

Democratic and Popular republic Of Algeria
Ministry of Higher Education and Scientific Research
Directorate General for Scientific Research and Technological Development
**Scientific and Technical Research Centre for Arid Regions
(CRSTRA)**

Algerian Journal of Arid Regions
Journal Algérien des Régions Arides
(JARA)

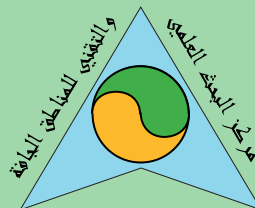
المجلة الجزائرية للمناطق الجافة

International Scientific Revue

Volume13 Issue 2 (2019)



ISSN 1112-3273
e-ISSN: 2676-2226



C.R.S.T.R.A
Scientific and Technical Research
Centre for Arid Areas

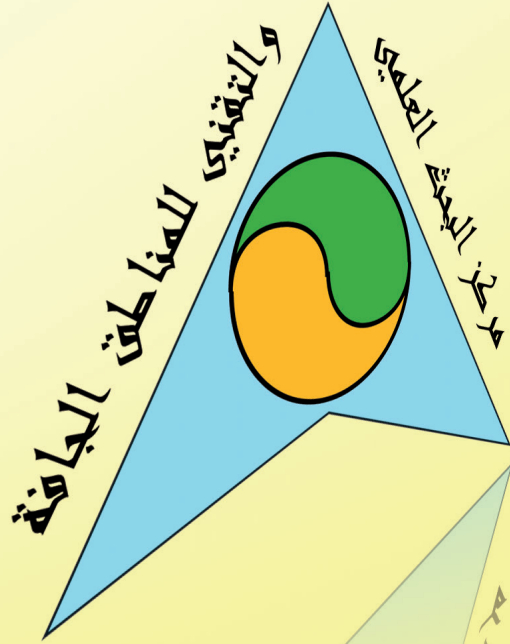
Algerian Journal of Arid Regions

**Journal Algérien des Régions Arides
(JARA)**

المجلة الجزائرية للمناطق الجافة

ISSN 1112-3273

e-ISSN: 2676-2226



Volume13 Issue 2 (2019)

**Scientific and Technical Research Centre for Arid Regions
(CRSTRA)**

<http://www.crstra.dz>

Editorial Team

Editor-in-Chief

BELHAMRA Mohamed, General Director of CRSTRA, Algeria

Associate Editors

HUGUENIN Johann, CIRAD, Montpellier, France

HALIS Youcef, CRSTRA-Touggourt, Algeria

NOURANI Ahmed, CRSTRA-Biskra, Algeria

Editorial Assistant (Secretary)

HANAFI Asma, CRSTRA-Biskra, Algeria

NEDJAA Mohamed Tayeb, CRSTRA-Touggourt, Algeria

Reviewers

ADAMOU Abdelkader, University Kasdi Merbah, Ouargla, Algeria

AÏDOUD Ahmed, University of Rennes 1, France

AINOUCHE Abdelkader, University of Rennes 1, France

AMIRI Khaled, CRSTRA-Touggourt, Algeria

AZZOUZ Mohamed Yassine, University of Blida, Algeria

BEKKARI Naceur eddine, CRSTRA-Touggourt, Algeria

BENSACI Tayeb, University of M'sila, Algeria

BELGUEDJ Naima, CRSTRA-Biskra, Algeria

BEN SALAH Mohamed Kamel, CRSTRA-Biskra, Algeria

BENAISSA Mohamed Hocine, CRSTRA-Touggourt, Algeria

BENHADDYA Mohammed Lamine, CRSTRA-Touggourt, Algeria

BENMALEK Ahmed, CRSTRA-Biskra, Algeria

BENSAHA Hocine, URAER- CDER, Algeria

BENZOHRA Ibrahim Elkhilil, CRSTRA-Saoura, Taghit, Bechar, Algeria

BETTICHE Farida, CRSTRA-Biskra, Algeria

BOUCHAHM Tabouche Nora, CRSTRA-Biskra, Algeria

BOUKEHIL Khaled, University Mohamed Khaider, Biskra, Algeria

BOUKERKER Hassen, CRSTRA-Biskra, Algeria

BOUKHALFA hassina, University Mohamed Khaider, Biskra, Algeria

BOUKHECHEM said, University of Mentouri,

Constantine, Algeria

BOULGHOBRA Nouar, CRSTRA-Touggourt, Algeria

BOUSSAADA Tarek, CRSTRA-Touggourt, Algeria

BOUTERAA Yakoub, CRSTRA-Biskra, Algeria

CHABBI Mohamed, CRSTRA-Biskra, Algeria

CHAIB Warda, CRSTRA-Biskra, Algeria

CHAMSA A. Khalifa, University Hamma Lakhdar, El-Oued, Algeria

DJAGHROURI Kamal, CRSTRA-Biskra, Algeria

FACI Mohammed, CRSTRA-Biskra, Algeria

FARHI Yassine, CRSTRA-Biskra, Algeria

FOUGHALIA Abdelhamid, CRSTRA-Biskra, Algeria

HACHEMI Amina, Higher National Veterinary School, Algiers, Algeria.

HADJOU DJ Moussa, CRSTRA-Touggourt, Algeria

HAFNAOUI Mohammed Amin, CRSTRA-Biskra, Algeria

HALIS Youcef, CRSTRA-Touggourt, Algeria

HALITIM Amor, University of Batna, Algeria

HECINI Lynda, CRSTRA-Biskra, Algeria

HEDDADJ Djilali, INRA Rennes, France.

KADRI Ahmed, National Higher School of Agronomy, El-Harrach, Algeria

KAROUNE Samira, CRSTRA-Biskra, Algeria

KECHEBAR Mohamed, CRSTRA, Biskra, Algérie

KHEZZANI Bachir, University Hamma Lakhdar, El-Oued, Algeria

LAKHDARI Kaouthar, CRSTRA-Touggourt, Algeria

LAKHDARI Wassima, INRA, Touggourt, Algeria

MADI Mohammed, CRSTRA-Biskra, Algeria

MAYOUF Rabah, CRSTRA-Touggourt, Algeria
MELLAH Abdelkarim, CRSTRA-Biskra, Algeria
MERADI Samira, CRSTRA-Biskra, Algeria
MERAH Abderezak, CRSTRA-Touggourt, Algeria
MESNOUA Mohammed, CRSTRA-Biskra, Algeria
MIMOUNE Nora, National higher school of veterinary,
Algeria
MOSTEPHAOUI Tewfik, CRSTRA-Biskra, Algeria
MOUMMI Abdelhafid, University Mohamed Khaider,
Biskra, Algeria

NIA Billal, CRSTRA-Biskra, Algeria
NOURANI Ahmed, CRSTRA-Biskra, Algeria
NOUI Abderrahmane, CRSTRA-Biskra, Algeria
RECHACHI Miled Zohra, CRSTRA-Biskra, Algeria
SAKAA Bachir, CRSTRA-Biskra, Algeria
SI-BACHIR Abdelkrim, University of Batna, Algeria
SIABDALLAH Nourelislam, CRSTRA-Biskra, Algeria
TAHIRINE Mohammed, CRSTRA-Biskra, Algeria
TOUIL Abdelkadir, CRSTRA-Biskra, Algeria

Production Team

HANAFI Asma, CRSTRA-Biskra, Algeria
NEDJAA Mohamed Tayeb, CRSTRA-Touggourt, Algeria
KHARFALLAH Nasreddine, CRSTRA-Biskra, Algeria
CHEKKAL Fekhreddine, CRSTRA-Biskra, Algeria

Journal Algérien des Régions Arides (JARA) Volume 13 Issue 2 (2019)

ISSN 1112-3273

e-ISSN: 2676-2226

<http://www.crstra.dz>

Instructions for authors

Generalities

The journal accepts any original article, presenting new studies on any aspect of basic, applied and development research. The article can be of a scientific or technical nature and relates to arid or semi-arid zones. Submitted articles must not have been published in another journal.

It is recommended that articles be written in editorial form by limiting the classification levels, no more than three levels of titles and headings, and ensuring a balance between the text itself and the illustrations (boxes, tables, figures, and photos). When author uses a figure or table from another source (other publication), he must indicate the origin of the document after obtaining the reproduction right in advance.

Language

Articles can be written in Arabic, English or French.

Types of manuscript

Should be specified on the first page when submitting a manuscript.

Research article: Unpublished contribution from a comprehensive study. This type of article is typically about ten pages and about 3,000 to 4,000 words.

Short communication (Note): new observation or report of experience in a context relevant to the topics covered by the review. This type of article is typically a five to seven page document and approximately 2,000 to 3,000 words.

Synthesis article: Critical and original review of specific topics of current interest or a field of advanced research. This type of article is typically about twenty pages and about 6,000 to 8,000 words.

Presentation

The manuscript must be written in electronic format in double spacing with a font 12. The preferred format for the text is Word. It is recommended to avoid PDF or PostScript type formats.

The first page of the submission must contain the main title with its English translation, the authors, the institutions involved, the name and contact information of the corresponding author.

The second page must include a French summary of 250 words maximum, an abstract in English (exact translation), and a maximum of 6 keywords in French and English (exact translation). In the case of the

article in Arabic, the second page must include an Arabic abstract of 250 words maximum, an abstract in English (exact translation), and a maximum of 6 keywords in Arabic and English (exact translation).

The article outline will be classically organized as follows: Introduction, Materials and Methods, Results and Discussion, Conclusions. Bibliographic references appear after the conclusion.

Units, abbreviations and symbols

Use the metric system (International Units) as often as possible. Note for example these abbreviations: gram, g; kilogram, kg; liter, L; milligram, mg; microgram, µg; ml, mL; centimeter, cm; International Unit, U.I. ; milliequivalent, mEq; seconds, s; minutes, min; hours, h.

All abbreviations, usual or otherwise, medical and scientific terms must be explained when they first appear in the text.

Nomenclature

The Latin names of genera and species, the Latin phrases will be in italic or underlined.

Illustrations

The figures and tables of the article are incorporated and joined on separate pages placed after the bibliographical references. Each illustration must have a short explanatory legend.

Bibliographical references

In the current text, references to authors of articles are in lower case, without a comma before the year, ex: Chevalier (2001), Chevalier (2001, 2002), (Chevalier 2000; Ruzin 2002), (Chevalier & Ruzin 2003), (Chevalier et al. 2005), Chevalier (2001: 1; 2003: 4), Chevalier (2001: fig. 2).

In the bibliography, journal names should not be abbreviated. The references are presented in alphabetical order as below:

For journal articles:

Charrouf Z, Pumareda L, Henry F, (2006) Valorisation des feuilles d'arganier: impact environnemental. Bois et Forêts des Tropique 287:35-44

For books:

Ruzin SE (1999) Plant microtechnique and microscopy. Oxford University Press, New York.

Summary

Activité antifongique de l'extrait méthanolique de R'tem (<i>Retama raetam</i>) sur la croissance mycélienne et la sporulation de <i>Fusarium oxysporum</i> f. sp. <i>albedinis</i>, agent de Bayoud du Palmier dattier	1
<i>I.E. Benzohra, M. Megateli, H. Belaidi, F. Toumi-Benali</i>	
Origins of pesticide residues in agricultural soils in Biskra (South-East Algeria): survey vs. detection	12
<i>F. Bettiche, O. Grünberger, W. Chaïb, H. Mancer, K. Bengouga, M. Belhamra</i>	
Variabilité pluviométrique et reconfiguration de l'occupation du sol dans le delta du fleuve Sénégal	30
<i>D. Cissokho, D. D. Ba, C. Faye, I. Diombaty, M. Thiare, H. Mane</i>	
Héritabilité, corrélations et gain de sélection précoce en F2 de blé tendre (<i>Triticum aestivum</i> L.) sous conditions semi-arides	37
<i>Z. Fellahi, A. Hannachi, A. Guendouz, A. Rabti, H. Bouzerzour</i>	
Effects of morphometric characteristics on flash flood response at arid area (case study of wadi deffa, el bayadh city, algeria)	50
<i>A. Hachemi, MA. Hafnaoui, M. Madi</i>	
Assessment of genetic diversity among pearl millet landraces (<i>pennisetum glaucum</i> (L.) R. Br.) from Algerian Sahara using qualitative traits	58
<i>Hafida Rahal-Bouziane, Samia Yahiaoui, Sabrina Oumata, Yasmina Semiani, Mohamed Kharsi</i>	
Adoucissement par précipitation a la chaux et le carbonate de sodium des eaux de l'albien d'Ain Sahara (Touggourt – Algérie)	69
<i>A. Mellah, N. Bouchahm, W. Chaib, Y. Abdelhafid</i>	
Evaluation of the resistance to antibiotics of bacteria responsible for mastitis in cows in Southern Algeria	84
<i>R. Saidi, N. Mimoune, MH. Benaïssa, R. Baazizi, D. Khelef, W. Bahouh, R. Kaidi</i>	
Analyse du bilan énergétique pour la production de la plasticulture, étude de cas: Wilaya de Biskra	95
<i>Ahmed Nourani, Abdelali Bencheikh</i>	
Apport du SIG à l'établissement de la carte de vulnérabilité intrinsèque de la nappe d'In-féro-flux de l'Oued M'zab, Algérie	103
<i>M. Achour, M.I. Hassani, H. Mansour, A. Hadj Brahim, H. Bensaha</i>	

Summary

L'agriculture irriguée au Souf –El Oued (Algérie): acteurs et facteurs de développement	114
<i>ML. Ouendeno</i>	
Impact de la gestion irrationnelle des eaux d'irrigation sur l'environnement oasisien du Sud algérien (Cas de l'oasis d'In-Salah)	129
<i>R. Zegait, H. Bensaha</i>	
Évaluation d'un test de diagnostic rapide des mammites: Speed Mam Color	140
<i>R. Saidi, N. Mimoune, MH. Benaissa, R. Baazizi, D. Khelef, R. Kaidi</i>	