

ICID PRESIDENT

1. Country of Residence: United Kingdom



2. Name **Ragab Ragab**

3. Present Professional Position

Professor, Fellow Principal Hydrologist & Water Resources Management Specialist
UK Centre for Hydrology (UK CEH) Wallingford, Oxfordshire, UK
Adjunct Professor, Soil and Water Sciences Dept., University of Alexandria, Egypt (2006-present),
Editor, Journal of Agricultural Science, Cambridge University Press UK (2013-present)
Short CV: <http://www.ceh.ac.uk/StaffWebPages/Ragab.html>
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4. Interest in the activities of ICID

President of the International Commission on Irrigation and Drainage, ICID (2020-2023)
Vice President of the International Commission on Irrigation & Drainage, ICID (2010-2013)
Chairman of the UK National Committee on Irrigation and Drainage (currently IWF - 2007-2011)
Chairman of the Permanent Committee on Strategies and Organization, ICID (2011-2014)
Chairman of the Work Group on Water & Crops, ICID (www.icid.org)
Founder and ex-chairman of the Work Group on the Use of Poor Quality Water for Food Production, ICID, (1997-present)
Chairman and member of the select committee of World Heritage Irrigation Structure WHIS.
Member of the WG on Climate Change (WG_Climate) and Drought (WG_Drought)

5. Contributions to ICID Activities

a) Contribution to Publications	<i>Role</i>
(i) <i>32 papers published in ICID journal</i>	<i>Author and Editor</i>
(ii) <i>10 ICID Proceedings and Technical Report</i>	<i>Author and Editor</i>

b) Contribution to ICID free Models downloads

- i) SALTMED 2019. SALTMED model as an integrated management tool for management of water, crop, soil and N-fertilizers. Available at ICID web site: https://www.icid.org/wg_crop.html
 Author/developer
 Online course: <https://www.youtube.com/watch?v=JRMeUFzuBYU>
 SALTMED publications:
[https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1531-0361.saltmed-publications](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1531-0361.saltmed-publications)
- ii) **IHMS**: Integrated hydrological Modelling system for catchment scale. Available at ICID web site: https://www.icid.org/wg_crop.html.
 Author/developer



c) Organized ICID workshops and International Meetings

- | | Year |
|--|--|
| (i) International Workshop on “The Water-Energy-Food-Nexus: Implementation and examples of application”. September 24, ICID – Sydney. | (Rescheduled for Morocco 2021 & Adelaide 2022) |
| (ii) International workshop on Water-Food-Energy Nexus, Bali, Indonesia, ICID | 2019 |
| (iii) International workshop on Precision irrigation. Held within the International Commission on Irrigation and Drainage, ICID conference, Montpellier, France, October. | 2015 |
| (iv) International workshop on climate change impact on the environment. Held within the International Commission on Irrigation and Drainage, ICID conference, Mardin, Turkey. | 2013 |
| (v) International workshop on the use of Poor Quality Water and Environmental Flows, ICID, Adelaide, Australia, June 25, | 2012 |

(vi)	International workshop on Environmental Consequences of Irrigation with Poor Quality Waters. Joint workshop ICID-FAO. Kuala Lumpur, Malaysia, September 12,	2006
(vii)	International workshop on Water Saving Practices in Rice Paddy Cultivation, September 14-15, Kuala Lumpur, Malaysia, September 14-15,	2006
(viii)	International workshop on "Management of Poor Quality Water for Irrigation: Institutional, Health and Environmental aspects". ICID Moscow, Russia, September 10,	2004
(ix)	International workshop on Sustainable Strategies for Irrigation in Salt-prone Mediterranean Region: A System Approach, Cairo, Egypt, December 8-10,	2003
(x)	International workshop on Crop Production under Limited Water Supply, Montreal, Canada, July 21-22,	2002
(xi)	International workshop on the Wastewater Reuse Management, Seoul, Korea, September 19-20,	2001
(xii)	International workshop on Control of Adverse Impacts of Fertilisers and agrochemicals, Capetown, South Africa, October 22-27,	2000
(xiii)	International Workshop on the Use of Saline and Brackish Water for Irrigation- Implication for the Management of Irrigation, Drainage and Crops, Bali, Indonesia, July 23-24,	1998
xiv	International Workshop on Crop-Water-Environment Models, Cairo, Egypt, September 17.	1996

d) Awards

(a) ICID Awards

- 2002 ICID Award of Excellence in recognition of the exceptional contributions to the ICID and the world food security. International Commission on Irrigation and Drainage (ICID), Montreal.
- 2012 ICID Award of Excellence in recognition of the exceptional contributions to the ICID as the chairman and founder of the Working Group on the use of poor-quality water (1995-2011), Adelaide, Australia.
- 2013 ICID Award of Excellence in recognition of the exceptional contributions to the ICID as Vice President (2010-2013), Mardin, Turkey.
- 2014 ICID Award of Excellence in recognition of the exceptional contributions to the ICID as the chairman of the Permanent Committee on Strategies and Organization, (2010-2014), Gwangju, South Korea.
- 2018 Best paper 2018 Award by Wiley Publisher, USA. Journal of Irrigation and Drainage, Saskatoon, Canada

(b) National /International Awards

Merit Award for Scientific achievements. Egypt State Recognition, 1987.

"The Marquis Who's Who in Science and Engineering", American Biographer, 4th Edition, 1998.

"The Marquis Who is Who in the World", American Biographer. 13th Edition. Recognition by the Publications Board for outstanding achievement in science.

The Baron's 500: Leaders for the New Century. 2000. J.L. Pellam. ISBN-13:9781882292189

Best paper 2018 Award by Wiley Publisher, USA. Journal of Irrigation and Drainage, Saskatoon, Canada



ICID & International Awards as displayed in Ragab's office

e) Recent training offered to ICID Young Professionals

2018: Cairo Water Week, Water-Food-Energy Nexus

2018: Cairo Water Week, SALTMED model and its application

2019: Cairo Water Week, Accurate Estimation of crop water Requirement

2020: Management of Saline water for irrigation http://icid-ciid.org/inner_page/131

6. Mentioned in the Media

<https://www.cairowaterweek.eg/#1605087076046-da39cf6b-105f> Cairo Water week, October 21, 2020

https://www.youtube.com/watch?v=9yC_3HK4yWk&feature=youtu.be Water & Food security, September 27, 2020

<https://www.youtube.com/watch?v=l6hcB3bipVg&fbclid=IwAR3wX7UATvkvpXhgOHRdxBmTMJDvud0VRRSaXwZSgQyVjiYJWL11FQ-1fdE> Saline water management for food production, September 29, 2020

<https://www.cairowaterweek.eg/dr-ragab/> Cairo Water Week 2020

<https://www.youtube.com/watch?v=iXE3f0ejRtw&feature=youtu.be> ICARDA Interview on water management and food production, October 22, 2019

http://icid-ciid.org/inner_page/131 Water Management in Saline Agriculture, July 1st, 2020, ICID

<https://newsroom.wiley.com/press-releases/press-release-details/2017/Research-May-Lead-to-Improvements-in-Water-Use-for-Crop-Irrigation/default.aspx> Wiley Press Release: Research May Lead to Improvements in Water Use for Crop Irrigation

<https://ec.europa.eu/environment/archives/greenweek2011/content/dr-ragab-ragab.html> EU Green Week, 24-27 May, 2011

<https://www.youtube.com/watch?v=0n2IG2fyISg> Cairo water Week 20-24 October 2019, Climate and land use changes impact on water resources, the results of the Drought Study Project

[https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1531-0361.saltmed-publications](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1531-0361.saltmed-publications) SALTMED model Publications: 17 papers in Irrigation and Drainage Virtual Issues, Published 20 May 2020

<https://www.ceh.ac.uk/news-and-media/news/study-howing-multiple-benefits-drainage-water-wins-international-award> ICID Award August 2018

<https://twitter.com/cairowaterweek/status/1026664001768448000/photo/1> Cairo Water Week, October 2018

<https://www.youtube.com/watch?v=PualTKerHJw> Cairo water Week 20-24 October 2018, Science, technology and innovation session

<http://www.water4crops.org/saltmed-2015-e-learning-tutorials-via-youtube/> on line course on SALTMED model Application

<https://www1.uwe.ac.uk/et/research/dry/projectteam/biographies.aspx> DRY Project Team member

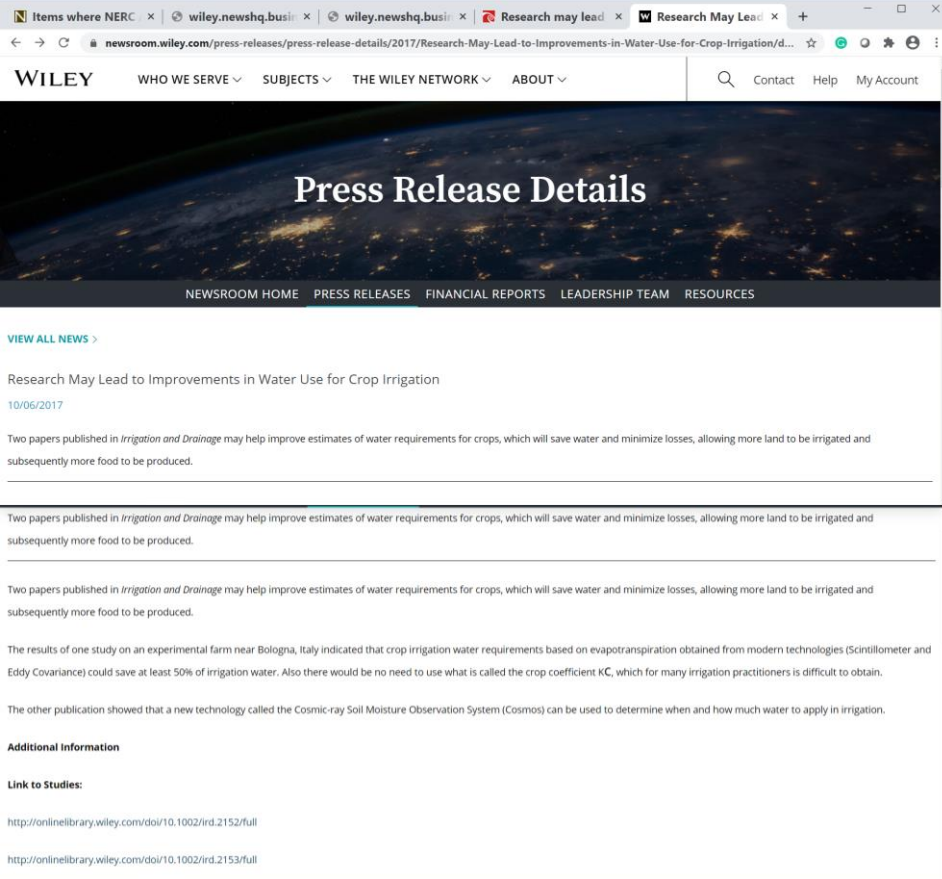
<https://link.springer.com/book/10.1007%2F978-3-319-51131-3> The Souss-Massa River Basin, Morocco, e-book

<http://nora.nerc.ac.uk/id/eprint/3131/1/N003131CP.pdf> ICID 2006, Water Saving in Rice Cultivation

https://www.icid.org/Report%202nd_Af-YWPF_Cairo.pdf ICID Second African Young Water Professional's Forum

(Af-YWPF) October 2019

<http://nora.nerc.ac.uk/view/author/803.html> Full publication record



The screenshot shows a web browser window displaying a Wiley press release. The page title is "Press Release Details" and the main heading is "Research May Lead to Improvements in Water Use for Crop Irrigation". The date is 10/06/2017. The text describes two papers published in *Irrigation and Drainage* that help improve estimates of water requirements for crops, which will save water and minimize losses, allowing more land to be irrigated and subsequently more food to be produced. The page also includes a section for "Additional Information" and "Link to Studies" with two URLs: <http://onlinelibrary.wiley.com/doi/10.1002/ird.2152/full> and <http://onlinelibrary.wiley.com/doi/10.1002/ird.2153/full>.

Wiley Press Release in relation to the two published papers:

R. Ragab, J.G. Evans, A. Battilani and D. Solimando. 2017. Towards accurate estimation of crop water requirement without the crop coefficient: New approach using modern technologies. *Irrigation and Drainage*, 66: 469–477.

R. Ragab, J.G. Evans, A. Battilani and D. Solimando. 2017. The COsmic-ray Soil Moisture Observation System (COSMOS) for estimating the crop water : New approach. *Irrigation and Drainage*, 66:456-468.

7. My mission as elected ICID president:

I will continue to promote:

1. The ICID work on “sustainable agriculture water management to achieve a ‘water secure world free of poverty and hunger through sustainable rural development’.

2. The ICID activities that cover the entire spectrum of agricultural water management practices ranging from rainfed agriculture to full, deficit and supplemental irrigation, land drainage, etc. In addition to a special focus on the climate change impact, especially the extreme events such as floods and drought, on agricultural production.
3. The implementation of the Water-Energy-Food Nexus as a holistic approach for integrated management that aims at producing more crop per drop per kilowatt per unit area of land. I have already submitted a scoping document to establish a new WG on the Nexus.
4. The ICID Vision 2030, revisit, extend and update it over time:
 - (i) enable higher crop productivity, more crop per drop per kilowatt per unit area (WEF Nexus),
 - (ii) provide guidance for change in policies and practices,
 - (iii) facilitate exchange of information, knowledge, and technology,
 - (iv) enable cross disciplinary engagement of various groups,
 - (v) provide technical support on the latest innovations. I have supplied ICID with several proceedings, reports, publications and two free download management models, SALTMED and IHMS and,
 - (vi) facilitate capacity development work towards training and fostering young professionals. I already contributed to several training sessions for ICID professionals.

In addition, I will:

1. Reach out to other similar organization for more cooperation and engagement in ICID activities, at least as observers
2. Encourage non ICID member countries to join ICID to increase ICID membership and income
3. Encourage more young professionals to Join ICID
4. Encourage members to make available tools and technical materials for ICID members
5. Promote fund raising events for ICID whenever and wherever possible
6. Set up a task force to investigate the impact of pandemics such as COVID-19 on food security and wellbeing.

8. Selected Publications (1981 - 2021)

Jelle Beekma, Jeremy Bird, Adey Nigatu Mersha, Stijn Reinhard, Sanmugam Ahembaranathan Prathapar, Golam Rasul, Jeffrey Richey, Jouke van Campen, **Ragab Ragab**, Chris Perry, Rabi Mohtar, Laurie Tollefson and Fuqiang Tian. 2021. Enabling Policy Environment for Water, Food and Energy Security. *Irrigation and Drainage* (published on line), <https://doi.org/10.1002/ird.2560>

Afzal M., and **R. Ragab**. 2020. Impact of the Future Climate and Land Use Changes on the Hydrology and Water Resources in South East England, UK. *American Journal of Water Resources*, vol. 8, no. 5 : 218-231. doi: 10.12691/ajwr-8-5-2.

Kaushal K. Garg, Anantha, K.H., Rajesh Nune, Venkata Radha Akuraju, Pushpraj Singh, Murali Krishna, G., Sreenath Dixit and **Ragab Ragab**. 2020. Impact of land use changes and management practices on groundwater resources in Kolar district, Southern India. *Journal of Hydrology: Regional Studies* Volume 31, October 2020, 100732. <https://doi.org/10.1016/j.ejrh.2020.100732>

Dewedar, O.M., Plauborg Finn, Marwa, M.A., EL-Shafie, A.F. and **Ragab, R.** 2020. Improving water saving, yield and water productivity of bean under deficit drip irrigation: field and modelling study using SALTMED Model. *J. Irrigation & Drainage* (in press)

Abdelaziz Hirich, Redouane Choukr- Alla, and **Ragab Ragab** (Editors). 2020. *Emerging Research in Alternative Crops*. Springer. *Environment & Policy* 58 (in press). ISSN 1383-5130 ISSN 2215-0110 (electronic). *Environment & Policy* ISBN 978-3-319-90471-9 ISBN 978-3-319-90472-6 (eBook) <https://doi.org/10.1007/978-3-319-90472-6>

Muhammad Afzal and **Ragab Ragab**.2020. Assessment of the potential impacts of climate change on the hydrology at catchment scale: Modelling approach including prediction of future drought events using drought indices. Applied Water Science, Applied Water Science (10), 215. 19, pp. <https://doi.org/10.1007/s13201-020-01293-1>

Abdelraouf R.E., M.A. El-Shawadfy, A.A. Ghoname and **R. Ragab**.2020. Improving crop production and water productivity using a new field drip irrigation design. Plant Archives, Volume 20 Supplement 1, pp. 3553-3564.

Marwa M.A., A.F. El-Shafie, O.M. Dewedar, J.M. Molina-Martinez and **R. Ragab**.2020. Predicting the water requirement, soil moisture distribution, yield, water productivity of peas and impact of climate change using SALTMED model. Plant Archives Vol. 20 Supplement 1, pp. 3673-3689.

Ragab, R., Kaelin, A., Afzal, M. and Panagea, I. 2020. Application of Generalized Likelihood Uncertainty Estimation (GLUE) at different temporal scales to reduce the uncertainty level in modelled river flows. Hydrological Sciences Journal, published on line (<https://doi.org/10.1080/02626667.2020.1764961>). 65(11): 1856-1871.

Ragab, R. 2020. A special issue combines 17 research papers on SALTMED model. "SALTMED Publications in Irrigation and Drainage. Virtual Issues First published: 20 May 2020 Last updated: 20 May 2020. Wiley on line Library". [https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1531-0361.saltmed-publications](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1531-0361.saltmed-publications)

Muhammad Afzal, Nikolaos Vavlas and **Ragab Ragab**.2020. Modelling study to quantify the impact of future climate and land use changes on water resources availability at catchment scale. J. water & Climate Change. Published on line, <https://doi.org/10.2166/wcc.2020.117>

Muhammad Afzal and **Ragab Ragab**.2020. How do climate and land use changes affect the water cycle? Modelling study including future drought events prediction using reliable drought indices, J. Irrigation & Drainage. Volume 69, Issue 4, Pages: 806-825. (<https://doi.org/10.1002/ird.2467>)

Chauhdary, Junaid Nawaz; Bakhsh, Allah; **Ragab, Ragab**; Khaliq, Abdul; Engel, Bernard A.; Rizwan, Muhammad; Shahid, Muhammad Adnan; Nawaz, Qamar. 2020 Modeling corn growth and root zone salinity dynamics to improve irrigation and fertigation management under semi-arid conditions. Agricultural Water Management, 230, 105952. 12, pp. <https://doi.org/10.1016/j.agwat.2019.105952>

Muhammad Afzal and **Ragab Ragab**. 2019. Drought Risk under Climate and Land Use Changes: Implication to Water Resource Availability at Catchment Scale. Water 2019, 11, 1790; doi:10.3390/w11091790.

Chauhdary, J. N., A. Bakhsh, B.A. Engel and **R. Ragab**. 2019. Improving corn production by adopting efficient irrigation and fertigation practices: Experimental and modelling approach. Agric.Water Management, 221: 449-461.

Abdelraouf, R.E., **Ragab, R.** 2018. Applying Partial Root Drying drip irrigation in presence of organic mulching. Is that the best irrigation practice for arid regions?: Field and Modelling Study Using SALTMED model. Irrigation and Drainage 67: 491-507.

Abdelraouf, R.E., and **R. Ragab** 2018. Is the partial root drying irrigation method suitable for sandy soils? field experiment and modelling using the SALTMED model. Irrigation and Drainage, 67: 477-490.

Maryam Dastranj; Masoud Noshadi; Alireza Sepaskhah; Fatemeh Razzaghi; and **Ragab**

Ragab. 2018. Soil Salinity and Tomato Yield Simulation Using SALTMED Model in Drip Irrigation. *J. Irrig. Drain Eng.*, 144(2): 05017008

Abdelraouf, R.E., **Ragab, R.** 2018. Effect of fertigation frequency and duration on yield and water productivity of wheat: field and modelling study using SALTMED model. *Irrigation and Drainage*. *Irrigation and Drainage J* 67: 414-428.

Tamara Avellán, Reza Ardakanian, Sylvain R. Perret, **Ragab Ragab**, Willem Vlotman, Hayati Zainal, Sangjun IM and Hafied A. Gany. 2018. Considering resources beyond water: irrigation and drainage management in the context of the water-energy food nexus. Invited paper, *Irrigation and Drainage*, 67: 12–21.

Abdelraouf, R.E., and **R. Ragab** 2017. The benefit of using drainage water of fish farms for irrigation: field and modelling study using the SALTMED model. *Irrig. and Drain.* 66: 758–772 (The paper won the best paper award of 2018 by International Commission of Irrigation and Drainage, ICID)

Silva, L.L., F.J. Baptista, J.F. Meneses and **R. Ragab**. 2017. Evaluation of the SALTMED model for tomato crop production in unheated greenhouses. *Acta Hort.* 1170. ISHS 2017. DOI 10.17660/ActaHortic.2017.1170.54 Proc. Int. Symp. on New Tech. and Mgt. for Greenhouses – GreenSys2015 Eds.: F.J. Baptista, J.F. Meneses and L.L. Silva.

Ragab Ragab, 2017. SALTMED model for field management of water, crops and N-fertilizers. In : Gheyi, H. R.; Dias, N. da S.; Lacerda, C. F. de; Gomes Filho, E. (Editors.) *Manejo da salinidade na agricultura: Estudos básicos e aplicados*. Fortaleza, Brazil, Institute Nacional de Ciencia e Tecnologia em Salinidade, INCTSal.

R. Ragab, J.G. Evans, A. Battilani and D. Solimando. 2017. Towards accurate estimation of crop water requirement without the crop coefficient: New approach using modern technologies. *Irrigation and Drainage*, 66: 469–477. (The paper triggered a press release by Wiley, top downloadable paper)

R. Ragab, J.G. Evans, A. Battilani and D. Solimando. 2017. The COsmic-ray Soil Moisture Observation System (COSMOS) for estimating the crop water: New approach. *Irrigation and Drainage*, 66: 456-468. (The paper triggered press release by Wiley as it was the top downloadable paper)

Redouane Choukr-Allah, **Ragab Ragab**, Lhoussaine Bouchaou and Damia Barcelo 2017 (BookEditors). *The Souss-Massa River Basin, Morocco*. Springer. DOI 10.1007/698_2016_74. Pp 355.

R. Ragab, R. Choukr-Allah, A. Nghira, and A. Hirich. 2017. SALTMED model and its application on field crops, different water and field management and under current and future climate change. Chapter 10 in Redouane Choukr-Allah, Ragab Ragab, Lhoussaine Bouchaou and Damia Barcelo 2017 (Book Editors). *The Souss-Massa River Basin, Morocco*. Springer. DOI 10.1007/698_2016_74. pp 227-274.

Kaoutar, Filali; Abdelaziz, Hirich; Ouafae, Benlhabib; Redouane, Choukr-Allah; **Ragab, Ragab**. 2017. Yield and dry matter simulation using the Saltmed model for five quinoa (*Chenopodium quinoa*) accessions under deficit irrigation in south Morocco. *Irrigation and Drainage*. *Irrigation and drainage* 2017 v.66 no.3. pp. 340-350. 10.1002/ird.2116 <http://nora.nerc.ac.uk/516684/>

El-Shafie, A.F.; Osama, M.A.; Hussein, M.M.; El-Gindy, A.M.; **Ragab, R.** 2017 Predicting soil moisture distribution, dry matter, water productivity and potato yield under a modified **gated pipe irrigation system: SALTMED model application using field experimental data**. *Agricultural Water Management*, 184. 221-233. <https://doi.org/10.1016/j.agwat.2016.02.002>.

Afzal, M, A. Battilani, D. Solimando and **R. Ragab**. 2016. Improving water resources management using different irrigation strategies and water qualities: Field and modelling study. *Agricultural Water Management* 176: 40–54.

- Yamina Elmeddahi, Hacene Mahmoudi, Abderrahmane Issaadi, Mattheus F.A. Goosen and **Ragab Ragab**. 2016. Evaluating the Effects of Climate Change and Variability on Water Resources: A Case Study of the Cheliff Basin in Algeria. *American Journal of Engineering and Applied Sciences*, 9 (4): 835-845. DOI: 10.3844/ajeassp.2016.835.845
- Rameshwaran P, Qadir M, **Ragab R**, Arslan A, Abdul Majid G, Abdallah K. 2016. Tolerance of Faba Bean, Chickpea and Lentil to Salinity: Accessions' Salinity Response Functions. *J. Irrigation and Drainage*. 65: 49–60. doi:10.1002/ird.1922.
- Rameshwaran P, Tepe A, Yazar A, **Ragab R**. 2016. Effects of drip-irrigation regimes with saline water on pepper productivity and soil salinity under greenhouse conditions. *Scientia Horticulturae*. 199: 114–123.
- Hirich A, Fatma H, **Ragab R**, Choukr-Allah R. 2016. Climate change impact on corn grown in the south of Morocco using the SALTMED model. *Irrigation and Drainage*. 65(1): 9-18. doi: 10.1002/ird.2002.
- Arslan, A, Majid GA, Abdallah K, Rameshwaran P, **Ragab R**, Singh, M, Qadir M. 2016. Evaluating the productivity potential of chickpea, lentil, and faba bean under saline water irrigation systems. *Irrigation and drainage*. 65: 19–28. doi: 10.1002/ird.1912.
- Ragab R**. 2015. Integrated Management Tool for Water, Crop, Soil and N- Fertilizers: The SALTMED Model. *J. Irrigation and Drainage*. 64(1): 1–12.
- Pulvento C, Riccardi M, Lavini A, D'Andria R, **Ragab R**. 2015. Parameterization and field validation of SALTMED model for grain amaranth tested in south Italy. *J. Irrigation and Drainage*. 64(1): 59–68.
- Pulvento C, Riccardi M, Lavini A, D'Andria R, **Ragab R**. 2015. Assessing amaranth adaptability in a Mediterranean area of south Italy under different climatic scenarios *J. Irrigation and Drainage*. 64(1): 50-58.
- Fghire R, Wahbi S, Anaya F, Issa Ali O, Benlhabib O, Ragab R. 2015. Response of quinoa to different water management strategies: field experiments and Saltmed model application results. *J. Irrigation and Drainage* 64(1): 29-40.
- Rameshwaran P, Tepe A, Yazar A, **Ragab R**. 2015. The effect of saline irrigation water on the yield of pepper: experimental and modelling study. *J. Irrigation and Drainage*. 64(1): 41-49.
- Ragab R**, Battilani A, Matovic G, Stikic R, Psarras G, Chartzoulakis K. 2015. SALTMED 2013 model as an integrated management tool for water, crop, soil and N-fertilizers, water management strategies and productivity: field and simulation study. *J. Irrigation and Drainage*. 64(1): 13–28.
- Hirich A, El Omari H, Jacobsen S-E, Lamaddalena N, Hamdy A, **Ragab R**, Jelloul A, Choukr-Allah R. 2014. Chickpea (*Cicer arietinum* L.) physiological, chemical and growth responses to irrigation with saline water. *Australian journal of crop science*. 8(5): 646-654.
- Hirich A, **Ragab R**, Choukr-Allah R, Rami A. 2014. The effect of deficit irrigation with treated wastewater on sweet corn: experimental and modelling study using SALTMED model. *Irrigation Science*. 32 (3): 205-219.
- De Fraiture C, Fayrap A, Unver O, **Ragab R**. 2014. Integrated water management approaches for sustainable food production. *Irrigation and Drainage*. 63(2): 221–231.
- Silva LL, **Ragab R**, Duarte I, Lourenço E, Simões N, Chaves MM. 2013. Calibration and validation of SALTMED model under dry and wet year conditions using chickpea field data from Southern Portugal. *Irrig Sci*. DOI 10.1007/s00271-012-0341-5. *J Irrigation Science*. 31(4): 651-659.

Silva LL, Duarte I, **Ragab R.**, Simões N, Lourenço E, Chaves MM. 2013. The effect of supplemental irrigation in five chickpea varieties under Mediterranean conditions. Field evaluation and modelling study. SWUP-MED Final conference proceedings, Agadir, Morocco, March 2013.

Pulvento C, Riccardi R, Lavini A, D'Andria R, **Ragab R.** 2013. SALTMED model to simulate yield and dry matter for quinoa crop and soil moisture content under different irrigation strategies in south Italy. *J. Irrigation and Drainage*, 62(2): 229-238.

Hirich A, Choukr-Allah R, **Ragab R.**, Jacobsen S-E, El Youssfi L, El Omari H. 2012. The SALTMED model calibration and validation using field data from Morocco. *J. Mater. Environ. Sci.* 3(2): 342-359.

Choukr-Allah R, **Ragab R.**, Rodriguez-Clemente R. (Editors). 2012. Integrated Water Resources Management in the Mediterranean Region: Dialogue Towards New Strategy, DOI 10.1007/978-94-007-4756-2 © Springer Science & Business Media Dordrecht. ISBN 978-94-007-4755-5 & ISBN 978-94-007-4756-2 (eBook). pp 364.

Ragab R. 2012. Challenges and Issues on Measuring, Modelling and Managing the Water Resources Under Changing Climate and Land Use. Chapter 6 in Choukr-Allah R, **Ragab R.**, Rodriguez-Clemente R (Editors): Integrated Water Resources Management in the Mediterranean Region: Dialogue Towards New Strategy, DOI 10.1007/978-94-007-4756-2_5 © Springer Science & Business Media Dordrecht. ISBN 978-10.1007/978-94-007-4756-2_5 © Springer Science & ISBN 978-94-007-4756-2 (eBook). pp 91-108.

Montenegro S, **Ragab R.** 2012. Impact of possible climate and land use changes in the semi-arid regions: a case study from North Eastern Brazil. *Journal of Hydrology*. 434-435: 55-68.

Ragab, Ragab, ed. 2010 SAFIR-Safe and high quality food production using low quality waters and improved irrigation systems management. Amsterdam, The Netherlands, Elsevier, 106pp. (*Agricultural Water Management*, 98 (3).

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