



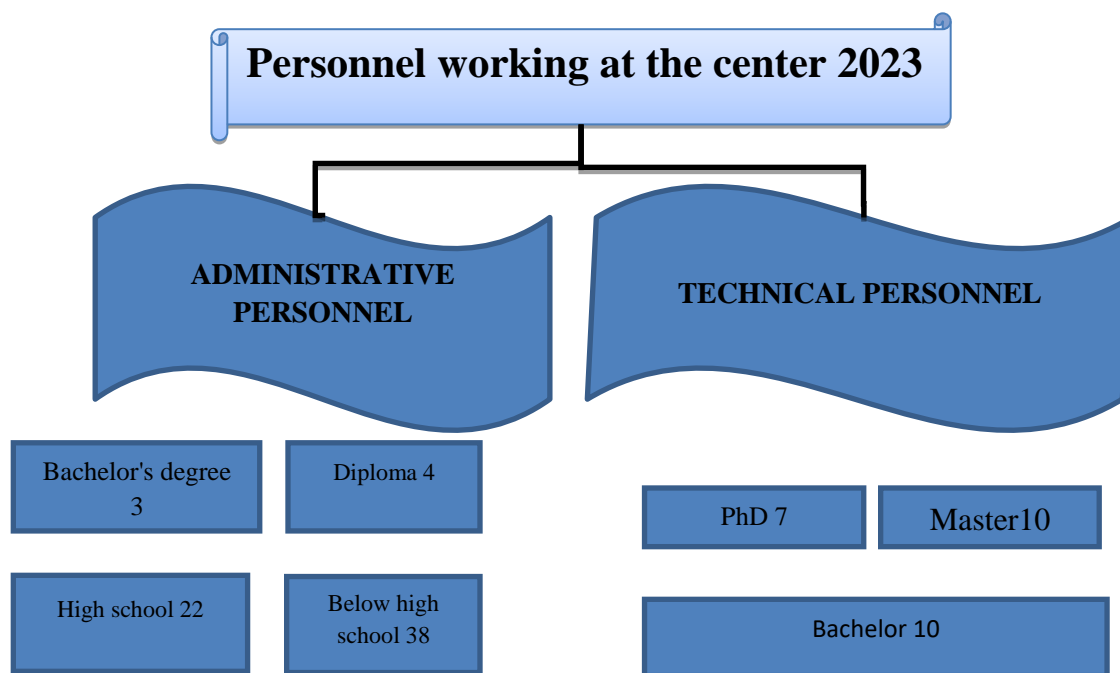
المركز الوطني للبحوث الزراعية
National Agricultural Research Center

RAMTHA AGRICULTURAL RESEARCH CENTER

Ramtha Agricultural Research Center established in 1988 under the name (Ramtha Regional Center for Agricultural Services), it was one of eight regional centers affiliated with agricultural research at that time. It is located in the north of Jordan, close to the Jordan University of Science and Technology, away in the southern of Ramtha about 10 km.

GEOGRAPHICAL LOCATION: 35.97770463318119 ,32.49295152993364

1- Ramtha Agricultural Research Center Personnel



2- Working areas of Ramtha Agricultural Research Center

IRBID: Irbid Governorate is located at a longitude: of 35.8478965 degrees east, and latitude: of 32.5569636 degrees north. Area: The area of Irbid Governorate is approximately 1,571.8 square kilometers. It's bordered by the north of Syria, to the west by Palestine, to the east by Mafraq Governorate, and the south by the governorates of Balqa, Ajloun, and Jerash. Irbid Governorate includes (9) districts and (18) municipalities.



JERASH: Jerash Governorate located at a longitude of: 35.84 degrees east, and a latitude of 32.58 degrees north. The area of the governorate is (410) square kilometers within the northern Jordanian region. In its western part, the maximum distance between the northernmost point and the southernmost point is about 28 km, and between the westernmost point and the easternmost

point is about (31). Jerash governorate includes (Qasabat Jerash District), two districts (Barma District and Mastaba District), and five municipalities.

AJLOUN: Ajloun Governorate is located at longitude: 35.7516844 degrees, and latitude: 32.3325584 degrees. The area of Ajloun Governorate is approximately 419.6 square kilometers in the northwestern corner of the Jordanian capital Amman at (76) km distance. Ajloun Governorate includes two districts (Qasabat Ajloun and Kafranja District), as well as two districts (Sakhrah and Arjan District), it includes five municipalities (Great Ajloun Municipality, New Kafranja Municipality, Al-Junaid Municipality, Al-Ayoun Municipality, Municipality (Shifa).

3- Projects implemented at Ramtha Agricultural Research Center

Implementing research projects to find scientific solutions based on scientific experiments and realistic results. The center has three research departments:

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- Ramtha Agricultural Research Station Department, **9 projects**
 - Maru Agricultural Research Station Department, **11 projects**
 - Ramtha Non-Conventional Water Research Department, **2 projects**
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– **Ramtha Agricultural Research Station Department**

№	Project name	Name of coordinator/Participant(s)
1	Effect of different levels of potassium on yield and fruit quality of table grape (<i>Vitis vinifera</i> L.) cv. Red Globe	Dr.Hamzeh Rawashdeh& Dr.Mazen Al Kelani
2	Use of Genetic Diversity and Evolutionary Plant Breeding for Enhanced Farmer Resilience to Climate Change, Sustainable Crop Productivity and Nutrition under Rainfed Conditions	Dr. Nawal Al-Hajjaj, Eng. Nawar Al-Omari, .Eng. Jihan Naseer Eng. loai al dawood
3	National Barley Breeding program	Dr. Nawal Al-Hajjaj, Eng. Maysoon Ababna
4	Studying of morphological and productive traits of local chickens and conservation	Mustafa Khwaileh/ Sameer Suleiman, Eng. loai al dawood, Eng.jumana hijazi
5	Rural Economic Growth and Employment (Promoting the cultivation of drought- Project tolerant vegetable crops	Dr. Mazen Al-Kilani, Eng. Eng .Jehan Naseer
6	Rediscovery and development of ancient plants in drought tolerant environments(Field School)	Dr. Manar Al-Talhouni and Eng. Ghaida Masoud
7	أثر المعاملات على نسبة وسرعة انبات العكوب	Eng. Ghaida Masoud, Eng. Jehan Naseer
8	Rural Economic Growth and Employment	<p style="text-align: center;">(Food industry)</p> <p style="text-align: center;">Eng. Jihan Naseer, Eng. Ghaida Masoud</p> <p style="text-align: center;">(Medicinal and Aromatic Plants)</p> <p style="text-align: center;">Eng. Nawar Al-Omari + Eng. loai al dawood</p> <p style="text-align: center;">(fruit trees)</p> <p style="text-align: center;">Dr. Mazen Al-Kilani,</p>
9	Supporting Agricultural Services for Small Farmers Project (JORDAN HORTIFUTURE)	Eng.Yahya Abu Sini Dr.Mazen Kilani

- Maru Agricultural Research Station Department

№	Project name	Name of coordinator/Participant(s)
1	Wheat and Barley Seed Increase Project	Eng.Yahya Bani-Khalaf,Eng.Ahmad Bataineh
2	National Wheat Breeding Program	Eng.Yahya Bani-Khalaf,Eng.Ahmad Bataineh, Eng.Yansi Kaswneh, Eng.Shahenaz Besharat
3	National Barely Breeding Program	Dr. Nawal Al-Hajjaj, Eng.Ahmad Bataineh, Eng.Yansi Kaswneh, Eng.Shahenaz Besharat
4	National Food Legume Breeding Program	Eng.Ahmad Bataineh, Eng.Yansi Kaswneh, Eng.Shahenaz Besharat
5	Technical concept on implementing Field Experiment for Testing Locally Produced Compost	Dr.Nabeal Banihani, Dr.Mohamad Refai, Eng.Yahya Bani-Khalaf,Eng.Ahmad Bataineh, Eng.Yansi Kaswneh,Eng.Mohamad Abdallah, Dr.Fatima Bani Khaled
6	Activity of Introducing Saf Flower and Saffron as Alternate Crop	Eng.Ahmad Bataineh, Eng.Osama Meqdadi
7	Evaluation of Different Quinoa Genotypes Under Jordanian Environmental Conditions to Help in Climate Change Adaptation and Enhancement of Food Security.	Dr.Iyad Musallam, Eng.Ahmad Bataineh, Eng.Osama Meqdadi
8	Pollinators	Eng.Ahmad Bataineh + Eng. Firas Haddad + Eng. Ghaith Obaidat
9	MEDI Bees	Eng. Banan Shaqour + Eng.Ahmad Bataineh +

		Eng. Firas Haddad + Eng. Ghaith Obaidat
10	Establishment of Specialized Apiary For Breeding of Honey Bee Queens	Eng.Ahmad Bataineh, Eng.Osama Meqdadi
11	The Use of The Extracts of Wild Plants for Varroa Control, to Improve Bee Hives Management and Permit Organic Production of Honey	Eng.Ahmad Bataineh, Eng.Osama Meqdadi, Dr.Mazen Kelani

- Ramtha Non-Conventional Water Research

N^o	Project name	Name of coordinator/Participant(s)
1	Effect of using different irrigation systems to increase the growth and productivity of alfalfa plants	Dr.Naem Mazahrih, Dr.Nabeel Bani hani, Eng.Badr Alomari, Eng.Ahmad Bdour, Eng.Ahmad Abo dalo
2	Effect of using irrigation with treated waste water on productivity and quality of Almehrass olives	Dr.Salam Ayoub, Eng.Badr Alomari, Eng.Ahmad Bdour, Eng.Ahmad Abo dalo

4- Radio, Television and Newspaper Reports:

- TV interview with His Excellency Engineer Yahya Bani Khalaf, Director of Ramtha Agricultural Research Center, in the “ARD AL KHAIR” program. Wednesday 6-7-2023, episode link:
https://www.youtube.com/watch?v=kEnv_ZwNyk
- TV interview with Dr. Abdallah aldahadha on the New Day program, Irbid Governorate, about hydroponics. Link to the episode:
<https://www.youtube.com/watch?v=FIPpEVBT7U8>
- TV interview with Agricultural Engineer Ghaida Masoud on the (ARD AL KHAIR) program Wednesday 6/14/2023, episode link:
<https://www.youtube.com/watch?vrPhZIdQt4TU>
- TV interview with fellow agricultural engineer Nawar Al-Omari on the (ARD AL-KHAIR) program, Thursday 3-2-2023, link to the episode:
<https://youtu.be/ggv5eezaopQ?siZWOAewz7jbC2RJPq>
- Radio interview with agricultural engineer Nawar Al-Omari on University of Jordan, (DAMMA WARD) program, link to the episode
[https://web.facebook.com/watch/live/?extidCL-UNK-UNK-UNK-AN_GK0T- :
GK1C&mibextid=9R9pXO&ref=watch_permalink&v=572833418118239](https://web.facebook.com/watch/live/?extidCL-UNK-UNK-UNK-AN_GK0T-:GK1C&mibextid=9R9pXO&ref=watch_permalink&v=572833418118239)
- Dr. Abdallah aldahadha: **Al-Ghad** - Experts: The agricultural calendar serves producers and consumers, 4/17/2023
- Dr. Abdallah aldahadha: **Al-Ghad** - April's rains dispel farmers' fears of irrigation water scarcity **Al-Ghad** 4/14/2023
- Dr. Raed ABDALQADER: Published article (The role of the private sector in developing the Jordanian economy in light of economic crises) **Nabd**, publication date: 5/21/2023
- Dr. Raed ABDALQADER: Published article (Repercussions of the Russian war on wheat's agreement) **Go24**, publication date: 07/20/2023.

5- Scientific Papers Published by the Center's Researchers

Abdallah Aldahadha, Nawal Alhajaj, Yahya Shakhathreh, Yahya Bani Khalaf, Nezar Samarah, Eyad Alzoubi. 2024. Seed priming improved the physiological parameters, growth, and yield of durum wheat varieties under tillering and anthesis drought stress conditions. Australian Journal of Crop Science. Accepted paper .

Bani Khalaf, Y., A. Aldahadha, O. Migdadi, and N. Samarah. 2024. Boron and magnesium foliar application increase grain yield of durum wheat under drought by improving some physiological parameters. Agronomy Research. Accepted paper

Aldahadha, A., and Bani Khalaf, Y. 2023. Evaluating the Synergistic Effects of Foliar Boron and Magnesium Application on Mitigating Drought in Wheat. Published in 10 November 2023 by MDPI in 2nd International Electronic Conference on Agriculture session Crop Production; <https://doi.org/10.3390/IOACAG2023-15964> (registering DOI)

Mustafa, E., Tigabu, M., Aldahadha, A., and LI, M., 2023. Variations in cone and seed phenotypic traits among and within populations of Aleppo pine in Jordan. New Forests. Published on 17 May 2023. <https://doi.org/10.1007/s11056-023-09978-6>

Samarah, N., and Aldahadha, A., 2022. Effect of polymer coating on seed germination and emergence of squash (*Cucurbita pepo* Zucchini). Journal of Applied Horticulture. 24(3): 288-292 .

Al-Ajlouni, Z., Migdadi, O., Makhadmeh, I., Aldahadha, A., Hasan, S. and Al-Abdallat, A.M., 2022. Assessment of Genetic Diversity among Wild *Ruta chalepensis* L. from the North of Jordan. Diversity, 14(11), p.969 .

Khalaf, Y.B., Aldahadha, A., Samarah, N., Migdadi, O. and Musallam, I., 2021. Effect of zero tillage and different weeding methods on grain yield of durum wheat in semi-arid regions. Agronomy Research, 19(1), pp.13-27 .

Aldahadha, A., Samarah, N. and Bataineh, A., 2020. Effect of storage temperature and duration on pollen viability and in vitro germination of seven pistachio cultivars. Journal of Applied Horticulture, 22(3). 184-188

Aldahadha, A.M., Warwick, N.W. and Backhouse, D., 2019. Water relations and yield of wheat (*Triticum aestivum* L.) exposed to interactions of drought and fungal root diseases (*Rhizoctonia* and *Pythium*). Archives of Agronomy and Soil Science, 65(4), pp.507-520.

- Aldahadha, A.M., Al Sane, K., Bataineh, A., Alloush, A.A. and Hammouri, Z., 2019. Pollen viability and in vitro germination of six pistachio (*Pistacia vera* L.) cultivars grown in northern Jordan. *Advances in Horticultural Science*, 33(3), pp.441-446 .
- Aldahadha, A.M., Backhouse, D. and Warwick, N.W., 2019. Comparative Effect of Root Pruning and *Pythium irregulare* on Water Use Efficiency of Wheat Under Water Stress. *World Research Journal of Agricultural Sciences*, 6(1), pp.157-161.
- Aldahadha, A.M., Backhouse, D. and Warwick, N.W., 2017. Inoculation with *Pythium irregulare* increases the water use efficiency of wheat exposed to post-anthesis drought. *Journal of Plant Chemistry and Ecophysiology*, 2(2), p.1017 .
- Aldahadha, A.M., Warwick, N.W. and Backhouse, D., 2012. Effects of *Pythium irregulare* and Root Pruning on Water-Use Efficiency of Hydroponically Grown Wheat under PEG-Induced Drought. *Journal of Phytopathology*, 160(7-8), pp.397- 403 .
- Aldahadha, A., Warwick, N.W. and Backhouse, D., 2010. Interactive effects of root diseases and drought on water use efficiency of wheat. In *Food Security from Sustainable Agriculture: Proceedings of the 15th Australian Agronomy Conference*. The Regional Institute Ltd .
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- Rujescu, C., Popescu, C., **RAWASHDEH, H.**, SALA, F. 2020. Imagistic Technique and Fractal Analysis - Investigations Mechanisms of the Morphological and Temporal Variability of the Wheat Cultures, *Technical Gazette* 27, 5, 1472-1477
- Abo-Ahmedeh, H., Mhasneh A., **Rawashdeh, H.** 2020. Using soil and foliar applications of some fertilizers to improve the yield and quality parameters of table grapes (*Vitis vinifera* L.), *Bulletin UASVM series Agriculture* 77(1): 1-6. DOI:10.15835/buasvmcn-agr: 2019.0016
- Rawashdeh, H.M.** 2017. Sunflower seed yield under trickle irrigation using treated wastewater, *Afr. J. Agric. Res.* 12(21): 811-1816.
- Ayoub, S., Al-Shdiefat, S., **Rawashdeh, H.**, Bashabsheh, I., 2016. Utilization of reclaimed wastewater for olive irrigation: Effect on soil properties, tree growth, yield and oil content. *Agricultural Water Management*, 176:163-169. **ISI** (Thomson Reuters). **IF** (2.603). **DOI:** [10.1016/j.agwat.2016.05.035](https://doi.org/10.1016/j.agwat.2016.05.035)

Rawashdeh H., Sala F., 2016. The effect of iron and boron foliar fertilization on yield and yield components of wheat. *Romanian Agricultural Research*, 33: 241-249. **ISI** (Thomson Reuters). IF (0.36). [DII 2067-5720 RAR 2016-195](#)

Rawashdeh H., Sala F. (2015). Effect of some micronutrients on growth and yield of wheat and its leaves and grain content of iron and boron. *Bulletin USAMV series Agriculture*. 72(2): 504-508.

Hamzeh R., Sala F. (2015). A Review: Foliar application with iron as a vital factor of wheat crop growth, yield quantity and quality. *International Journal of Agricultural Policy and Research*. 3(9): 368-376. [DOI:10.15739/IJAPR.062](#).

Sala F., **Rawashdeh H.**, Boldea M. (2015). Biofortification and shoot: root ratio in wheat seedlings under the influence of certain mineral elements. *AgroLife Scientific Journal*. 4(2): 106-113.

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Sala F., **Rawashdeh H.**, Boldea M. (2015). Differentiated contribution of minerals through Soil and foliar fertilization to the winter wheat yield. *American Journal of Experimental Agriculture*. 6(3): 158-167. [DOI: 10.9734/AJEA/2015/14354](#)

Rawashdeh H., Sala F. (2014). Influence of iron foliar fertilization on some growth and physiological parameters of wheat at two growth stages. *Scientific Papers. Series A. Agronomy*. 57, 306-309.

Rawashdeh H., Florin S. (2014). The effect of boron foliar fertilizer on some morphological parameters of wheat at different growth stages. *Review on Agriculture and Rural Development*. 3(1): 27-32.

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Raed Ali Abdalqader. Study the market and distribution channels of olives and olive oil in Irbid governorate. *Int J Agric Extension Social Dev* 2022;5(1):122-134. DOI: 10.33545/26180723.2022.v5.i1b.132

Raed Ali Abdalqader: How Agricultural Credit Serves Agricultural Development in Jordan, 2023, VOL. 1, ISSUE 1, Ministry of Agriculture and Land Reclamation, Food Technology Research Institute, ARC-Egypt. Frequency: Semi-annual, Online ISSN2974-3990.

Raed Ali Abdalqader Participated with the World Bank Group in preparing the "Enabling the Business of Agriculture 2019 Report", Jordan case study

Freihat, N., Shannag, H., and Alkelani, M. (2020), Effects of supplementary irrigation on performance of ‘Nabali’ and ‘Grossa de Spain’ olives under semi-arid conditions in Jordan. *Scientia Horticulture*.

Shannag, H., Freihat, N., and Alkelani, M. Capinera, J.L. (2019), Population Dynamic of Olive Pit Scale, *Pollinia pollini* Costa (Hemiptera: Asterolecanidae) on Two Olive Cultivars in North Region of Jordan. *Journal of Agricultural Science and Technology*.

Pedro Carvalho, John Foulkes, Yahya Shakhathreh, Iyad Musallam, Faddel Ismail, **Yahya Bani Khalaf**, Nabeel Bani Hani, optimising irrigation practices of durum wheat and spring barley to cope with climate change effects in Jordan.

Pedro Carvalho, John Foulkes, Yahya Shakhathreh, Iyad Musallam, Faddel Ismail, **Yahya Bani Khalaf**, Nabeel Bani Hani. Improving wheat agricultural practices to cope with climate change effects in Jordan.

M. Al hiary, Y. shakathreh, **Y. Bani Khalaf**, M. Ababneh. Socioeconomic assessment of wheat varieties and the adoption of recommended technologies in North Jordan .

Abdul Latief A. Al-Ghzawi , **Yahya Bani Khalaf**, Zakaria I. Al-Ajlouni , Nisreen A. AL-Quraan , Iyad Musallam and Nabeel Bani Hani .The Effect of Supplemental Irrigation on Canopy Temperature Depression, Chlorophyll Content, and Water Use Efficiency in Three Wheat)Triticum aestivum L. and T. durum Desf(Varieties Grown in Dry Regions of Jordan

Abdul Latief A. Al-Ghzawi, Zakaria I. Al-Ajlouni, Khaldoun O. Al San, Emad Y Bsoul, Iyad Musallam, **Yahya Bani Khalaf**, Nawal Al-Hajaj, Abdel Rahman Al-Tawaha, Yaser Aldwairi and Hala Al-Saqqar. Yield stability and adaptation of four spring barley (*Hordeum vulgare* L.) cultivars under rain-fed conditions.

Khalaf, Y.B., Aldahadha, A., Samarah, N., Migdadi, O. and Musallam, I., 2021. Effect of zero tillage and different weeding methods on grain yield of durum wheat in semi-arid regions. *Agronomy Research*, 19(1), pp.13-27 .

Asad Moh'd AlKhader, Amal Al-Khatib, Awad Kaabneh, Ali Mahasneh, Elaf Obeidat, **Yahya Bani Khalaf**, Ahmad Bataineh, Isra Salem and Shahnaz Absharat. Response of Wheat Crop to Potassium Fertilization Under Rain-fed Conditions in Semi-Arid Regions. *Sustainable Agriculture Research*; Vol. 12, No. 1; 2023.

Yahya Bani Khalaf, Khaldoun O. Al Sane'*, Osama Migdadi Abdulatif Al-Ghzawi and Iyad Musallam. Evaluation the most important factors affecting yield and yield components of durum wheat (*Triticum durum* Desf.) grown using full package production practices in a Semiarid Mediterranean Environment. Accepted paper.

Bani Khalaf, Y., A. Aldahadha, O. Migdadi, and N. Samarah. 2024. Boron and magnesium foliar application increase grain yield of durum wheat under drought by improving some physiological parameters. *Agronomy Research*. Accepted paper.

5- Community responsibilities and initiatives:

JOHUD: Organizing courses, seminars, and other activities - field farmer schools

Syndicate of Agricultural Engineers: Participation in specialized agricultural conferences

Jordan University of Science and Technology & Yarmouk University: students visit to see the center's activities

Local charity: holding specialized agricultural courses, training local community women to establish small projects and improve the income of rural families

SOS Children's Villages Jordan: Organizing courses, seminars and other agricultural activities to serve the local community

Al Hussein Youth Camps in Jordan: Training Jordanian youth on many agricultural topics

Lutheran Benevolent Society: Training local community women to dry vegetables and fruits.

Ramtha Agricultural Research Center

Telecommunication tool	How to communicate
Phone	02 7095171
Messages and suggestions	Complaints and Suggestions Box
FB	https://web.facebook.com/profile.php?id=100035761004587
Radio and television channels	Radio and Television Awareness reports
Periodic meetings	Field days, meetings and workshops
Obtain information right	http://www.ncare.gov.jo/RightSuggComInfo/RightToInformation.aspx