

Curriculum Vitae

First Name: Eyad
Last Name: Al-Khaled
Father Name : Ahmad
Place and Date of Birth: Damascus 20/03/1971
Nationality: Syrian
Work: In General Organization of Remote Sensing,
Damascus, Syria

- Agricultural Engineer (1996-2000)
- Researcher Assistant (2000-2005)
- Researcher (2005-2012)
- Senior Researcher (2012-2016)
- **Director of Research (2016_)**
- **Head of the Agricultural Studies and Research Department (2019_)**

Native language: Arabic
Other languages: English **Level:** middle
Home Address: Yafour – Damascus Countryside - Syria
Mob: (+963) 944 293633 _ (+963) 996 918668
Tel: (+963) 11 3947168
Office: (+963) 11 3943691
E-Mail: dr.eyadalkhaled@gmail.com
dr.eyadalkhaled@org.com

Certificates:

B.Sc. Agricultural (Agronomy)., Damascus Univ., Syria. 1995

M.Sc. Agric. Sc. (Agronomy & RS)., Ain Shams Univ., Egypt. 2000. Field Crops Monitoring and Yield Predication Using Remote Sensing **“Spectral**

Characteristics of Wheat Plant at Different Stages of Growth and Their Relation to The Yield”

Ph. D. Agric. Sc. (Agronomy & RS), Ain Shams Univ., Egypt. 2005. Field Crops Monitoring and Yield Predication Using Remote Sensing. “**Spectral Reflectance of Some Field Crops in Relation to Growth and Yield”**

Published Papers:

27 published papers in science periods:

1. Abd El-Gawad, A.A.; H.K. Zaki.; A.M. Abo-Shetaia.; **E.A. Al-Khaled** (2000). A Try to Apply Spectral Reflectance of Wheat Plant for Predicting Yield. Egypt J. Appl. Sci. 15(8):375-397.
2. Abo-Shetaia, A.M.; M.A. Ashoub.; M. Ismail and **E.A. Al-Khaled (2005)**. Estimation of Some Summer Crops Area and Yield Prediction Using Remote Sensing Techniques. Annals Agric. Sci., Ain Shams Univ., Cairo, 50 (2):481-498.
3. **Al-Khaled, E.A.**; A. A Abd El-Gawad.; A.M. Abo-Shetaia.; M.A. Ashoub and H.K. Zaki (2005). Spectral signatures and identification of some summer crops using remote sensing techniques. Annals Agric. Sci., Ain Shams Univ., Cairo, 50(1): 65-82.
4. Ghazala, J. M., Al-Atwan, S and **E.A. Al-Khaled** (2010). Using Remote Sensing Techniques in the Estimation of Cotton (*Gossypium hirsutum* L.) Area with their Cost Compared with Traditional Methods in Al- Hassaka Governorate (Kahtanya Department). The Arab Journal for Arid Environments (3) 2:46_56.
5. **Al-Khaled, E.A.** and A.S.Makdah (2013) Study the Spectral performance of Healthy of Infected Wheat plants with left Rust (*puccinia recondita*). Journal of Remote Sensing. 24: 36-50.
6. **Al-khaled, E.A.** Al-Atwan, S and Ghazala, J. M. (2016) Enhancing the Accuracy of the Statistical Number for Cotton Area Estimated by Using Remote Sensing Techniques, Compared with Traditional Methods in Al-Hassaka Governorate, (Al Jawadya and Al Kahtanya Directorates) Journal of Remote Sensing. 27: 80-93.
7. **Al-Khaled, E.A.**, Al-kai, B and A.S.Makdah (2016). Early Detection of Brown Rust (Leaf Rust) *Puccinia recondita* in Wheat Plant Using Remote

- Sensing Techniques. Syrian Journal of Agricultural Research. (3) 1: 191-201.
8. Al Atwan, S. Al-Jbawi, E, **Al-Khaled, E.A.**, and Jaafar, A (2016). Economic Comparison Between Autumn and Summer Sowing of Sugar Beet in Al Raqqa Governorate, Syria. Syrian Journal of Agricultural Research. (3) 1: 126-135.
 9. **Al-Khaled, E.A.** and Kassouha. R (2016). Monitoring Changes in Vegetation cover in Agriculture Stability Zones of Syria using Time Series NDVI/MODIS during 2000-2012 Syrian Journal of Agricultural Research. (3) 2: 188-204.
 10. **Al-Khaled, E.A.** Edris, Y, Ahmad, R and Rassok, A (2017). Detecting the spatial and periodical changes in biomass using the NDVI/MODIS images in the Syrian governorates during 2000-2012. Journal of Remote Sensing. 28: 42-36.
 11. Edris, Y. **E.A. Alkhaled** and Almekdad, H (2017). Using Normolized Deiferential Vegetation Index (NDVI) and Moisture Stress Index (MSI) to Detect the Infection with Water and Nitrogen Deficits in Barley. Journal of Remote Sensing. 28: 5-20.
 12. **Al-khaled, E. A.** Nemr, Y and Alhumaer, I (2017) Response of Some Spectral Vegetation Indices (Broad and Narrow Band) under Irrigation and Nitrogen Fertilization Factor on Wheat Crop. Syrian Journal of Agricultural Research. 4 (4): 79-101.
 13. Hmeidan, G. Moussa, S. Yaghi, A. Alboody, A. Daoud, N and **Al-Khaled, E. A. (2018)**. Estimation Plant Dry Matter Productivity for Al-Sweeda Badia (Syria) By Deferent Processing Levels of L8 Satellite Images. The Arab Journal for Arid Environments. 11(1-2):91-104.
 14. **Al-khaled, E. A.** Hasson, O. Waked, B. Ghazaleh, J. Ismail. A and Hmeidan, G. (2018). Estimation of The Area of Wheat, Barley and Chickpeas Crops in The Sweida Governorate Using Remote Sensing Technology. Syrian Journal of Agricultural Research. 5(3):98-112.
 15. Karmoka, S. Ahmad, A. A and **Al-khaled, E. A.** (2019) Identifying Drought Classes in Northwest Syria Using MODIS Satellite Image Spectral Indices EVI, LAI, TVI. Scientific Journal of King Faisal University: 20(1): 29-37.
 16. Mohammad, W. N. **Al Mesber, W and. Alkhaled, E. A. (2020)** Relationship between Rainfall and Surface Soil Moisture within Time

- series in Syrian Coastal Using Remote Sensing Data. Syrian Journal of Agricultural Research. 7(3): 293-314.
17. Al-kai. B, **Al-khaled. E. A** and Makdah. A.S. Effect of Brown Rust on the Bread Wheat Yield. Journal of Albaath university. Accepted 28/12/2010
 18. Al-kai. B, **Al-khaled. E. A** and Makdah. A.S. Effect of Nitrogen Fertilizer on Brown Rust on Some Varieties of Durum Wheat Triticum durum and its Yield. Journal of Albaath university. Accepted 26/1/2011.
 19. **Al-khaled. E. A.** Farhood, A and Ghazala. Identification Some Summer Field Crops Using Hyperspectral Remote Sensing Data. The Arab Journal for Arid Environments Accepted 21/10/2013
 20. **Al-khaled. E. A.** Atwan, S. Al-Jbawi, E and Jaafar. Defining Land Suitability for Sugar Beet Cultivation in Summer Time in AL-Raqqa Governorate Using GIS. The Arab Journal for Arid Environments. Accepted 24/2/2015
 21. Alhumaer, I. Nembr and **Alkhaled, E. A.** The Effect of Irrigation and Nitrogen Ntilization on Yield Components Durum (Triticum ssp) Crop under Rif Dimashq Countryside of wheat. The Arab Journal for Arid Environments. Accepted 30/4/2015
 22. **Al-khaled. E. A.** Alhaj, A and Ahmad, G. Using NDVI/MODIS Images to Detective the Spatial and Periodical Changes of Biomass During 2000-2012 in Syria. The Arab Journal for Arid Environments. Accepted 22/10/2015
 23. Mohamad, L. Al-Atwan, S. Al-Mokdad, F and **Al-khaled, E. A.** Econometric Analysis of the Olive Cost Function in Alsafsafa District (Tartous Governorate) with the Help of Geographic Information System. The Arab Journal for Arid Environments. Accepted 24/2/2016.
 24. **Al-khaled, E. A.** Al-Mokdad, F Al-Atwan, S. and Mohamad, L. Econometric analysis of the Olive Production Function in Alsafsafa District (Tartous Governorate) with the Help of Geographic Information System. Journal of Remote Sensing. Accepted 11/7/2016.
 25. Hmeidan, G. Alboody, A. Moussa, S. Daoud, N. Yaghi, A and **Al-haled, E. A.** study the reality of protected area and impact protection system followed Al-Sweeda Badia (Syria) using L8 Satellite Images. The Arab Journal for Arid Environments. Accepted 18/9/2017.
 26. Karmoka, S. Ahmad, A. A and **Alkhaled, E. A.** Using some Spectral Vegetation Indexes from the MODIS Image Products to Study the Drought

- in Northwest Syria for the period 2000-2016. The Arab Journal for Arid Environments (under publishing accepted on 2/11/2017).
27. Ghazala, j. Ismail, E and **AlKhaled, E. A.** Preparation of a land use Map Using remote sensing and GIS for Al Thaala sub district in Al-Swaidaa Governorate. Journal of Albaath university. Accepted 8/3/2018. No 40 _ 2018 under press
28. Ghazala, j. Ismail, E and **AlKhaled, E. A.** Dynamic Spatial Linking of Agricultural Digital Maps Through the world wide web. Journal of Aleppo university. Accepted 11/7/2018. No 130 _ 2018 under press

Scientific reports and other publications:

- 1 - **AlKhaled, E. A (2006).** *FieldSpecPrp RS3 User Manual.* General Organization of Remote Sensing. Damascus, Syria.
2. - **AlKhaled, E. A and Yaghi, A (2007).** Report: *Radiometric Measurement Program for Summer Crops.* project “surveying natural and agricultural resources in the eastern governorates using remote sensing techniques and geographic information systems” cooperation with the Ministry of Agriculture and Agrarian Reform and the General Organization of Remote Sensing. Damascus, Syria.
3. **AlKhaled, E. A (2008).** Report: *Crop Area Estimation. The General Methodology of the Program.* project “surveying natural and agricultural resources in the eastern governorates using remote sensing techniques and geographic information systems”. cooperation with the Ministry of Agriculture and Agrarian Reform and the General Organization of Remote Sensing. Damascus, Syria.
- 4- **AlKhaled, E. A (2010)** Report: *Radiometric Measurements of the Olive Tree.* Project “Designing a methodology for the statistics of olive trees using remote sensing techniques and studying their spectral response during the most important stages of their phenology”. General Organization of Remote Sensing. Damascus. Syria. cooperation with Centre National de la cartographie et de la Télédétection. Tunisia.
5. - **AlKhaled, E. A (2014).** Report: *Using NDVI in Monitoring the Area Changes the Agricultural Land Using MODIS Images in Syria.* General Organization of Remote Sensing. Damascus. Syria.
- 6 - Ibrahim, M and **AlKhaled, E. A (2014).** Report: *Monitoring Oil Pollution and The Movement of Oil Spots on the Syrian-Lebanese Coast Using Radar Data Images.* Syrian-Lebanese Joint Research Cooperation Program 2012-2013. General Organization of Remote Sensing. Damascus. Syria.
- 7 - **AlKhaled, E. A (2016).** Report: *Radiometric Measurements Program, Spectral Response and Identification of Winter Strategic Crops in Sweida*

Governorate. “Project of Survey of Natural and Agricultural Resources using Remote Sensing Techniques and Geographic Information Systems in Syria” cooperation with the Ministry of Agriculture and Agrarian Reform and the General Organization of Remote Sensing. Damascus, Syria.

8 - AlKhaled, E. A (2016). Report: *Crop Area Estimation Program, Determination of Crop Area of the Major Winter Crops in Sweida Governorate Using Remote Sensing Techniques*. Project “Survey of Natural and Agricultural Resources using Remote Sensing Techniques and Geographic Information Systems in Syria” cooperation with the Ministry of Agriculture and Agrarian Reform and the General Organization of Remote Sensing. Damascus, Syria.

9- AlKhaled, E. A (2017). Report: *Drought Monitoring using Remote Sensing Technology in Syria during the period 2001-2015* cooperation with the Drought and Natural Disaster Management Fund. Ministry of Agriculture and Agrarian Reform. and the General Organization of Remote Sensing. Damascus, Syria.

Projects:

In Egypt:

- Participation in the project “Determination the area of the main crops (Wheat, Clover, Cotton and Rice) in Egypt” (2005). Remote Sensing & GIS Unit, Soil, Water, and Environment Research Institute, Agricultural Research Center, Ministry of Agriculture
- Participation in the project “Spectral Characteristics of the main Crops (Wheat, Cotton, Corn and Rice) under the Egyptian conditions” (1998-2005). Remote Sensing & GIS Unit, Soil, Water, and Environment Research Institute, Agricultural Research Center, Ministry of Agriculture

In Syria:

- Head of the Radiometric Measurements Program in the project “Natural and Agricultural Resources Survey of the Eastern Provinces using Remote Sensing Techniques and Geographical Information Systems in Syria”. (Phase I: 2004-2009 Comprehensive study on the most important crops grown in the Eastern Governorates of Hasakah, Raqqa and Deir Al-Zour)
- Head of the crop area estimation program in the project “surveying the natural and agricultural resources of the eastern governorates using remote sensing techniques and geographic information systems in Syria” (Phase I: 2004-2009 Comprehensive study on the most important crops grown in the Eastern Governorates of Hasakah, Raqqa and Deir Al-Zour)
- Head of the project “using remote sensing techniques in the prediction of Rhizomania disease in sugar beet fields”.

- Participation in the project “Designing a methodology for the statistics of olive trees using remote sensing techniques and studying their spectral response during the most important stages of their phenology”.
- Head of the Radiometric Measurements Program in the project “surveying the natural and agricultural resources using remote sensing techniques and geographic information systems in Syria”. (Phase II: 2010-2017 Comprehensive study on the most important crops grown in Syria)
- Head of the Crop Area Estimation Program in the project “surveying the natural and agricultural resources using remote sensing techniques and geographic information systems in Syria”. (Phase II: 2010-2017 Comprehensive study on the most important crops grown in Syria) – Coordinator and supervisor of training in the project “surveying the natural and agricultural resources using remote sensing techniques and geographic information systems in Syria”.
- Supervisor of the work of the Radiometer Committee in the General Organization for Remote Sensing - Syria.
- Head of the project “Using NDVI in Monitoring the Area Changes the Agricultural Land Using MODIS Images in Syria”.
- Participation in the project “monitoring oil pollution and the movement of oil spots on the Syrian-Lebanese coast using radar data images”. Syrian-Lebanese Joint Research Cooperation Program 2012-2013.
- Head of the project “drought Monitoring using remote sensing techniques in Syrian Arab Republic”. cooperation with the Drought and Natural Disaster Management Fund. Ministry of Agriculture and Agrarian Reform. 2014-2017
- Head of the project to “predict the incidence of peacock eye disease on olive trees by studying its spectral signature using a spectroradiometer device”. cooperation with the General commission of Scientific Agricultural Research.2018-2020.
- Head of the project to “Estimation of Crop Area and Yield of Wheat and Barley in Syrian Arab Republic, (Pre-CFSAM_ season 2017_2018)”. cooperation with Food and Agriculture Organization (FAO) and Ministry of Agriculture and Agrarian Reform.
- Head of project “surveying the natural and agricultural resources using remote sensing techniques and geographic information systems in Syria”. (Phase III: 2018-2025)
- Head of the Crop Area Estimation Program in the project “surveying the natural and agricultural resources using remote sensing techniques and geographic information systems in Syria”. (Phase III: 2018-2025 Comprehensive study on the most important crops grown in Syria)

- Head of the project to “Estimation of Crop Area and Yield of Wheat and Barley in Syrian Arab Republic, (Pre-CFSAM_ season 2018_2019)”. cooperation with Food and Agriculture Organization (FAO) and Ministry of Agriculture and Agrarian Reform.
- Head of the project “drought Monitoring using remote sensing techniques in Syrian Arab Republic”. cooperation with the Drought and Natural Disaster Management Fund. Ministry of Agriculture and Agrarian Reform. Phase II: 2019-2026
- Head of the project. Using Remote Sensing Technology to Assess the Impact of FAO’S Irrigation Rehabilitation Projects on Agricultural Productivity cooperation with Food and Agriculture Organization (FAO) and Ministry of Agriculture and Agrarian Reform.2019.
- Head of a project to build a spatial database for holdings larger than 25 dunums of citrus fruits in Lattakia and Tartous governorates. In cooperation with the Ministry of Agriculture and Agrarian Reform. 2019

Training course:

- Using the Remote Sensing in Agricultural Application. That was held between 20/01/2002 to 19/02/2002 at Remote Sensing & GIS Unit. Soil, Water, and Environment Research Institute. Egypt.
- GIS/GPS training course, which was held at Remote Sensing & GIS Unit. Soil, Water, and Environment Research Institute. Egypt. Between 26/03/2005 to 30/03/2005 by ESRI.
- I have been trained for three years since 01/09/2002 to 01/09/2005 at Remote Sensing & GIS Unit. Soil, Water, and Environment Research Institute. Egypt. In the following:
 - Using Radiometer to study the spectral reflectance of many crops.
 - Field check and training area.
 - Image processing.
 - Crop area estimation.
 - Yield predication.
 - GIS/GPS
 - Layout
- Training course titled “using remote sensing in estimation of yield crops”, from 10 to 23/04/2006, that was held at Remote Sensing & GIS Unit. Soil, Water, and Environment Research Institute. Egypt. By ACSAD.
- Advanced training course titled “Satellite Image processing”, from 24/6 to 5/7/2007 that was held at General Organization of Remote Sensing (GORS), Damascus, Syria. By Iranian Space Agency.
- Participation in training course titled “using ASTER image in estimation of area and yield crops”, from 14/7 to 3/8/2007, that was organized by

- ACSAD in the General Organization of Remote Sensing (GORS), Damascus, Syria.
- Training course titled “Satellite Image processing using ERDAS”, from 22 to 26/1/2008 that was held at Centre National de Télédétection (CNT). Tunisia. Within executing common project called "Planning Methodology for Oil Trees Inventorial, Using Remote Sensing techniques and GIS".
 - Training course titled “Remote Sensing and Digital Image processing”, organized by Training and Research Division at National Center for Remote Sensing and Geo-Information (NCRG), SUPARCO HQs, Karachi, Pakistan from 07 to 18 April 2008.
 - Training course titled “Land Use Land Cover System”, organized by (ACSAD), with the cooperation of gtz and FAO from 07 to 20 November 2009.
 - Training course titled “Introduction to Earth Engine” United Nations World Food Programme (WFP). At General Organization of Remote Sensing (GORS). Damascus, Syria, from 05 to 08 May 2019.

Conferences and Symposiums:

Participation in many conferences and symposiums about the analyze of space data in purpose of agriculture and other related issues.

Scientific Thesis Supervision:

- 7 Master Thesis:
 - 1- Economics Comparison for Cotton Crop Area Estimation Using Remote Sensing Techniques and The Traditional Methods in Hassaka Governorate. Jalal Ghazalah. Damascus University. Faculty of Agriculture. Department of Agricultural Economic. Degree awarded 2010.
 - 2- Early Detection of Brown Rust (Leaf Rust) *puccinia recondita* in Wheat Plant Using Remote Sensing Techniques. Al-baath University. Faculty of Agriculture. Department of Pant Protection. Degree awarded 2011.
 - 3- Economic comparison for the cultivation of sugar beet crop between Summer & Autumn Time and Using Remote Sensing Techniques to make a Proper map for Growing Locations (Al Raqqa Governorate). Alaa Jaafar. Damascus University. Faculty of Agriculture. Department of Agricultural Economic. Degree awarded 2014.
 - 4- Using Some Spectral Indices to Evaluate the Spectral Response of Wheat its Growing under the Effect of Irrigation and Fertilization. Iman Alhumaer. Damascus University. Faculty of Agriculture. Department of Field Crops. Degree awarded 2015.
 - 5- Production Economics of Olive Crop with the Help of Remote Sensing Techniques in the Tartous Governorate (Alsafsafa District). Louay

- Mohammad. Damascus University. Faculty of Agriculture. Department of Agricultural Economic. Degree awarded 2016.
- 6- Study of Changing Vegetation in Northwest Syria and its Relation to Drought Using MODIS Images. Souzan Karmoka. Damascus University. Faculty of Agriculture. Department of Renewable Natural Resources and Environment. Degree awarded 2019.
 - 7- The economics of the Rosa damascena and identifying suitable places for cultivation in Damascus countryside using remote sensing techniques. Registration 2018.
2 PhD Thesis:
 - 8- Sound Management of Agricultural Resource Data Using Remote Sensing Techniques and Based on Agricultural Information System Compared to The Traditional Method in Al-Thalaa Sub District in Al-Sweida Governorate. Jalal Ghazala. Damascus University. Faculty of Agriculture. Department of Agricultural Economics. Degree awarded 2019.
 - 9- Studying Changes of the Economic Reality of the Potato Crop in Tartus Governorate by Using Mathematical Modeling and Remote Sensing Techniques During the Current Crises. Louay Mohammad. Tishreen University. Faculty of Agriculture. Department of Agricultural Economics. Registration 2017.
 - 10- The economic impact of land use changes in light of the current crisis of the coastal plain using remote sensing techniques. Damascus University. Faculty of Agriculture. Department of Agricultural Economics. Registration 2018.

Training (Trainer):

- Participation to exercise in many training courses (1500 hours training) in the following:
 1. Theoretical basis of remote sensing.
 2. Using ERDAS software to process and analyze the space images.
 3. Classification and analyzing space images to separate the plant cover and to identification the crops.
 4. images interpretation.
 5. Spectral measurements and reflectance characteristics of plant cover.
 6. Using ERDAS software to process and analyze the MODIS images.
 7. statistical analysis

Skills

- 1- Office software _ very good

- 2- Image Processing _ Erdas Imagine v.2015 software_ Very good
- 3- Image Processing ENVI. V.5.3 software_ good
- 4- ArcGIS. V.10.5 software _ESRI_ good
- 5- statistical analysis. SPSS. V.20 software_ very good
- 6- Photoshop software_ good

Eyad Ahmad Alkhaled