

How to keep being updated in science

Get relevant news and do not lose any important new article

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15. 12. 2015

The screenshot shows the top navigation bar of the Web of Science platform. It includes several service logos: Web of Science™, InCites™, Journal Citation Reports®, Essential Science Indicators™, and EndNote™. On the right side of the bar, there is a user profile dropdown menu labeled 'Vojtech', a 'Help' link, and a language dropdown menu set to 'English'. Below the navigation bar, the 'WEB OF SCIENCE™' logo is displayed in large orange letters on the left, and the 'THOMSON REUTERS™' logo is on the right. A search bar is located below the logos, with the word 'Search' in an orange button and a dropdown menu currently showing 'All Databases'. To the right of the search bar are three utility buttons: 'My Tools', 'Search History', and 'Marked List'. At the bottom of the interface, a light gray banner contains the text: 'Welcome to the new Web of Science! View a brief tutorial.'

The purpose

- In the past, one had to read all relevant journals for particular field, or at least lists of literature for particular country/field
- There was no central evidence or database of all literature – one had to rely on local library and/or personal contacts
- Internet is great library, but we need some special tools to work with on-line literature resources efficiently
- There are at least thousands of daily published articles – how to select the relevant ones?
- There are several basic ways how to keep being updated
 - There is no single the best solution
 - Choice depends also on personal preferences
 - Regardless tool chosen, it requires some work to set it up...
 - Following slides show some possibilities...

Various alerting services of individual publishers

- Publishers usually provide tools (e-mail, RSS, ...) to inform readers about new articles for particular journal/topic
 - Also notifying about citing of an article, custom searches, ...
- It works well, but there are dozens of different services – it can be little bit noisy to follow all of them in once
- Not everyone is providing it, registration is commonly required
- Publishers collect personal data (at least e-mails) – **read privacy policy and terms of conditions!**
- Examples of e-mail alerts
 - Oxford Journals eAlerts <http://www.oxfordjournals.org/en/connect/email-alerts.html> (no registration needed)
 - PNAS <http://www.pnas.org/> requires registration only for advanced e-mail settings
 - Wiley Online Library <http://olabout.wiley.com/WileyCDA/Section/id-404512.html> requires registration
 - Springer Alerts <https://www.springer.com/alert> requires registration – similarly Nature, Science, PLOS, ...

What is RSS and what it is good for

- Electronic format to spread news (new published content) from web to users' web browser, special readers (computer applications) or web services
- See https://en.wikipedia.org/wiki/Comparison_of_feed_aggregators for available software
 - E-mail clients can also handle RSS
 - Web browsers are not so comfortable to manage much RSS feeds (but there are add-ons available to help with that)
- Web services
 - Feedly <https://feedly.com/>
 - Digg Reader <https://digg.com/reader>
 - AOL Reader <http://reader.aol.com/>
 - NewsBlur <https://www.newsblur.com/>
 - The Old Reader <https://theoldreader.com/>
 - Portals like Seznam allows to add custom blocks with RSS feeds (good for few, for for dozens)

Look for the orange icon

Browsers usually detect RSS feeds

Článek [Diskuse](#) [Číst](#) [Editovat](#) [Editovat zdroj](#) [Zobrazit historii](#)

RSS

Tento článek pojednává o souborovém formátu. Další významy jsou uvedeny v článku [RSS \(rozcestník\)](#).

RSS (Rich Site Summary) je rodina XML formátů určených pro čtení novinek na [webových stránkách](#) a obecněji [syndikaci](#) obsahu.

Technologie RSS umožňuje uživatelům [Internetu](#) přihlásit se k odběru novinek z webu, který nabízí RSS zdroj (*RSS feed*, též *RSS kanál*, *RSS channel*). Tento zdroj se většinou vyskytuje na stránkách, kde se obsah mění a přidává velmi často (například zpravodajské servery).

Původně tento formát sloužil pouze k předávání aktuálních novinek mezi jednotlivými servery, které takto velmi jednoduše mohly odkazovat na aktuální články na jiných serverech.

RSS formát poskytuje obsah celého článku, příp. jeho část, odkaz na původní článek a také jiná [metadata](#). Tyto informace jsou posílány jako XML soubor nazývaný RSS zdroj, webový zdroj, RSS stream, RSS feed nebo RSS kanál.

Obsah [\[skrýt\]](#)

Symbol RSS

- Go to browser settings to set how to handle RSS – open special application, go to web service or add it as special bookmark (instead of one site it lists feeds' new articles)

Akregator RSS reader

An example of RSS reading application

Divergence times, historical biogeography, and shifts in speciation rates of Myrtales
Datum: sobota 17:59

Publication date: February 2016

Source: Molecular Phylogenetics and Evolution, Volume 95

Author(s): Brent A. Berger, Ricardo Kriebel, Daniel Spalink, Kenneth J. Sytsma

We examine the eudicot order Myrtales, a clade with strong Gondwanan representation for most of its families. Although previous phylogenetic studies greatly improved our understanding of intergeneric and interspecific relationships within the order, our understanding of inter-familial relationships still remains unresolved; hence, we also lack a robust time-calibrated chronogram to address hypotheses (e.g., biogeography and diversification rates) that have implicit time assumptions. Six loci (*rbcl*, *ndhF*, *matK*, *matR*, 18S, and 26S) were amplified and sequenced for 102 taxa across Myrtales for phylogenetic reconstruction and ten fossil priors were utilized to produce a chronogram in BEAST. Combretaceae is identified as the sister clade to all remaining families with moderate support, and within the latter clade, two strongly supported groups are seen: (1) Onagraceae+Lythraceae, and (2) Melastomataceae+the Crypteroniaceae, Alzateaceae, Penaeaceae clade along with Myrtaceae+Vochysiacae. Divergence time estimates

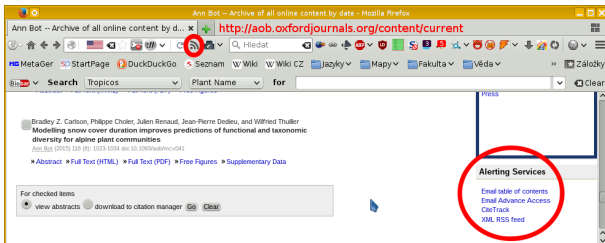
- Another RSS readers look similarly – the purpose is always the same, as well as basic functionality

Where to look for RSS feeds I

- Almost all journals/publishers/databases, as well as blogs, newspapers, etc. provide RSS feeds – very universal tool
 - Browse Springer Link <http://link.springer.com/> and select journals/topics
 - Browse Oxford Journals archive <http://oxfordjournals.org/en/our-journals/index.html> and add RSS for individual journals
 - Get RSS for Wiley's journals <http://olabout.wiley.com/WileyCDA/Section/id-404512.html#rss>
 - Select PLOS <http://www.plosone.org/taxonomy> topics or journals <https://www.plos.org/publications/journals/>
 - PNAS <http://www.pnas.org/site/aboutpnas/rss.xhtml>
 - Nature Journals web feeds <http://www.nature.com/webfeeds/index.html>
 - Science <http://www.sciencemag.org/>
 - PeerJ <https://peerj.com/> (see web's footer)

Where to look for RSS feeds II

- BioOne <http://www.bioone.org/action/showPublications?type=byAlphabet> has RSS feeds for individual journals
- BioMed Central <http://www.biomedcentral.com/journals> has RSS feeds for individual journals
- Taxon <http://ingentaconnect.com/content/iapt/tax> – e-mail alerts require registration
- American Journal of Botany <http://www.amjbot.org/> – e-mail alerts are available



Elsevier as a publisher as well as database maintainer

- Browse Elsevier journals in Science Direct
<http://www.sciencedirect.com/science/journals> and follow the journals using RSS or e-mail (it requires registration)
- Scopus <http://www.scopus.com/> allows to make RSS feed or e-mail alert (it requires registration) from custom searches
- Mendeley is reference manager making custom database <https://www.mendeley.com/research-papers/> from resources of its users – it is rich, but far from full databases and it is mainly to be used together with Mendeley
 - It offers tools similar to social networks – following users, groups (topics) etc. – it more or less requires usage of Mendeley (it is nice add-on to its usage)
 - It is not manually annotated – not fully reliable
- Nice feature is offer of related papers based on similarity and interest of people searching similar things

Web of Science (Thomson Reuters)

- The basic scientific database
- Probably the largest manually annotated database
- <https://apps.webofknowledge.com/> should contain most of relevant journals (but new records are added relatively lately after publication comparing to another resources)
- After registration it allows creation of RSS/e-mail alerts to saved searches, contents of journals, citations of selected articles etc. (menu My tools)
- EndNote <http://endnote.com/> is paid reference manager very well connected with Web of Science
- ResearchID <http://www.researcherid.com/> is sort of social network – scientists create profiles sharing their work and can follow each other and various topics etc.
 - All pros and cons of social networks (see further)

Google Scholar and Microsoft Academic Search (Beta)

- <https://scholar.google.cz/> is very strong when searching for full texts
 - Searching according to topics is not as good as in Web of Science or Scopus
- <http://academic.research.microsoft.com/> is still under development and not fully working (yet)
- It is unclear which resources they use – there are some copyright controversies – not fully reliable sources
- They allow to set (registration is required) various alerts
- Google is richer in features – including personal library, export of citations, ...
- Both have very restrictive and unfriendly privacy policy and usage terms and conditions

Social networks

Not only Twitter and Facebook

- Almost all publishers have Twitter/Facebook profiles – for people already using social networks it is good tool to follow news (not only new articles, also other potentially interesting information)
- Social networks are great to follow the latest news, but as there is low filtering, there can easily be more news than users can digest
- It is not reliable source of data – user follow mainly other people – important part of content is missing
- They are not connected to databases
- Users must provide a lot of personal data and privacy conditions and terms of use are commonly very problematic

"Scientific" social networks

- ResearchID <http://www.researcherid.com/> is sister product of Web of Science (its social network)
- Academia <https://www.academia.edu/> is large and commonly used academic social network
- ResearchGate <https://www.researchgate.net/> is may be the largest academic social network
- LinkedIn <https://www.linkedin.com/> probably the largest vocational social network – not only to share new articles, but also skills, experiences, ... from various fields (not only science)
- User get news only from his/her network
 - Work of people outside network is missing
 - It goes per people – not per journal or topic
 - It is mainly tool for self-presentation and keeping in touch within particular field, it is not fully reliable and it should not be overestimated
 - It can be hard to filter relevant content

Automated literature search

- It works similarly as alerts in databases
- Typically web application regularly searching various databases for selected keywords
- Pubcrawler <http://pubcrawler.gen.tcd.ie/> is probably the most advanced tool of this kind
 - Registered user can regularly search in many databases using rich search criteria
- PubMed <https://ncbi.nlm.nih.gov/pubmed/> is literature database tightly connected with NCBI genetic databases
 - Registered users can create various regular searches in all NCBI databases
 - It is mainly for biomedicine and molecular biology – not that great for taxonomy
- **Geneious** has agents able to regularly search PubMed database – the tool works well, but it is primarily aimed for molecular data, not literature

Other resources (various mixture)

- Botanical electronic journals
<http://www.e-journals.org/botany/>
- JSTOR database <http://www.jstor.org/> and JSTOR plants <http://plants.jstor.org/>
- Kew literature search
<http://kbd.kew.org/kbd/searchpage.do>
- The International Plant Names Index (literature)
<http://www.ipni.org/ipni/publicationsearchpage.do>
- Harvard University Herbaria & Libraries http://kiki.huh.harvard.edu/databases/publication_index.html
- Botanicus <http://www.botanicus.org/> – historical botanical literature
- Biodiversity Heritage Library
<http://biodiversitylibrary.org/> – historical literature
- Crossref <http://www.crossref.org/> helps with finding, linking and citing content


Czech electronic resources

- Portal of electronic resources, Charles University
<https://pez.cuni.cz/>
- Electronic databases and libraries, Faculty of Science, Charles University
<https://lib-eth.natur.cuni.cz/BIBLIO/>
- Central catalog of Charles University libraries
<http://ckis.cuni.cz/>
- Electronic information resources, Czech Academy of Science
<http://www.lib.cas.cz/eiz/>
- Digital library, Czech Academy of Science
<http://www.lib.cas.cz/digitalni-knihovna/>
- Catalogs and databases of Czech National library
<http://aleph.nkp.cz/>
- On-line reference manager Citace.com
<http://www.citace.com/>

The end

Questions...

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Chemical Engineering	Agricultural and Biological Sciences	Medicine and Dentistry	Arts and Humanities	G	H	I	J	K	L
Chemistry	Biochemistry, Genetics and Molecular Biology	Nursing and Health Professions	Business, Management and Accounting	M	N	O	P	Q	R
Computer Science	Environmental Science	Pharmacology, Toxicology and Pharmaceutical Science	Decision Sciences	S	T	U	V	W	X
Earth and Planetary				Y	Z	0-9			
				Browse all titles					

- How do you do it?
- How do you keep updated about new works?
- How are you looking for literature?
- How do you manage your articles and references?

Created in typographical system X₃LaTeX, <http://www.xelatex.org/> on openSUSE GNU/Linux,

<http://www.opensuse.org/>, December 17, 2015.