M., Abou-El-Enain, M., & Kamal, U. (2017). SELECTION OF OPTIMAL HYPERSPETRAL VEGETATION INDICES FOR ESTIMATING CHLOROPHYLL CONTENT OF SOME PLANT SPECIES. *European Chemical Bulletin*, 6(11), 531-535.

73- Arafat, S. M., Abutaleb, K., Farg, E., Nabil, M., & Ahmed, M. (2018). Identifying Land Use Change Trends Using Multi-temporal Remote Sensing Data for the New Damietta City, Egypt. *Journal of Geography, Environment and Earth Science International*, 1-12.

74- Safwat S. Gabr, Eslam F. Farg, Turki M. Habeebullah, Sayed M. Arafat, (2018) Irrigation water consumption and its impact on the groundwater aquifer of Wadi Uranah, Makkah, Saudi Arabia using remote sensing techniques, *The Egyptian Journal of Remote Sensing and Space Science*.

75- Farg, E., Ramadan, M. N., & Arafat, S. M. (2019). Classification of some strategic crops in Egypt using multi remotely sensing sensors and time series analysis. *The Egyptian Journal of Remote Sensing and Space Science*.

76- Khdery, G. A., Farg, E., & Arafat, S. M. (2019). Natural vegetation cover analysis in Wadi Hagul, Egypt using hyperspectral remote sensing approach. *The Egyptian Journal of Remote Sensing and Space Science*.

77- Yones, M. S., Khdery, G. A., Dahi, H. F., Farg, E., Arafat, S. M., & Gamil, W. E. (2019, October). Early detection of pink bollworm *Pectinophora gossypiella* (Saunders) using remote sensing technologies. In *Remote Sensing for Agriculture, Ecosystems, and Hydrology XXI* (Vol. 11149, p. 111491C). International Society for Optics and Photonics.