



• High Lights

- Turmeric Curcuminoid Polyphenolics as Antioxidant and Anticarcinogenic Agents
- Composition of the essential oil of two *Salvia* taxa (*Salvia sclarea* and *Salvia verticillata* subsp. *verticillata*)
- Non-Ionizing Radiation around Tanning Beds
- Identification of Essential Oils from the Four Umbelliferae from Turkey
- The analysis of solid waste and effluent water management in Diyarbakir and Batman districts

Natural Science and Discovery ([www.natscidiscovery.com](http://www.natscidiscovery.com)) is an international open access, peer-reviewed scientific research journal that provides rapid publication of articles in all disciplines of Natural science such as Physics, Mathematics, Chemistry, Biology, Engineering, Nanotechnology

The policy of top priority of NSD is to put forward and highlight medical innovations and inspiring patents

NSD offers an exceptionally fast publication schedule including prompt peer-review by the experts in the field and immediate publication upon acceptance.

The editorial board aims at reviewing the submitted articles as fast as possible and promptly including them in the forthcoming issues.

This journal is published under ethical publishing policy of international scientific ethical and publication rules. NSD supports the Open Access Initiative. Abstracts and full texts (HTML and PDF format) of all articles published by NSD are freely accessible to Researchers, Scientist, the Public and other users to view, download and share, immediately upon publication

**Founder:** Lycia Press

**Concessionaire and Founding Editor :** Zafer AKAN (Assoc. Prof. Dr.)

**Publisher:** Lycia Press, LONDON UK

#### **Editor in Chief**

Talha MUEZZINOGLU(Prof. Dr.) CBU, Faculty of Medicine Dept. of Urology, Manisa, TURKEY

#### **Deputy Editor**

Ozlem TOKUSOGLU (Assoc. Prof. Dr.) CBU, Faculty of Engineering Dept. of Food Engineering, Manisa, TURKEY

#### **Honorary Editors**

Prof. Dr. Gustavo Barbosa-CÁNOVAS, Washington State University, USA

Prof. Dr. Omer KUCUK, Emory University Winship Cancer Institute, USA

Prof. Dr. Peyami BATTAL, Yuzuncu Yil University, TR

All the financial and ethical rights of the journal are reserved for the private ownership of Lycia Press

Address: Lycia Press Inc., 4th Floor 86-90 Paul Street, EC2A 4NE, London, UK.

Phone: +44 0 203 322 3097

Email: [press \[at\] lycians.com](mailto:press@lycians.com)

Website: [www.lycians.com](http://www.lycians.com)

## Editorial Board

Prof. Dr.	Talha MUEZZINOGLU	Celal Bayar University,TR (Editor in Chief)
Assoc. Prof. Dr.	Ozlem TOKUSOGLU	Celal Bayar University,TR (Deputy Editor)
Prof. Dr.	Dilek HEPERKAN	Istanbul Technical University (ITU) TR
Prof. Dr.	Atakan SUKATAR	Ege University, TR
Prof. Dr.	Arash KHAKI	Islamic Azad University, Iran
Dr.	Muhammet Burak BATIR	Islamic Azad University, Iran
Dr.	Omer KACAR	TUBITAK MAM TR
Asist. Prof. Dr.	Ozdemirhan SERCIN	University Libre de Bruxelles, Belgium
Prof. Dr.	Mahinur AKKAYA	Middle East Technical University TR
Asist. Prof. Dr.	Serife Kaymaksiz	Helmholtz-Institute Muenster, Germany
Prof. Dr.	Halit DEMIR	Yuzuncu Yil University, TR
Prof. Dr.	Ugur AVCIBASI	Celal Bayar University, TR
Asc. Prof. Dr.	Mehmet ONDER	Celal Bayar University,TR
Asist. Prof. Dr.	Evren ZIPLAR	Cankiri Karatekin University, TR
Prof. Dr.	Şafak ALPAY	Middle East Technical University, TR
Prof. Dr.	Cuneyt CAN	Middle East Technical University, TR
Assist. Prof. Dr.	Bahriye SIRAV	Gazi University, TR
Prof. Dr.	Iskender REYHANCAN	Istanbul Thecnical University, TR
Prof. Dr.	Mehmet Ali KORPINAR	Istanbul University, TR
Prof. Dr.	Tunaya KALKAN	Istanbul University, TR
Prof. Dr.	Mehmet MUTLU	TOBB Economy and Technology University, TR
Prof. Dr.	Erdal ÇOKÇA	Middle East Technical University TR
Prof. Dr.	Krishna R. REDDY	University of Illinois at Chicago, USA
Asc. Prof. Dr.	Yeliz YUKSELEN AKSOY	Dokuz Eylul University TR
Prof. Dr.	Jeffrey C. EVANS	Bucknell University, Pennsylvania, USA
Prof. Dr.	Adnan YAZICI	Middle East Technical Univ. (METU) TR
Prof. Dr.	Faruk BOZOGLU	Middle East Technical University, (METU) TR
Prof. Dr.	Kazutaka YAMAMOTO	National Food Research Institute (NFRI), JAPAN
Prof. Dr.	Halil VURAL	Hacettepe University, TR
Asc. Prof. Dr.	Brijesh Kumar TIWARI	Manchester Metropolitan University, Manchester, UK
Prof. Dr.	Tayfur OZTURK	Middle East Technical Univ. (METU) TR
Asist. Prof. Dr.	Balati KUERBANJIANG	University of York, York, UK
Prof. Dr	Rahmi GUCLU	Yıldız Technical University, TR

## Statistical Editor

Prof. Dr.	Siddik KESKİN	YYU Faculty of Medicine, Dept. of Medical Statistics
-----------	---------------	--

## Language Editor

Asist. Prof. Dr.	Hakan ERGİN	Istanbul University, Dept. of Foreign Languages
------------------	-------------	---

## Editorial Office

Asist.	Fatma AKSUNGER	Bogazici University, TR
Asist.	Filiz AKSUNGER	Marmara University, TR

## Instruction for Authors

- NSD Publications uses CrossCheck's iThenticate software to detect instances of similarity in submitted manuscripts. In publishing only original research, NSD is committed to deterring plagiarism, including self-plagiarism. Your manuscript may be screened for similarity to published material.
- Dear Authors, please load just these three file to manuscript submission system
- Title Page Sample
- Manuscript Sample
- Copyright Transfer Form
- **Manuscript Preparation:**
- **1.Cover letter**
- a- A statement that the manuscript has been read and approved by all the authors.
- b- Approval of all the authors regarding the order in which their names have appeared.
- c- That each author confirms the manuscript represents honest work.
- d- The name, address, and telephone number of the corresponding author who is responsible for communicating with other authors about revisions and final approval.
- e- The letter should give any additional information that may be helpful to the editor, such as the type or format of the article. If the manuscript has been submitted previously to another journal or in another language, it is helpful to include the previous editor's and reviewers' comments with the submitted manuscript, along with the authors' responses to those comments. Submitting previous evaluatory review of another journal accelerates the review process.
- f- For accepted manuscripts, the authors are requested to fill and sign the journal's cover letter to express their consent for its publication.
- g- To reproduce published material, to use illustrations or tables or report information about identifiable people, the author should submit a copy of the permission with the manuscript to the journal.
- **2.Top Ethic Committee Approval**
- Inclusion of the approval letter from the relevant Ethics Committee or Institution's Review Board regarding the research protocol and the rights of the subjects (if applicable to the study)
- **3.Top Consent Form**
- Attach a copy of the consent form to the letter, if applicable. Consent forms would be evaluated by the Ethics Committee and then signed by the participant.
- **4.Top RCT or NCT Registration**
- Emailing the letter denoting registration of RCTs or NCTs in domestic or international databases (The trial's registration number needs to be mentioned, too).
- **5. Manuscripts submitted in English**, must be type written, double-spaced, on good quality A4 paper, or paper of similar format. Authors are requested to reserve margins of at least 2.5cm all around the paper. Original drawings of photos, tables and figures should be furnished together with the manuscripts.
- **6. Manuscripts should be kept to a minimum length** and should be subdivided into labeled sections (Title page, Abstract, Keywords, Introduction, Materials and Methods, Results, Discussion, Conclusion, Acknowledgement, and References).
- **7. A title page is to be provided** and should include the title of the article, authors' names with full first name (with degrees), authors' affiliation, suggested running title and corresponding author. The affiliation should comprise the department, institution (usually university or company), city and state (or nation). The suggested running title should be less than 50 characters (including spaces) and should comprise the article title or an abbreviated version thereof. For office purposes, the title page should include the name and complete mailing address, telephone and fax number, and email of the one author designated to review proofs.
- **8. An abstract no longer than 250** words for reviews and research articles is to be provided as the second page. Abstract should be structured as objective(s) (including purpose setting), materials and methods, results, and conclusion.
- **9. A list of 3-8 keywords**, is to be provided directly below the abstract. Keywords should express the precise content of the manuscript, as they are used for indexing purposes. Provide abbreviations and nomenclature list in an alphabetical order and non-standard abbreviations contained in the manuscript (excluding references) with definitions after the keywords. Use abbreviations sparingly and only when necessary to save space, and to avoid repeating long chemical names or therapeutic regimes. In a figure or table, define the abbreviations used in a footnote.
- **10. Tables in limited numbers** should be self- explanatory, clearly arranged, and supplemental to the text. The captions should be placed above.
- **11. Figures should be utilized** only if they augment understandability of the text. The captions should be placed below. Drawings and graphs should be professionally prepared in deep black and submitted as glossy, black and white clean Photostats. Professionally designed computer generated graphs with a minimum of 300 DPI laser printer output is preferable. Color photographs are welcomed.
- **12. The same data** should not be presented in tables, figures and text, simultaneously.
- **13. NSD uses Vancouver referencing Style.** References in limited numbers and up-to-dated must be numbered consecutively in order of citation in the text (number in parentheses). Print surnames and initials of all authors when there are six or less. In the case of seven or more authors, the names of the first six authors followed by et al. should be listed.
- Please check all references with EndNote referencing System. Please check out and Download Vancouver Endnote Style.

## Instruction for Authors

### • **TYPE OF ARTICLES**

#### • **Editorial :**

- Editorial is Opinion piece, policy statement, or general commentary, typically written by staff of the publication (The similar value "article-commentary" is reserved for a commentary on a specific article or articles, which is written by an author with a contrasting position, not an editor or other publication staff.)

#### • **Letters to the Editor** about a recent journal article :

- Letters referring to a recent article in this journal must be received within three months of its publication. For example, a letter referring to an article published in the January issue must be submitted online no later than March 31st. Letters submitted after the allowed time will not be considered.

- The text, not including references, must not exceed 700 words. A maximum of three authors and 10 references are allowed. Neither tables nor figures are allowed.

#### • Letters to the Editor NOT referring to a recent journal article :

- Original research that is of interest but does not fulfill all the requirements needed for publication as a full-length manuscript can be submitted as a letter to the editor. The letter must have a title and a maximum of three authors.
- The text, not including references, tables, figures or legends must not exceed 700 words. No more than 10 references and either one table or one figure are allowed.
- Word Count Limit: Letters should contain 500 - 700 words, maximum number of references is 10, maximum Number of illustrations/Tables is 1.

#### • **Original :**

- The content of the paper must justify its length. For reports of original investigative work, traditional division into sections is required: Title, Keywords, Addresses and which author address for correspondence, Structured abstract, Background, Objectives, Materials/Patients and Methods, Results, Discussion, References and Acknowledgements, Legends for display items (Figures and Tables).
- Research articles should contain 2500 - 3500 words, maximum number of references is 35, maximum Number of illustrations/Tables is 5.

#### • **Review Article:**

- Review Articles should contain 3500 - 4000 words, maximum number of references is 50, maximum number of illustrations/Tables is 5. In a review article both abstract and text of the manuscript, include following items:
- 1) Context: Include 1 or 2 sentences describing the clinical question or issue and its importance in clinical practice or public health.
- 2) Evidence Acquisition: Describe the data sources used, including the search strategies, years searched, and other sources of material, such as subsequent reference searches of retrieved articles. Explain the methods used for quality assessment and the inclusion of identified articles.
- 3) Results: Address the major findings of the review of the clinical issue or topic in an evidence-based, objective, and balanced fashion, emphasizing the highest-quality evidence available.
- 4) Conclusions: Clearly state the conclusions to answer the questions posed if applicable, basing the conclusions on available evidence, and emphasize how clinicians should apply current knowledge.

#### • **Hypothesis:**

- Hypothesis should not exceed 2000 words with a structured abstract of 200 words maximum. Hypothesis should comprise sections of Background, Objectives, Materials & Methods, Predicted Results with not more than 2 tables or figures and up to 20 references

#### • **Brief Report :**

- Brief Reports should contain 1000 - 2000 words with a structured abstract of 200 words maximum. Short reports should comprise sections of Background, Objectives, Materials & Methods, Results and Discussion with not more than 2 tables or figures and up to 20 references.

#### • **Short Communication :**

- Short Communication, follow the instructions for original articles, except that the total word number of the main text (excluding references, tables and figure legends) is limited to 2000 with no more than 2 figures and/or tables and no more than 15 references. An abstract, not exceeding 150 words, should be presented at the beginning of the article.

#### • **News :**

- News should contain 1000 - 2000 words with a structured abstract of 200 words maximum. News should comprise sections of Background, Objectives, Materials & Methods, Results and Discussion with not more than 2 tables or figures and up to 20 references.

#### • **Submission and Review Process :**

- Manuscripts must be written in English (use consistently either British or American spelling) and must be submitted online. To submit, go to <http://natscidiscovery.com> Full instructions for submission are detailed on submission system.

## Instruction for Authors

- **C. General Consideration:**
- **1. Peer review process:** All submissions will be reviewed anonymously by at least two independent referees. All manuscripts will be acknowledged upon presenting to the Journal office, provided that all stated requirements are met. Authors are encouraged to suggest names of two expert reviewers, but selection remains a prerogative of the Editor. The whole review process depends on receiving referees comments and revising the manuscripts based on these comments to the author. On receipt of the revised article from the author, and after final approving by referees, the letter of acceptance is issued to the author. Authors have the right to communicate to the editor if they do not wish their manuscript to be reviewed by a particular reviewer because of potential conflicts of interest. No article is rejected unless negative comments are received from at least two reviewers.
- **2. Conflicts of interest:** Authors should disclose, at the time of submission, information on financial conflicts of interest or other interests that may influence the manuscript. Authors should declare sources of funding for the work undertaken.
- **3. The Journal's Policy on Plagiarism:** Any practice of plagiarism will not be tolerated by the journal regarding submitted manuscripts. Non-identifiable quoted segments of articles or close paraphrases from other author/s or even submitting the author's previously published work are known as the act of plagiarism by this journal unless proper use of quotations or paraphrasing with decent citation or referencing are in place. Heavy use of one or a couple of articles is discouraged, even if paraphrased fully. Advertent practice of plagiarism will abort reviewing process or later submission to this journal. All submitted articles will evaluate by iThenticate software belonged to cross check for stop any plagiarism and improve publication quality.
- **4. Ethical consent:** All submitted articles involving human experiments should be performed only in accordance with the ethical standards provided by the responsible committee of the institution and in accordance with the Declaration of Helsinki (as revised in Edinburgh 2000), available at <http://www.wma.net/en/30publications/10policies/b3/index.html>. Papers describing animal experiments can be accepted for publication only if the experiment conforms the National Institute of Health Guide (National Institute of Health Publications No. 80-23, Revised 1978) for the care and use of Laboratory Animals for experimental procedure. Authors must provide a full description of their anesthetics and surgical procedures. All manuscripts reporting the results of experimental investigations involving human subjects should include a statement confirming the informed consent was obtained from each subject or subject's guardian. All animal or human studies should be used after approval of the experimental protocol by a local ethics committee
- **5. Acknowledgements:** Contributors: In acknowledgement section, name people for their contributions or their permission to reproduce their published material, to use their illustrations or provide information about them- try to fully name people who have helped from the conception of the idea to adoption of the hypothesis, to finalization of the study, etc., earnestly. Statement of financial support: Aside from the title page, state any financial or other relationships that might lead to a conflict of interest.
- **6. Copyright:** Please complete copyright form and send via email to editor. Download NSD Copyright Form
- **7. Disposal of material:** Once published, all copies of the manuscript, correspondence and artwork will be held for 6 months before disposal.
- **8. Creative Commons License**
- This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.
- **9. Once a manuscript** is accepted for publication it will be provided with a registered DOI number following the acceptance decision. Manuscripts accepted for publication by the MSD will be published as ahead of print articles prior to the printing date of their scheduled issue. Corresponding author will be provided with a PDF Proof by the publisher once the production process of an accepted manuscript is over.
- **10. Briefly Sections of NSD article:**
- Sections of article should insert into just one word document and uploaded to NSD submission system as manuscript document. Title page will detach from manuscript by NSD editors and manuscript will forward to referees without title page due to double blinded review rules.

## Instruction for Authors

- **Brief Section of NSD**
- **1-Title Page Section**
- Article Type:
- Title of Article:
- Name Surname of Author1, Name Surname of Author2, ...
- 1 Author Name Surname, Affiliation, e-mail address
- 2 Author Name Surname, Affiliation, e-mail address
- \*Corresponding Author :
- Author Name Surname, Affiliation, Address, Phone, Fax, E-mail address,
- Corresponding Author should upload all file
- **2-Manuscript Section**
- Abstract ( Objective: Methods: Results: Conclusion: "200-250 words and Key words )
- Introduction, Material and Methods, Statistics, Results, Discussion, Conclusion Acknowledgement, References.
- **3-Table and Figures Section**
- Tables and Legends, Figures and Legends should be inserted end of the references
- **Article Processing Charge**
- NSD is a non-profit Scientific Journal Platform; however, it uses professional services such as Language Editing, DOI, domain and hosting, iThenticate Plagiarism or similarity detection Detection Software. All of these professional services are used for all the article processes and an inevitable cost arises with this.
- Unfortunately, like most open journals, fees of the publication with NSD are charged to Authors. Payment is under the responsibilities of corresponding Author(s). NSD does not charge any fee during the submission period. However, after the peer-review process, a non-refundable charge (100 USD ) for each accepted manuscript must be paid by the author(s) via NSD's official PayPal account. An invoice will be sent for each accepted manuscript to corresponding author(s).
- Following with completion of payment procedure, the galey proof and acceptance letter of article will be send to authors for last check.
- Preperation of articles in PDF and HTMLformat is covered by Lycia Press Inc. ([www.lycians.com](http://www.lycians.com)) and Article Processing Charges paid to Lycia Press Inc. ([www.lycians.com](http://www.lycians.com))

Contents

Review Article

- 1 Turmeric Curcuminoid Polyphenolics as Antioxidant and Anticarcinogenic Agents  
**Ozlem Tokusoglu, Alkan Simsek, Murtaza Parvizi, Dilvin Eymen**  
Natural Science and Discovery, 2015; 1(3): 56-61

Original Article

- 2 Composition of the essential oil of two Salvia taxa (Salvia sclarea and Salvia verticillata subsp. verticillata) from Turkey  
**Sükrü Hayta, Gulden Dogan, Ebru Yuce, Eyup Bagci**  
Natural Science and Discovery, 2015; 1(3): 62-7
- 3 Non-Ionizing Radiation around Tanning Beds  
**Bahriye Sirav, Nesrin Seyhan**  
Natural Science and Discovery, 2015; 1(3): 68-73
- 4 Identification of Essential Oil Composition of Four Umbelliferae from Turkey  
**Sükrü Hayta, Gulden Dogan, Azize Demirpolat, Eyup Bagci**  
Natural Science and Discovery, 2015; 1(3): 74-9
- 5 The analysis of solid waste and effluent water management in Diyarbakir and Batman districts  
**Nilgun Onursal, Ali Riza Kul, Deylem Onursal**  
Natural Science and Discovery, 2015; 1(3): 80-4