

Grey Literature, E-Repositories and Evaluation of Academic & Research Institutes. The case study of BPI e-repository

Maria V. Kitsiou¹ & Vasileios Souvlidis²

¹Benaki Phytopathological Institute Library, 8, St. Delta Str., 14561 Kifissia, Athens, Greece,
Corresponding author e-mail: m.kitsiou@bpi.gr

²Benaki Phytopathological Institute- Information Technology Service, 8, St. Delta Str., 14561 Kifissia, Athens, Greece

Abstract

E-repositories are internet databases, in which the whole intellectual property produced by an Educational Foundation or a Research Institute can be gathered, classified, reserved and, of course, disseminated.

It is known that e-repositories are based on Open Access and Knowledge Dissemination concept, providing access-without restriction- to scientific information. But, it is not known that e-repositories can be proved useful and usable “tools” for the evaluation of Universities and Research Institutes.

In this study, we present the case of the BPI e-repository. The Library of the Benaki Phytopathological Institute (BPI) realizing the importance of the *evaluation* – necessary for funded projects- developed the BPI e-repository.

BPI e-repository has been planned and structured so in order to achieve the aims of the evaluation simultaneously in an “institution level”, in “scientific department level” (common intellectual responsibility) and in “researcher level” (individual intellectual responsibility). The scientific material contained in it has been *categorized* so in order to responds to the organizational structure and function of BPI and, also, to highlights in the best way the research activities of the BPI scientific community members. Its implementation based on *DSpace 1.7.0*, open source software suitable for digital archives management, that uses *OAI-PMH* (Open Archives Initiative Protocol for Metadata Harvesting) and Dublin Core Standard, that is suitable for the documents description. The flexibility of DSpace software allowed us to implement changes into the repository system, like fields addition. So, these changes made the description of all documents in different types (books or book chapters, papers, dissertations, BPI publications, patents, conferences, technical reports etc) more efficient and complete.

Navigation and *search* function in an user-friendly interface using five diverse ways, i.e. *type of material*, *title*, *author*, *year* and *subject*. We note that we implement a simple bilingual subject standardization system. The keywords used by the authors themselves in their papers or conferences proceedings make the subject standardization procedure and indexing difficult. Nevertheless, we are aiming at the implementation of an optimized bilingual subject index adopting and implementing *standards such as NLGSH or/and LC*.

The appropriate use and exploitation of the search results via e-repository – according to the experience having been acquired by this e-repository development process and function- can lead certainly to faithful conclusions concerning the evaluation of an Educational Foundation or a Research Institute.

Keywords: Grey Literature, E-Repositories, Open Access, Evaluation, Universities, Research Institutes

Introduction

The Library of the Benaki Phytopathological Institute¹ (BPI) has been in operation since 1930. It is a specialized scientific Library dedicated to the subject of agriculture. In particular, it covers subjects of phytopathology, plant protection, plant health, botany, entomology, agricultural zoology, weed science, phytopharmacy, pesticides control, eco-toxicology, environmental protection, crops, food technology, food quality and integrated management systems of rural production. It intends not only to support and enhance the research activities of both the BPI community members and the external users, but also to exceed their expectations.

Its collection consists of books, printed and electronic journals, maps, grey literature, databases and audiovisual material.

As regard as grey literature, and realizing the importance of the internal evaluation of the Institute, the Library of BPI has developed the BPI e-repository².

But, how BPI e-repository has been planned and structured? What is the type of material contained in it? What are the diverse *communities* and *collections*? What are its technical characteristics? How many persons have been working for its implementation? and – the most important- how is it related to the internal evaluation of BPI? How the e-repository can be used as a useful and usable “tool” for the internal evaluation of an Institute?

BPI e-repository

BPI e-repository has been in operation since January 2012. It has been planned and structured so in order to achieve a twofold aim, i.e. the *preservation* and *dissemination* of the BPI intellectual property and the *internal evaluation* of BPI, simultaneously in an “institution level”, in a “scientific department level” (common intellectual responsibility) and in a “researcher level” (individual intellectual responsibility). Benaki Phytopathological Institute consists of three (four in the past) scientific departments “Department of Phytopathology”, “Department of Entomology & Agricultural Zoology” and “Department of Pesticides Control & Phytopharmacy”, and these are obvious if somebody choose “Author” from the main menu at the home page and then select the letter “D” from the index “browsing by author”. In this way, the intellectual property of each scientific department can be easily evaluated. Also, the same results can be retrieved, if the options “search” and “advanced search” are used.

The scientific material contained in the e-repository has been *categorized* so in order to respond to the organizational structure and function of BPI and, also, to highlight in the best way the research activities of the BPI scientific community members. More specific, there are -up to present- eleven (11) *communities* and thirty two (32) *collections*:

¹ Established in 1929, Benaki Phytopathological Institute was the first Greek research institute to have a broad scientific basis in plant health, plant protection, risk assessment and safe usage of agricultural chemicals with regards to the protection of human health and that of the environment more generally. BPI, also, performs analytical work and mandated checks to ensure the safety of foodstuffs and other agricultural products. It is a Legal Entity of the Public Sector, donated by the National Benefactor Emmanouel Benakis and it operates under the supervision of the Hellenic Ministry of Rural Development and Food. Since January 2008, BPI has been publishing the semi-annual scientific journal, the Hellenic Plant Protection Journal (HPPJ), formerly Annals of the Benaki Phytopathological Institute.

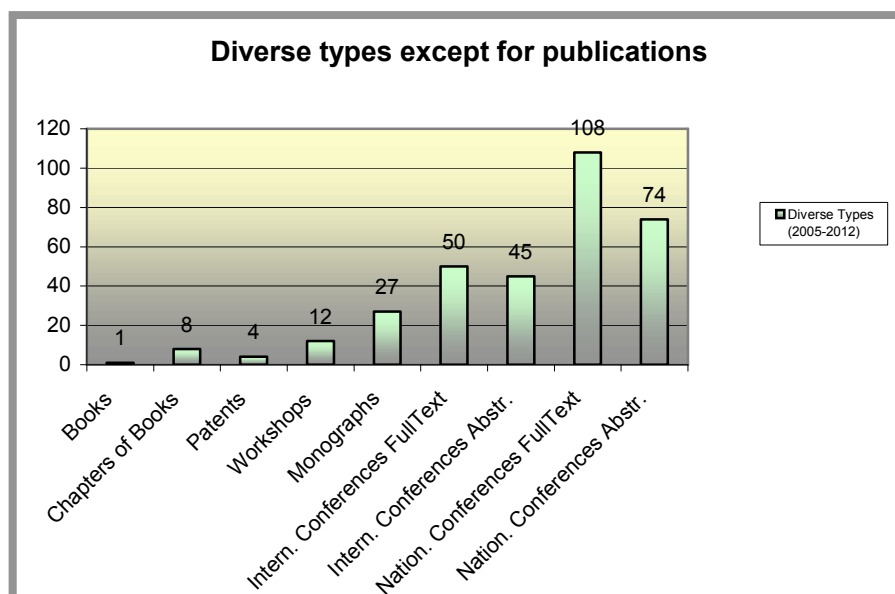
² BPI e-repository is accessible via both website of BPI Library <http://83.235.16.144:8080/jspuien> and www.openarchives.gr

- Books
- BPI Annual Reports
- BPI Editions
- Conferences
- Funded Projects
- Meetings/ Seminars
- Monographs
- MSc, Phd, Post Doc
- Patents
- Publications
- Technical Reports

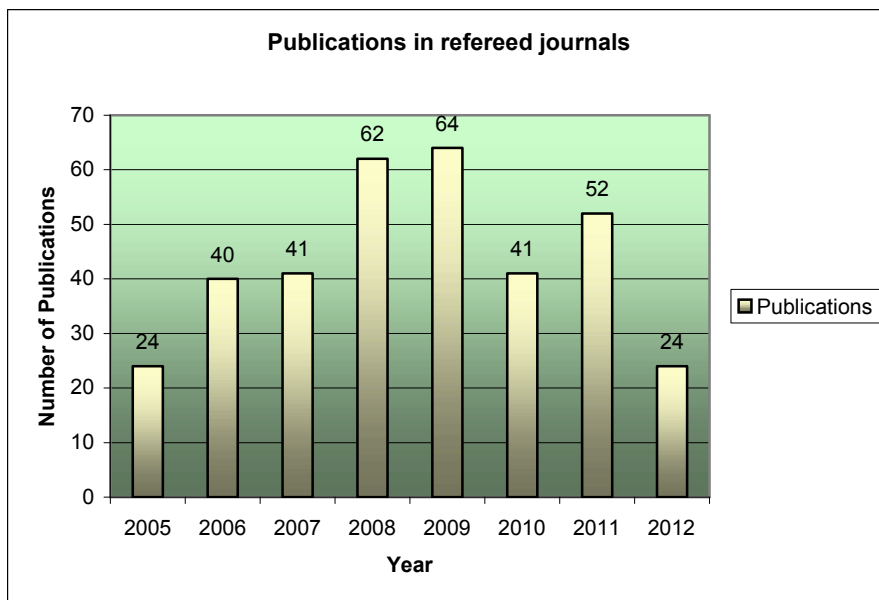
For example, the *community* “Books” consists of two (2) *collections* “Book Chapters” and “Books”. Also, the *community* “Publications” consists of four (4) *collections* 1.“Publications in foreign scientific journals (non refereed)”, 2. “Publications in foreign scientific journals (refereed)”, 3.“Publications in greek non-scientific journals” and 4.“Publications in greek scientific journals”. Additionally, several *collections* are contained in the *community* “BPI Editions”, like BPI books, Speeches, Guidelines, Newsletters and Technical Bulletins. As regard as the *community* “Conferences”, there are six (6) *collections*, i.e. 1. “International Conferences-fulltext”, 2. “International Conferences-abstract only”, 3. “International Conferences-posters”, 4. “National Conferences-fulltext”, 5. “National Conferences-abstract only” and 6. “National Conferences-posters”.

Shortly, one more *community* “Photographs” or “Photographic Material” is predicted to be added. Its *collections* (“photos of insects”, “photos of plants”, “photos of plant diseases” etc) will be included too. It is notable that this photographic material is original and it has been produced by the researchers of BPI during their research activities.

Up to now, there are totally 516 *records*. The graphs below represent the numbers of the *records* in some *communities* and *collections*. The numbers –as the note shows- concern only the period 2005 –2012.



Graph1: Diverse types except for publications 2005-2012



Graph 2: Publications in refereed journals 2005-2012

As regard as the technical characteristics, the implementation of the BPI e-repository is based on *DSpace 1.7.0*, an open source software suitable for digital archives management, that uses the *OAI-PMH* (Open Archives Initiative Protocol for Metadata Harvesting) and the *Dublin Core Standard*, that is suitable for the documents description. Owing to the inefficiency of the *Dublin Core*, concerning the number and the diversity of the fields, it was needed to be several modifications, like fields addition. So, these changes made the description of all documents in the different types (books or book chapters, publications, dissertations, BPI editions, BPI annual reports, patents, conferences, technical reports etc.) more efficient and complete.

A common *record* consists of the following *fields*:

- author(s)
- title
- date of issue
- publisher
- citation
- identifiers (ISSN, ISBN etc.)
- type
- language
- subjects
- abstract
- description
- file attachment

With respect to the *field* “Author”, 650 authors names have already been recorded. During the recording, it was realized that the name of an author could be appeared in diverse types in different issues.

So, it was decided to be implemented a standardization system (*authorities*) in order the double records to be avoided. This means that only one name type is used for each author, the authorized one. For example “*Kitsiou, M. V.*”

Concerning the *field* “Subject”, there are almost 1500 subjects headings. It is notable that the bilingual (greek-english) subject standardization system that used, is so simple. The keywords used by the authors themselves in their papers or conferences proceedings make the subject standardization procedure and indexing difficult. Nevertheless, we are aiming at the implementation of an optimized bilingual subject index adopting and implementing *standards such as NLGSH (National Library of Greece Subject Headings), LCSH (Library of Congress Subject Headings) or Agrovoc thesaurus.*

The “*Browse*” and “*Search*” function in an user-friendly interface in which five diverse options, i.e. *communities/collections, issue date, author, title and subject* are available. At this point, we should refer that due to a technical problem –at the first stages- there was a quantitative difference between the results retrieved via *Browse* and the results retrieved via *Search* concerning the same keyword. We realized that *DSpace* uses two different indexes. Although, the problem was easy to be solved.

A librarian and a computer technician were the only persons needed in order the BPI e-repository be structured.

Conclusion

The appropriate use and exploitation of the search results via e-repository – according to the experience having been acquired by this e-repository development process and function- can lead certainly to faithful conclusions concerning the evaluation of an Educational Foundation or a Research Institute

Acknowledgment: The authors would like to express their gratitude to all contributors.

Bibliography

- Dietz, P. (2011) Dspace 1.7.0 System Documentation. Manual
- Hussos, N. K. et al. (2010) “Successful interoperability case studies in greek repositories and relative technological tools”, Proceedings of the 19th National Conference of Greek Academic Libraries, pp 87-105, (3-5 November 2010, Panteion University, Athens, Greece)
- Kounoudes A. et al. (2010) “The way to the open access through Creative Commons. The case study of Ktisis” Proceedings of the 19th National Conference of Greek Academic Libraries, pp 319- 334), (3-5 November 2010, Panteion University, Athens, Greece)
- <http://dspace.mit.edu/> (last access date January 9, 2013)
- <http://ktisis.cut.ac.cy/> (last access date January 9, 2013)
- <http://dspace.lib.uom.gr/> (last access date January 9, 2013)