Testing Journal Matching Systems
A Head-to-Head Comparison

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Introduction

• Report on work to test journal matching systems that have been developed to help authors identify and choose potential journals for publication.

• Methods Used.

• Results.

• Discussion of results and systems.
Why Journal Finders?

- Authors have a number of options for publishing their work:
  - Reputable journals from various publishers.
  - Less than reputable journals.
- New researchers generally guided by their advisors, but may wish to branch out at some point.
- Many options for identifying journals for publication:
  - Library Resources (e.g. Library Journal Holdings List; Ulrich’s; Subject Indexes; Librarians).
  - Google Scholar.
  - Journal Matching Systems - match working titles & abstracts to journals that publish in a subject area.
What are Journal Matching Systems?

- Systems designed to help researchers identify and choose a journal for a publication.
- Use terms from an article’s title and/or abstract to find journals that publish articles on that topic.
- Available from individual publishers and other sources.
Methods

- Collected titles & abstracts of articles written by science faculty at Western Illinois University.
- Total of 394 journal articles from 2003 to 2015.
- Searched each title and abstract in the journal matching systems.
- Identified whether the results matched the journal that published the article (Top Match; Top 5 Matches; Any Match).
- Summarized the data.
Number of Articles by Subject

- Agriculture: 25
- Biology: 148
- Chemistry: 89
- Geography: 47
- Geology: 30
- Physics: 55
Number of Articles by Publisher Type

- Commercial: 55%
- Government: 1%
- Non-Profit: 2%
- Society: 40%
- University: 2%
Systems Tested

- Edanz Journal Selector
- Elsevier Journal Selector (only on Elsevier titles)
- EndNote Journal Matching
- Journal/Author Name Estimator (JANE)
- Journal Guide
- Scientific Journal Finder
- Springer Journal Finder (only on Springer titles)
- ResearchGate – tested and dismissed (matches individual articles but does not give a list of journal titles that might publish on a topic).
<table>
<thead>
<tr>
<th>System</th>
<th>Links</th>
<th>Journals</th>
<th>Time</th>
<th>Rank?</th>
<th>Acceptance Rate</th>
<th>Publication Time</th>
<th>Fees</th>
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<tbody>
<tr>
<td>Edanz</td>
<td>Yes</td>
<td>28,547</td>
<td>5 yrs. (2013-17)</td>
<td>IF</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Elsevier</td>
<td>Yes</td>
<td>2,500</td>
<td>9 yrs.</td>
<td>IF</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>EndNote</td>
<td>Yes</td>
<td>11,365</td>
<td>5 yrs.</td>
<td>IF;</td>
<td>JCR Rank</td>
<td>No</td>
<td>No</td>
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<tr>
<td>JANE</td>
<td>No</td>
<td>5,629</td>
<td>10 yrs.</td>
<td>Article Influence</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Journal Guide</td>
<td>Yes</td>
<td>&gt;40,000</td>
<td>10 yrs. 2005-15</td>
<td>SNIP</td>
<td>No</td>
<td>If provided by publisher</td>
<td>No</td>
</tr>
<tr>
<td>Scientific Journal Finder</td>
<td>Yes</td>
<td>&gt;30,000</td>
<td>10 yrs. 2003-13</td>
<td>SJR</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Springer</td>
<td>Yes</td>
<td>2,900</td>
<td>None</td>
<td>IF</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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</table>

**IF** - Impact Factor  
**JCR Rank** – Journal Citation Reports Rank  
**SNIP** - Source Normalized Impact per Paper  
**SJR** - SCImago Journal Rank  
**Article Influence** - article citation frequency within 5 years of publication
## Results – Matches by System

<table>
<thead>
<tr>
<th>System</th>
<th>Top</th>
<th>Top 5</th>
<th>Match</th>
<th>Total</th>
<th>% Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDANZ</td>
<td>51</td>
<td>43</td>
<td>16</td>
<td>110</td>
<td>27.92%</td>
</tr>
<tr>
<td>EndNote (362)</td>
<td>72</td>
<td>57</td>
<td>24</td>
<td>153</td>
<td>38.83%  (42.27%)</td>
</tr>
<tr>
<td>JANE</td>
<td>93</td>
<td>11</td>
<td>10</td>
<td>114</td>
<td>28.93%</td>
</tr>
<tr>
<td>Journal Guide</td>
<td>42</td>
<td>49</td>
<td>30</td>
<td>121</td>
<td>30.71%</td>
</tr>
<tr>
<td>Scientific Journal Finder</td>
<td>85</td>
<td>7</td>
<td>8</td>
<td>100</td>
<td>25.38%</td>
</tr>
<tr>
<td>Elsevier (71)</td>
<td>11</td>
<td>20</td>
<td>13</td>
<td>44</td>
<td>61.97%</td>
</tr>
<tr>
<td>Springer (30)</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>14</td>
<td>46.67%</td>
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# Results – Matches by Subject

<table>
<thead>
<tr>
<th>System</th>
<th>Ag</th>
<th>Biol</th>
<th>Chem</th>
<th>Geog</th>
<th>Geol</th>
<th>Phys</th>
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<tbody>
<tr>
<td>EDANZ</td>
<td>3</td>
<td>55</td>
<td>34</td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Elsevier (71)</td>
<td>2</td>
<td>7</td>
<td>15</td>
<td>13</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>EndNote (362)</td>
<td>15</td>
<td>58</td>
<td>33</td>
<td>15</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>JANE</td>
<td>2</td>
<td>56</td>
<td>43</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Journal Guide</td>
<td>3</td>
<td>58</td>
<td>41</td>
<td>3</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Scientific Journal Finder</td>
<td>1</td>
<td>51</td>
<td>34</td>
<td>0</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Springer (30)</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Discussion

• Systems do not always match to journals that published the article.

• Systems provide different information about journals:
  ▪ Impact factor or other ranking.
  ▪ Links to journal home page.
  ▪ Decision time or time to publication (from publishers).

• Some systems do better in certain subjects (Biology & Chemistry).
  ▪ May have lower impact factors than the journal where an article was published.
  ▪ Both provide acceptance rate and decision time.

• Publishers’ systems (Elsevier; Springer) direct users to their journals.
Discussion

• Elsevier matched articles about brood parasite birds to parasitology journals (brood parasites are birds that lay their eggs in other birds’ nests).
• EndNote gives information from Journal Citation Reports (discipline & rank within a discipline) when results expanded.
Questions?