

BUILDING A COMPREHENSIVE KNOWLEDGE BASE ON SUNFLOWER RESEARCH OVER MORE THAN 24 YEARS OF PUBLISHING THE ISJ HELIA

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SUMMARY

Journal Helia started his "mission" nearly 36 years ago, very unpretentious, as an information bulletin FAO Research Network on Sunflower, with the founders intention to allow quick and easy exchange of knowledge gained from experimental field trials of improving and breeding so important oilseed crop species, such as sunflower. Over time, the number of scientists gathered around the project development and promotion of sunflowers growing under the FAO Research Network on Sunflower has risen slowly but surely, the projects became more extensive, complex and serious. The abundance of scientific research results, realized in the framework of a research network, imposed the direction of evolution journal Helia in scientific journal with internationally recognized quality, peer-reviewed papers and relatively highly ranked in the scientific society.

Since the beginning in Serbia, the Journal was published by the Institute of Field and Vegetable Crops, as the publisher and editorial office headquarters, under the auspices of F.A.O. and ISA until 2006th. In 2007 the editorial office was moved to the Serbian Academy of Sciences and Arts, branch in Novi Sad, which also assumed the role of the main publisher, while the Institute remained to be a co-publisher.

Since 1990 a total of 24 volumes with 47 regular and two extraordinary numbers have been published by the scientific journal HELIA. That's a pretty impressive library with 6900 pages of printed material in 746 scientific papers in English. So far 2125 authors and co-authors of scientific papers from 43 countries from all continents have participated in publishing scientific papers in the journal and many authors have published a number of papers.

All submitted manuscripts are subject to anonymous, international review (so-called "single-blind peer review", where the authors of the papers do not know who the reviewers, but the reviewers know who the authors of the

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papers) and published in the journal only after receiving a positive review by two independent reviewers and the final opinion of the editor.

Considering the impact factor of the ISJ Helia in the last 10 years, according to citation indicators of some papers published in the journal Helia, it can be observed relatively high levels over the past 10 years, with a trend of significant increase in 2011th and 2012th. Focusing on that parameter, and the relatively high two-and five-year impact factors in 2011th and 2012th, we can be very pleased with these trends, which lead to our journal ranked near to relatively influential journals globally.

Key words: sunflower, editorial process, publishing process, scientific contribution, non-commercial journal, international evaluation

GENERAL REMARKS ON THE JOURNAL HISTORY AND PROGRESS

ISJ Helia is primarily a non-commercial scientific journal which is distributed free of charge to any interested person or institution engaged in the research work in the field of sunflower research, as stated in the preamble to the magazine. The first issue was published in December 1978 under the title "Helia - Information Bulletin of the FAO Research Network on Sunflower", without any intention to play the role of scientific journals. The main intention, however, was to be a good information platform for exchanging information and work experience in the area of the research network on sunflower under the auspices of the F.A.O. Our colleagues from the Romanian agricultural institute Fundulea, where the FAO headquarters of Research Network on Sunflower was settled, released this Bulletin until 1989, ending with the issue 11. The editor in chief of the journal issues Helia published in Romania was the world-renowned geneticist and sunflower breeder prof Alex V. Vrânceanu PhD.

During 1989 and 1990 F.A.O. headquarters of the Research Network on Sunflower was moved to the Institute of Field and Vegetable Crops in Novi Sad, under the leadership of professor Dragan Škorić PhD. The Bulletin Helia also moved to Novi Sad and professor Dragan Škorić PhD was appointed editor in chief. That year we published a single issue, but in 1991, when the Bulletin at the time changed its name to the International Scientific Journal Helia, began the regular publishing of two issues a year, one in July and another in December. Since July 2004 (the issue number 40), the editor has been Mr Zvonimir Sakač. When taking over the editorial policy, the main goal was to make a good, recognizable and influential scientific journal from the existing Information bulletin. With this purpose in mind, after the first three issues published, we started a process of anonymous peer review papers, as well as the formation of distinctive physiognomy and graphical features of the journal.

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the auspices of F.A.O. and ISA until 2006 (Volume 29, Number 45, December 2006). In 2007 the editorial office was moved to the Serbian Academy of Sciences and Arts, branch in Novi Sad, which also assumed the role of the main publisher, while the Institute remained to be a co-publisher.

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The editorial staff:

- Academician Dragan Škorić PhD, editor in chief
- MSc Zvonimir Sakač, managing editor
- Aleksandar Sakač, technical editor
- Vladimir Škorić, proof-reader and translator
- Srđan Vraneš, proof-reader and translator
- Snežana Merdović, secretary and copy editor

Members of the ISJ Helia editorial board:

- Prof Wolfgang Friedt PhD (Germany)
- Prof Gian Paolo Vannozzi PhD (Italy)
- Maria Joita Pacureanu PhD (Romania)
- Ferenc Viranyi PhD (Hungary)
- Jose Fernández-Martinez PhD (Spain)
- Gerald J. Seiler PhD (USA)
- Thomas Gulya PhD (USA)
- Felicity Vear PhD (France)
- Yakov Demurin PhD (Russia)
- Viktor V. Kirichenko PhD (Ukraine)
- Yalcin Kaya PhD (Turkey)
- Mulpuri Sujatha PhD (India)
- Prof Antonio J. Hall PhD (Argentina)
- Abelardo de la Vega PhD (Argentina-Hungary)
- Prof Jun Zhao PhD (China)
- Academician Dragan Škorić PhD (Serbia)

THE PROCESS OF PEER REVIEW OF THE SUBMITTED PAPERS

All submitted manuscripts are subjected to anonymous, international review (so-called "single-blind peer review", where the authors of the papers do not know

who the reviewers are, while the reviewers know who the authors of the papers are) and published in the journal only after receiving a positive review by two independent reviewers and the final opinion of the editor.

In reviewing the submitted manuscripts there is currently the initial team of 22 reviewers from 8 countries (USA-4, Italy-3, France-3, Spain-1, Romania-4, Germany-2, Hungary and Bulgaria-2-3), whose education, scientific competence, as well as the issues that are currently dealt with, allow them to authoritatively evaluate the quality of submitted papers, to review and contribute to the improvements of the quality of peer-reviewed papers. Selecting reviewers, we tried to cover all the areas that are of interest for publication in the journal *Helia*. Reviewers are employed in a variety of institutions, from universities, research institutes, and the private companies, and have a great research experience, related to the scientific research on sunflower.

Besides the initial team of reviewers and according to the needs *Journals*, some prominent scientists from other scientific branches are occasionally engaged, especially in situations when you need a little reinforcement of some scientific issues. We intend to introduce a further development of the magazine and the system of peer review that is now present in many leading scientific journals, where authors themselves propose the list of 3 to 5 evaluators, who they consider to be appropriate. After that the editor of the list is selected by a minimum of two reviewers.

BIBLIOMETRIC INDICATORS

All scientific papers, published in the magazine in addition to the abstract in English, containing abstracts in Spanish and French as well (in 2010, we decided that abstracts in Spanish and French should be optionally joined to the published work, only at the request of the author, who must ensure the quality and verified translations of the abstracts), and the corresponding assignment of UDC and DOI. DOI is a unique alphanumeric string assigned to an individual digital object (article, book chapter, etc..), through which a connection to the Internet site where the document is located could be established. Linking data about the articles, DOI numbers and web addresses is done via CrossRef service (www.crossref.org). This service maintains a DOI numbers, meta-data and links to full texts.

Over the past few years, under the jurisdiction of the Ministry of Education, Science and Technological Development, Government of the Republic of Serbia, the Centre for Evaluation in Education and Science (CEES) has conducted an extensive bibliometric analysis, and according to it a preliminary categorization of all journals published in the Republic of Serbia (over 500 journals) has been done under the same criteria as they do in the Thompson Reuters (CEON, 2013; Šipka, 2013; Kosanović and Šipka, 2013). Based on this categorization, *ISJ Helia* is in the first category of magazines, at the very top of the list (Subotić, 2013; Pajić, 2013).

Table 1: Citations of articles published in the journal Helia over the past 10 years, as well as the values of two-and five-year impact factors

Journal		In SCIndex		U ISI (SCI/SSCI/A&HCI)			Impact factor		
		Citates	H-citates	Citates	A-citates	H-citates	I-citates	Two-year	Five-year
2003	Helia	50	16	105	1	0	104	0.897	1.105
2004	Helia	72	15	128	2	1	125	1.337	1.162
2005	Helia	54	17	100	5	2	93	0.762	0.904
2006	Helia	57	23	122	5	2	115	0.573	0.492
2007	Helia	16	8	55	3	0	52	0.500	0.739
2008	Helia	45	23	81	1	5	75	1.040	0.883
2009	Helia	68	14	103	1	8	94	0.792	0.882
2010	Helia	49	18	109	1	2	106	0.429	0.932
2011	Helia	43	26	137	9	7	121	1.280	1.188
2012	Helia	68	15	180	4	19	157	0.870	1.454

Considering the impact factor of the ISJ Helia in the last 10 years, according to citation indicators of some papers published in the journal Helia, it can be observed that there have been relatively high levels over the past 10 years, with a trend of significant increase in 2011 and 2012. Focusing on that parameter and relatively high two-and five-year impact factors in 2011 and 2012, we can be very pleased with these trends, which lead to our journal being ranked near relatively influential journals globally, so even without the expected valuation of Thomson Reuters Institute.

According to SCOPUS (SCOPUS, 2013) database, since 1999 a total of 203 paper published in the journal Helia have been cited 281 times, and out of that number most cited are: Seiler, (2007). Škorić *et al.*, (2007). Vear, *et al.*, (2007). Encheva *et al.*, (2008); Fernández-Martínez *et al.*, (2008). Škorić, (2009). Demirci and Kaya, (2009), with h-index h7 (a group of seven works with 7 or more citations).

AREAS COVERED IN THE MAGAZINE

The journal published a number of different types of work: Original scientific papers, technical papers, short communications, reports, letters to the editor, hypotheses and show-biz works resulting from scientific research in all aspects of growing sunflower: agronomic traits of crops, sunflower genetic resources, breeding and selection of sunflower, phytopathology and crop protection, physiological, biochemical, molecular-biological, morphological, cytogenetic, genetic research at all levels of integration: ecology, access to land, water and mineral resources, and the application of various sunflower cropping systems.

The journal is published according to high standards applicable to this type of magazine, with several sheets in full color, depending on the requirements of the editorial policy, on high quality printing machines. The magazine is printed in

circulation of 650 copies, 600 copies are distributed to customers in over 50 countries around the world, virtually on every continent, and the remaining circulation is kept in the office for the archives. In the foreseeable future we intend to fully switch to electronic publication of journals, but some of circulations will still have to be printed and distributed as a printed (hard-copy) version. Reprints of published papers are to be submitted electronically (as PDF files) to the authors. The magazine is also exchanged with 64 institutions and libraries in the country and abroad. The official languages are English, Spanish and French, so that the work can be published in all three languages, but is recommended to be in English, with abstracts required in Spanish and French.

STATISTICAL REVIEW OF PUBLISHED PAPERS IN THE PAST 6 YEARS (2008-2013)

Over the past 6 years (2008-2013) we have published a five-volume (31 to 36) with a total of twelve issues of the ISJ Helia magazine (48 to 59).

Table 2: Statistical review of published papers over the past six years

N.r.	Journal designation	Publishing schedule	Articles	Pages
1	Helia 31(48)	July 2008	16	160
2	Helia 31(49)	December 2008	13	112
3	Helia 32(50)	July 2009	16	164
4	Helia 32(51)	December 2009	18	170
5	Helia 33(52)	July 2010	16	160
6	Helia 33(53)	December 2010	25	228
7	Helia 34(54)	July 2011	17	164
8	Helia 34(55)	December 2011	13	124
9	Helia 35(56)	July 2012	13	126
10	Helia 35(57)	December 2012	13	132
11	Helia 36(58)	July 2013	10	110
12	Helia 36(59)	December 2013	8	110
Total			178	1760

During this 6-year period, we published 178 scientific papers written by authors from 27 countries around the world, with a total of 1760 pages. Each issue of the magazine was distributed to interested individuals and institutions around the world, an average of about 550 copies of each number, which means that the total number of distributed copies of the journal is 6600.

A total of 177 authors have been involved (as corresponding author) from 27 countries over the last six-years.

Table 3: View countries of origin (according to corresponding authors) and the number of papers published from these countries in the past six-year period

Country	Papers	Country	Papers	Country	Papers
1 Argentina	15	10 Iran	3	19 Romania	5
2 Brazil	4	11 Israel	1	20 Russia	8
3 Bulgaria	12	12 Italy	2	21 Serbia	39
4 Canada	1	13 Mexico	1	22 Spain	8
5 Croatia	1	14 Morocco	1	23 Sudan	2
6 France	1	15 Nigeria	1	24 Turkey	24
7 Germany	1	16 Republic of Belarus	1	25 Tunisia	1
8 Hungary	1	17 Republic of Macedonia	1	26 Ukraine	4
9 India	32	18 Republic of Moldova	2	27 USA	5

CATEGORIZATION AND INDEXING OF ISJ HELIA

In 2008 the editorial board of ISJ Helia launched a process of evaluation of our journal via Thomson Reuters Journal Selection Process, with a purpose of including it in a comprehensive database Web of Science. However, due to the lack of citations of papers published in the journal, we have not received an affirmative response. In the meantime, the situation with citations (or "visibility works through web browser") has greatly improved (see details in Table 1), the visibility of articles published in our journal is getting better, thanks to the distribution of metadata through EBSCO and SCOPUS databases, so it is our great responsibility, together with the publisher DeGruyter, to take every possible effort to reconnect our journal to the Thompson Reuters Journal Selection Process and get a full international verification of journal as soon as possible. Citations of published papers in this case would increase greatly and, of course, that would attract a larger number of scientists to publish their scientific contributions in ISJ Helia.

Since August 2013, ISJ Helia has been published on-line (ISSN (Online) 2197-0483), home page: <http://www.degruyter.com/view/j/helia>. The ISJ Helia is indexed in Serbian Citation Index since vol. 23, no. 32, 2000 and electronically available in full-text since vol. 25, no. 36, 2002. on the web address <http://scindeks.nb.rs/journal-Details.aspx?issn=1018-1806>, and <http://www.doiserbia.nb.rs/journal.aspx?issn=1018-1806>, and through The International Sunflower Association Intranet portal for active members at <http://www.isa.cetiom.fr/>.

Also, ISJ Helia is indexed in FAO Agris database (agris.fao.org), in SCOPUS from 2007 (<http://www.scopus.com/home.url>), and in the CABI Abstracts database, but since 2008 Journal Helia has been available as the full text in database CABDirect <http://www.cabdirect2.org>. The ISJ Helia is electronically available in full-text also via commercial database EBSCO Academic Search Complete (www.ebsco-host.com).

The ISJ Helia is covered by the following services to: Celdes; CNKI Scholar (China National Knowledge Infrastructure); CNPIEC, EBSCO Discovery Service, Elsevier – SCOPUS; Google Scholar; J-Gate; Naviga (Softweco); Primo Central (ExLibris); SCImago (SJR); Summon (Serials Solutions/ProQuest); TDOne (TDNet); WorldCat (OCLC).

THE FUTURE PROSPECTS OF ISJ HELIA, PROBLEMS AND SOLUTIONS

The concept of non-commercial journal, which is distributed free of charge to all interested individuals and institutions, is largely obsolete, or rather getting harder and harder at the present time. Publishing a journal with profile like ISJ Helia requires a great financial effort, primarily due to the maintenance of the achieved high standards in bibliometric and graphic design of printed material, which must be constantly improved due to the tremendous desire to respond quickly and to be fresh and up-to-date in each published issue, and to a large extent because of the huge postage costs, which are an inevitable companion of international publications, especially those in the "hard copy". Postal costs sometimes exceed the cost of processing and printing the journals, but it is a tribute to the great number of subscribers around the world, since the magazine is alive and survives only by expanding circle of its readers. Today the Internet is everywhere and it seems that the other opportunities, whose attractiveness should always be scrutinized, are available.

Owing to these considerations, we decided to commercialize the journal and in this way secure its future. In fact, we recently received a very interesting offer from a reputable European publisher of scientific publications, De Gruyter house (http://en.wikipedia.org/wiki/De_Gruyter, <http://www.degruyter.com/dg/page/79> / eine geschichte-Kurz-des-Verlags), the offer of partnership in the publishing of ISJ Helia. After several conversations with the authorized representatives of the De Gruyter house, as well as dozens of e-mails exchanged, it was concluded that what the respected publishing house offers is a very crucial thing that ISJ Helia needed to overcome its current financial problems and to provide a significantly better prospects for the future. Accordingly, Serbian Academy of Sciences and Arts, Branch in Novi Sad, as well as the editor of ISJ Helia, has recently signed an agreement to a partnership with the publishing house De Gruyter in which the Serbian Academy of Sciences and Arts, Branch in Novi Sad transferred to the publishing house De Gruyter all exclusive publishing, marketing and distribution rights of ISJ Helia over the next ten years, provided that the ownership of the magazine will remain ours. We will continue to edit the magazine, and the International editorial Board will also remain of the same content and functionality.

CONCLUSION

In short, why is this a good deal for the future of ISJ Helia?

From 2014 on Journal Helia will be a commercial magazine and will be distributed by subscription. Distribution will be one of the regular ways, as hard copies, and others (majority) through the internet and internet charging subscriptions. Editorial board and current publisher of HELIA during the 2013th will publish volume 36 (issues 58 in July, and 59 in December 2013), and then continuing with the volume 37 (issue 60 in July of 2014), publishing duties will completely be taken over by the publishing house De Gruyter.

Complete journal publishing, printing, postal distribution, as well as charging subscriptions to the journal will be taken over by the publishing house De Gruyter.

Submission of papers for publishing will remain in the classical manner, by e-mail and online via ScholarOne Manuscripts[®] and will not be charged anything for the publication of papers and printing color photographs or illustrations in the manuscript submitted.

The Editorial Board will continue to operate as usual and will have the final word when it comes to editorial policy

De Gruyter publishing house will take over the financial and technical commitment so that ISJ Helia has both editions, printed and electronic, and may be distributed through both media simultaneously. Electronic edition of the magazine will also be the home address of the web journal with all the necessary information about the journal, with the possibility of electronic research journals (not just download PDF files), but also with the possibility of so-called "online first" publication. Establishing the electronic edition of the journal Helia practically started immediately after the signing of the transfer of rights and obligations, so that the on-line edition of the journal (ISSN 2197-0483 online) is set to the Internet at web-address: <http://www.degruyter.com/view/j/Helia>, already in August 2013th, with a free access to journal archives, all from 23rd volume of 2000th until the most recent 36th volume.

The publishing house De Gruyter takes over the responsibility of distributing all the meta data about the magazine and published papers in most bibliographic databases in order to increase the visibility of the ISJ Helia, thus drastically increase citations of the published articles.

The publishing house De Gruyter takes over the responsibility, through their respective channels, to carry out the evaluation of our magazine via Thomson Reuters Journal Selection Process, as well as the success of this process and there is no doubt that all journals published by the publisher are on SCI list.

The publishing house De Gruyter takes over the responsibility of placing the magazine in a large number of world class libraries and reference centres, where we have not been present yet, owing to objective reasons.

We think that these are very good conditions that allow further prosperity of ISJ Helia, its full promotion and good positioning in a large family of world scientific literature and allow editors to fully concentrate on improving the quality of published papers, so that we could finally declare that we have 20% of rejected papers. For us the most important thing is that a reputable publishing house, which will find its own interest and profit in the commercialisation of the magazine, takes care of technical matters relating to publication, distribution and promotion of ISJ Helia. The publishing house De Gruyter voluntarily chose us to be their partner (this "partner" with a particular accent). They have not been asked or advised on behalf of the third party, but only based on what they have found themselves in the market: well-molded, high-quality, lucidly conceived and technically well-equipped science magazine out of which it is possible to get better quality.

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REFERENCES

- CEON, (2014). Web-address: http://ceon.rs/index.php?option=com_frontpage&Itemid=73&lang=en
- DeGruyter, (2014). Web address: <http://www.degruyter.com/dg/page/79/>
- Demirci, M., and Kaya, Y., (2009). Status of *Orobanche cernua* Loeffl. and weeds in sunflower production in Turkey. *Helia*, 32(51): 153-160. Retrieved from www.scopus.com.
- Encheva, J., Shindrova, P., and Penchev, E., (2008). Developing mutant sunflower lines (*Helianthus annuus* L.) through induced mutagenesis. *Helia*, 31(48): 61-72. Retrieved from www.scopus.com.
- Fernández-Martínez, J. M., Domínguez, J., Pérez-Vich, B., and Velasco, L., (2008). Update on breeding for resistance to sunflower broomrape. *Helia*, 31(48): 73-84. Retrieved from www.scopus.com.
- Kosanović, .B. and Šipka, P., (2013). Output in WoS vs. representation in JCR of SEE nations: Does mother Thomson cherish all her children equally, *In: Šipka, P. (Ed.), Journal Publishing in Developing, Transition and Emerging Countries: Proceedings of the 5th Belgrade International Open Access Conference 2012, Belgrade, Serbia, May 18-19, 2012*, p.p. 125-137.
- Pajić, D., (2013). Journal classifications based on citation data: The comparison and suitability of three distance measures, *In: Šipka, P. (Ed.), Journal Publishing in Developing, Transition and Emerging Countries: Proceedings of the 5th Belgrade International Open Access Conference 2012, Belgrade, Serbia, May 18-19, 2012*, p.p. 25-35.

- Seiler, G.J., (2007). The potential of wild sunflower species for industrial uses. *Helia*, 30(46): 175-198. Retrieved from www.scopus.com.
- Šipka, P., (2013). Bibliometric quality of Serbian journals 2002-2011: More than just a dress for success. In: Šipka, P. (Ed.), *Journal Publishing in Developing, Transition and Emerging Countries: Proceedings of the 5th Belgrade International Open Access Conference 2012*, Belgrade, Serbia, May 18-19, 2012, p.p. 161-166.
- Škorić, D., (2009). Sunflower breeding for resistance to abiotic stresses. *Helia*, 32(50): 1-16. Retrieved from www.scopus.com.
- Škorić, D., Jocić, S., Hladni, N., and Vannozi, G. P., (2007). An analysis of heterotic potential for agronomically important traits in sunflower (*Helianthus annuus* L.). *Helia*, 30(46): 55-74. Retrieved from www.scopus.com.
- Subotić, S., (2013). "Face Validity" differences between locally published and highest level international journals based on the in-text citations approach, In: Šipka, P. (Ed.), *Journal Publishing in Developing, Transition and Emerging Countries: Proceedings of the 5th Belgrade International Open Access Conference 2012*, Belgrade, Serbia, May 18-19, 2012, p.p. 37-48.
- Vear, F., Serre, F., Roche, S., Walser, P., and De Tourville Labrouhe, D., (2007). Recent research on downy mildew resistance useful for breeding industrial-use sunflowers. *Helia*, 30(46): 45-54. Retrieved from www.scopus.com.
- Wikipedia, (2014). Web address: http://en.wikipedia.org/wiki/De_Gruyter.

