

Social news

Acta Botanica Croatica: editorial activity and scientometric analysis for the period 1998–2014

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Abstract – An editorial report concerning and scientometric analysis of papers published in the journal *Acta botanica croatica* for the period from 1998 to 2014 is presented. Since 1998, original scientific papers have been written exclusively in English and the accessibility and communicability have increased. The journal is included in the citation base SCOPUS (since 2007) and Web of Science – Science Citation Index Expanded (since 2008). Beginning in 2011, a partnership with co-publishers Versita – Central European Science Publisher and Walter de Gruyter Open Publishing House, resulted in improved management, quality control, electronic publication and increasing visibility of the journal. The impact factor has been calculated since 2010 by Journal Citation Reports and has increased from 0.435 to 0.839.

Acta Botanica Croatica is an international scientific journal published by the Department of Biology, Faculty of Science, University of Zagreb, Croatia; it is the traditional botanical journal of southern Europe. The scope of the journal is field (terrestrial and aquatic) and experimental botany (including plant viruses, fungi, bacteria, algae), from sub-cellular level to ecosystems.

One decade after the end of the First World War, botanists in the Department of Botany of the Faculty of Philosophy of the University of Zagreb of that time established a domestic botanical journal with the intention of improving communications with the international scientific community and exchanging it for other botanical journals (Ilijanić 1992). The journal, named *Acta Botanica instituti botanici regalis universitatis Zagrebiensis*, was founded in 1925 by Professor Vale Vouk (founder of the laboratory of plant physiology in Zagreb University, organizer of oceanographic institutions in Split, Rovinj and Dubrovnik). In the same period many other botanical journals were founded in Europe. Vale Vouk was the first editor of the journal, until his retirement in 1957, with an interval during World War II, when the journal did not come out (Tab. 1).

Tab. 1. Editors of *Acta Botanica Croatica*.

Editor	Period	Number of issues edited	Volumes edited
Vale Vouk	1925–1956	15	1–15
Stjepan Horvatić	1957–1968	12	16–26/27
Ljudevit Ilijanić	1969–1992	23	28–51
Ljerka Marković	1993–1997	5	52–55/56
Damir Viličić	1998–2013	32	57–72
Branka Salopek-Sondi	2014–		73–

In the period 1957–1968, during the editorship of Professor Stjepan Horvatić whose research field was the flora and vegetation of southwestern Croatia and the Adriatic islands), the name of the journal was changed to *Acta Botanica Croatica*. It was the period of consolidation of the journal although it was not still regularly published.

In the period 1969–1992, the journal was edited by Professor Ljudevit Ilijanić whose scientific interest was in the flora, plant ecology, plant sociology and grassland vegetation in Croatia. Ljudevit Ilijanić introduced a scientific (concise) style of writing, and achieved international revision of submitted manuscripts (one domestic and one international), as well as regular, annual publication of the journal. Statistical analysis of the ten-year period from 1979 to 1988 reveals that papers from 10 botanical subjects were published; they may be divided into two main groups: group A dealing with phytosociology, phytogeography, ecology and taxonomy (59%), and group B with physiology, cytology, embryology, virology and molecular biology (41%) (Jokić and Borić 1992). The difference between these two groups of papers was in the citations, which were older in group A than in group B, indicating the diversification of new scientific disciplines during that period.

In the early post-war period in Croatia, after the breakup of Yugoslavia, Professor Ljerka Marković took over the editorship of the journal, from 1993 to 1997 (vol. 56). The field of scientific interest of Professor Ljerka Marković was flora, expansion of neophytes, nitrophilous vegetation, riparian communities and grasslands. Unfortunately, for a short period the journal experienced irregularity in its financial support, resulting in a gap in publication in 1999, just before Ljerka Marković's retirement.

In 1996 I, Professor Damir Viličić, moved from the Institute of Oceanography and Fisheries, Dubrovnik, to the Department of Botany, Faculty of Science, University of Zagreb where I established my position as full professor and founded the laboratory for marine phytoplankton. I was asked to take over the journal and I accepted this duty. Here I give a short report of the editorial activity during my mandate which lasted from 1998 (vol. 57 which was published in 1999) until 2013 (vol. 72).

Beginning with volume 57 in 1998, *Acta Botanica Croatica* improved requirements of scholarly publishing, such as editorial procedures and records, structure of (international) editorial board, regular publishing (two times yearly). The journal was published as an entirely English-language journal. We began to use the journal management and publishing software (Online Journal System). By fulfilling the requirements for scholarly publishing (Marušić and Marušić 2005) the journal obtained financial support from the Croatian Ministry of Science again in 2000.

Impact factor was calculated in the SCOPUS base from 1999, within the portal Scimago Journal Ranking (Fig. 1).

In 2008, *Acta Botanica Croatica* was listed in the Directory of Open Access Journals and responded to the invitation of the International Study on Quality Assurance, organized by Humboldt University, Institute for Library and Information, Berlin. After quality control, the journal was soon included in Thomson Reuters Master Journal List, and the same year *Acta Botanica Croatica* was included in the Web of Science – Science Citation Index Expanded. The impact factor has been calculated since 2010 by Journal Citation Reports. Papers published in *Acta Botanica Croatica* are more and more cited in highly competent journals, increasing the impact factor from 0.435 to 0.839 over the time window examined (Fig. 1).

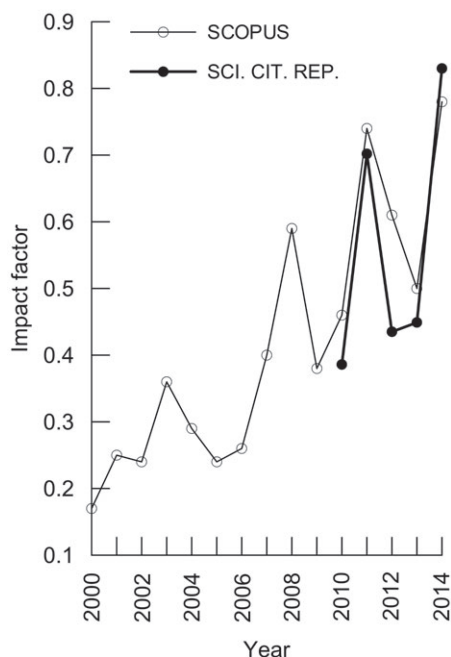


Fig. 1. *Acta Botanica Croatica*; impact factors (IF) calculated by the SCOPUS citation base (Scimago Journal Ranking), and Web of Science – Journal Citation Reports.

Beginning in 2011, partnership with co-publishers Verisita – Central European Science Publisher and Walter de Gruyter Open Publishing House resulted in improved management, quality control, electronic publishing and increasing visibility in indexing and other services. Since 2011 the number of libraries in Europe and North America where *Acta Botanica Croatica* content is disseminated increased to 624, i.e. 256 libraries in North America (according to ELUNA 2016) and 368 in Europe (according to IGeLU 2016). Metapress and Springer provide »CrossCheck Service«. Accepted publications are published »on-line first« with digital object identifier (DOI). All these improvements led to the interest of authors in publishing in *Acta Botanica Croatica* increasing exponentially during the last two decades (1997–2014) (Fig. 2). The period between submission and acceptance after positive reviewer and editor decisions has been shortened.

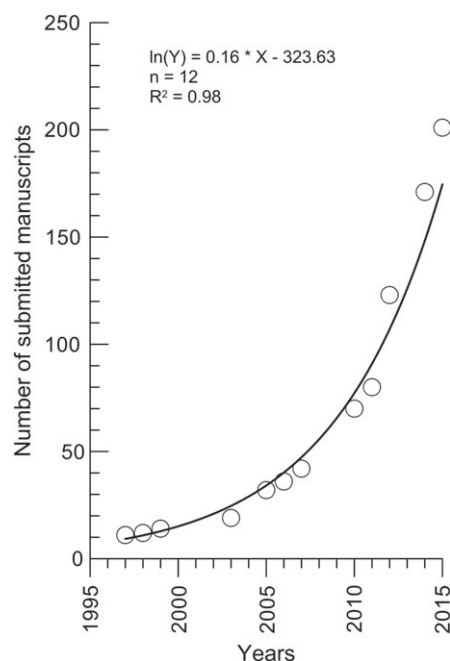


Fig. 2. Exponential increase of submissions of manuscripts to *Acta Botanica Croatica* in the last two decades.

The authors of papers appearing in *Acta Botanica Croatica* are dominantly from Croatia, with ca 83% in the period 1991–1999 (Jokić and Sirotić 2002); however there has recently been an increase in the number of authors who are from other European (44%) and from non-European (37%) countries (Tab. 2). One of the journal's focuses is research into the karstic and arid areas of southern Europe, resulting in an increasing number of publications coming from countries with arid environments, e.g. circum-Mediterranean, African and Asian countries.

In April 2013, the editing process was improved by the introduction of a technical editor-in-chief, subject editors and technical editors with the intention of better operationalization of reviewing process and technical preparation of accepted papers.

Tab. 2. Affiliation of authors who published papers in *Acta Botanica Croatica* in the period 1991–1999 (according to Jokić and Sirotić 2002) and 2008–2015, respectively.

Country	1991–1999		2008–2015	
	Number of papers	Relative contribution (%)	Number of papers	Relative contribution (%)
CROATIA	112	82.96	52	19.19
TURKEY			18	6.64
HUNGARY	4	2.96	17	6.27
INDIA			16	5.90
ITALY	12	8.89	16	5.90
SLOVENIA	5	3.70	15	5.54
POLAND			10	3.69
USA			8	2.95
MONTENEGRO			7	2.58
PAKISTAN			7	2.58
IRAN			6	2.21
SERBIA			6	2.21
AUSTRIA			5	1.85
BULGARIA			5	1.85
EGYPT			5	1.85
ENGLAND			5	1.85
GERMANY			5	1.85
GREECE			5	1.85
CZECH REPUBLIC			4	1.48
RUSSIA			4	1.48
SPAIN			4	1.48
SWEDEN			4	1.48
BOSNIA HERCEG			3	1.11
BRAZIL			3	1.11
JAPAN	2	1.48	3	1.11
MACEDONIA			3	1.11
SAUDI ARABIA			3	1.11
CANADA			2	0.74
DENMARK			2	0.74
MEXICO			2	0.74
MOROCCO			2	0.74
NIGERIA			2	0.74
PEOPLES R CHINA			2	0.74

Acta Botanica Croatica celebrated its 90 anniversary in 2015, and entered the 10th decade of publishing. High quality standards and modern scientific content should be a permanent editorial goal in order for the success of *Acta Botanica Croatica* to be maintained.

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