

Analysis of journal usage by Wageningen UR staff members via article references

Based upon co-citation of journals in articles published between 2006 and 2011

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Research domains



Hybrid research organization

- Wageningen **University and Research Organization**
- Research departments (5 at Wageningen UR)
 - Animal, Plant, Environmental, Social, Agrotechnology & Food Sciences)
- Research institutes (9 at Wageningen UR)
- Chair groups (92 with sometimes more than 1 chair)

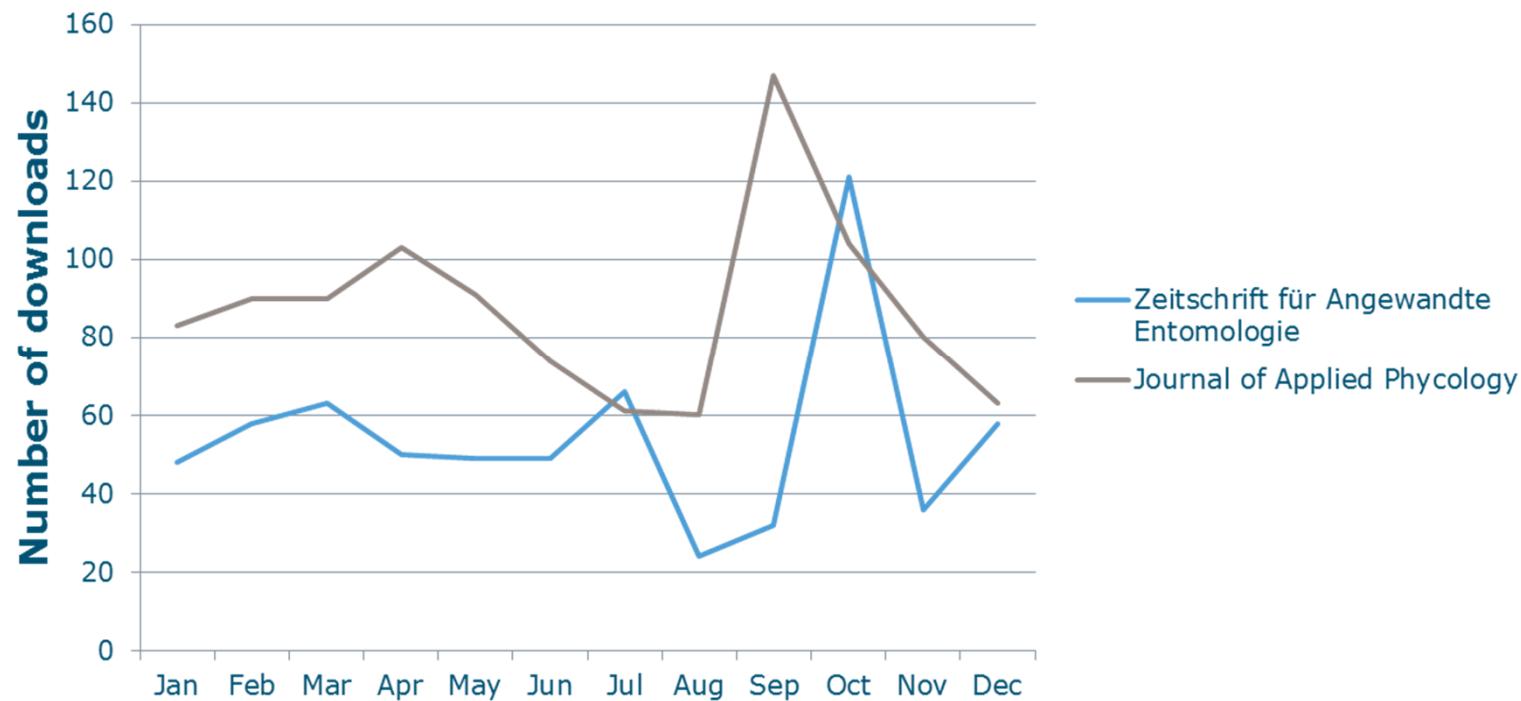
Article downloads

- Counter reports
- IP range: 137.224.0.0-137.224.255.255
 - not linked to research groups
- Usage for Wageningen UR as a whole

| Journal Re Number of Successful Full-text Article Requests by Month and Journal | | | | | | | | | | | | | |
|---|------------|-----------|------------|-------------|--------|--------|----------|--------|----------|--------|--------|--------|--------|
| Wageningen UR Library - 3_149 | | | | | | | | | | | | | |
| Date run: 6-1-2011 | | | | | | | | | | | | | |
| | Publisher | Platform | Print ISSN | Online ISSN | jan-10 | feb-10 | mar-2010 | apr-10 | may-2010 | jun-10 | jul-10 | aug-10 | sep-10 |
| Total for a IOP | IOPscience | | | | 0 | 0 | 237 | 209 | 208 | 260 | 143 | 151 | 277 |
| Acta Physi IOP | IOPscienc | 1004-423X | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Advances IOP | IOPscience | | 2043-6262 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Biofabrica IOP | IOPscienc | 1758-5082 | 1758-5090 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Bioinspira IOP | IOPscienc | 1748-3182 | 1748-3190 | | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 8 | 43 |
| Biomedica IOP | IOPscienc | 1748-6041 | 1748-605X | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

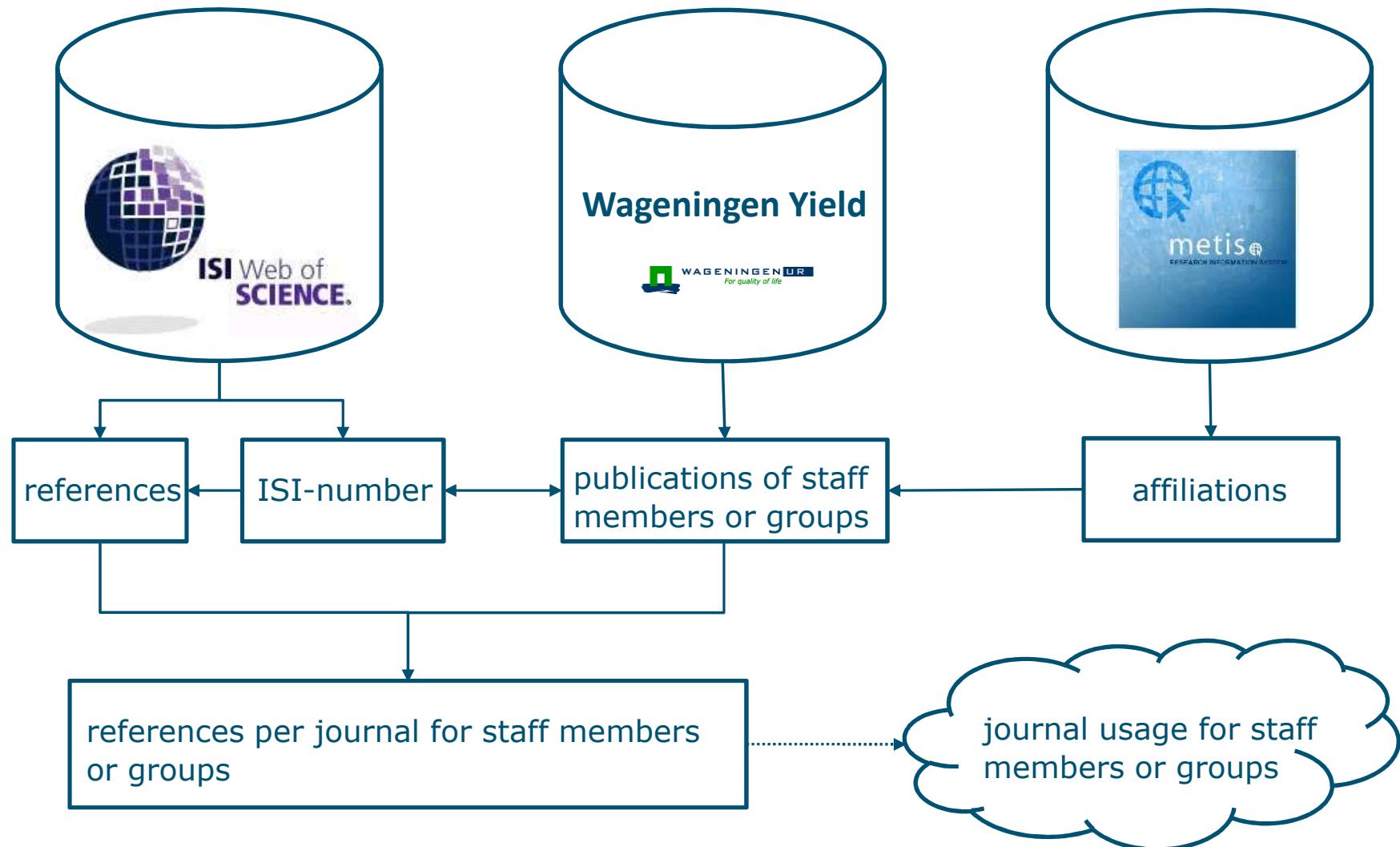
“Real” article downloads

- Representativeness of downloads for usage
- Journal importance for research groups/disciplines

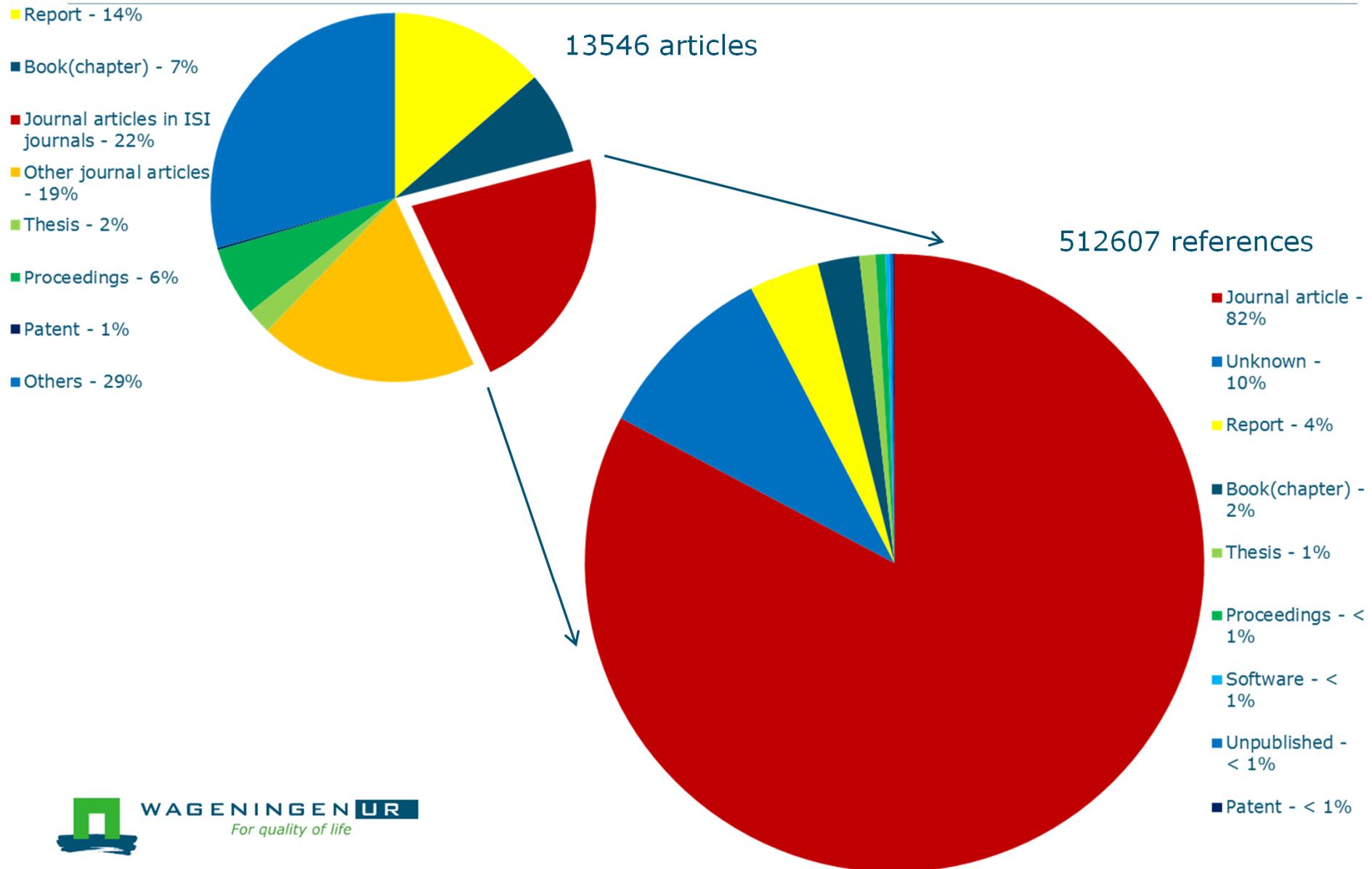


Journal usage by staff members or groups at Wageningen UR

- Collection management (library)
 - Include appropriate journals
 - Cost allocation journal subscriptions over departments
 - Journal recommendation (users)
 - Core journals for scientific disciplines or groups
 - Research strategies (management)
 - Collaborations between groups
 - Appointment of new staff
- } similarity analysis



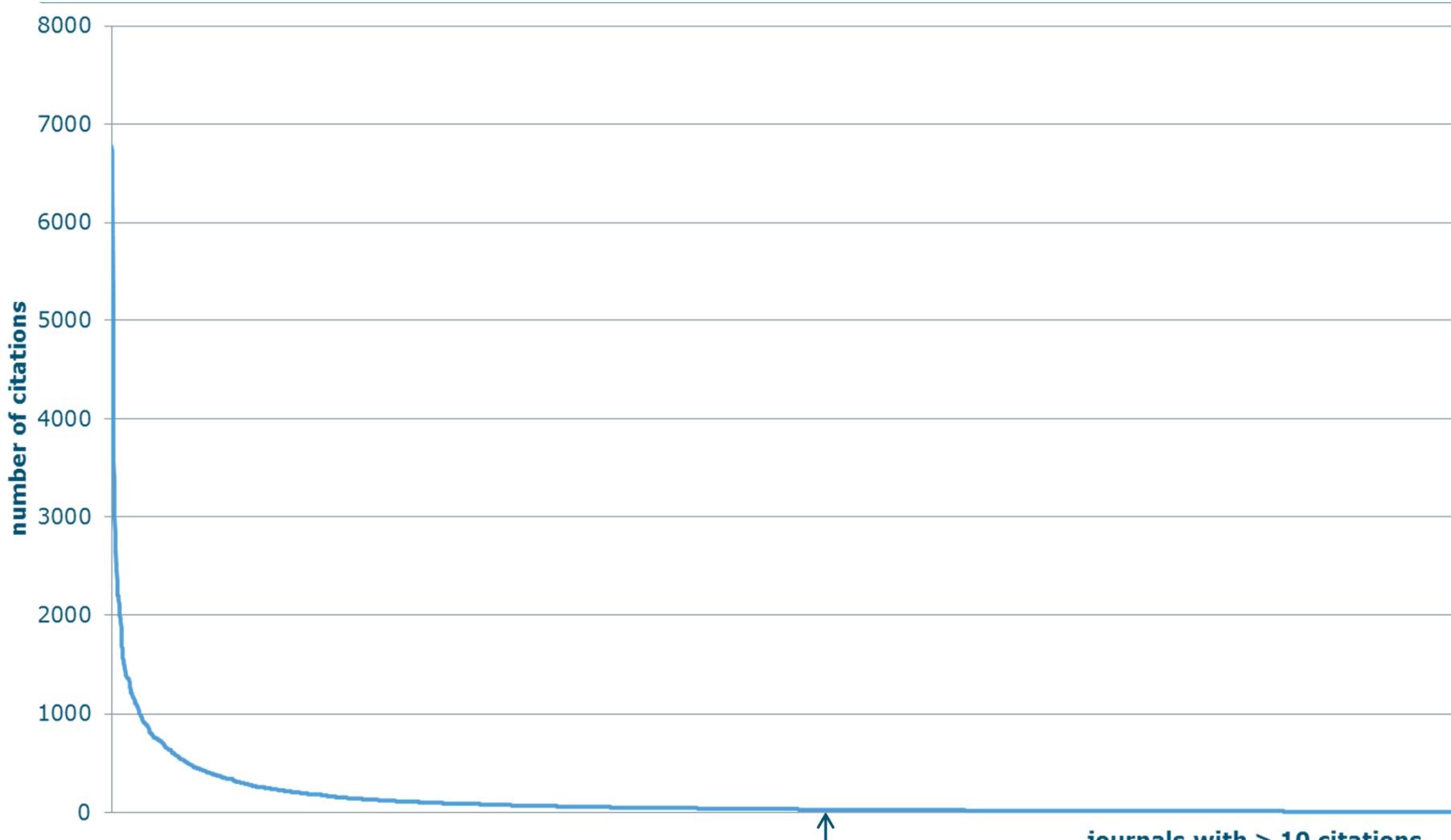
Publications and references 2006-2011



Most cited journals (n=9343)

| Journal | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2006-2011 |
|--|------|------|------|------|------|------|-----------|
| Nature | 764 | 947 | 999 | 1233 | 1365 | 1467 | 6775 |
| PNAS | 699 | 904 | 1020 | 1158 | 1375 | 1573 | 6711 |
| Science | 663 | 840 | 918 | 1133 | 1271 | 1486 | 6311 |
| Applied and environmental microbiology | 640 | 692 | 986 | 969 | 966 | 875 | 5128 |
| Journal of dairy science | 413 | 499 | 603 | 518 | 691 | 933 | 3657 |
| Plant physiology | 533 | 543 | 608 | 591 | 663 | 623 | 3561 |
| ... | ... | ... | ... | ... | ... | ... | ... |
| World agriculture | 0 | 0 | 0 | 0 | 0 | 1 | 1 |

Cited journals – Wageningen UR



Allocation costs journal subscriptions – journal citations

| Journal | PSG | ASG | SSG | AFSG | ESGcitations | Total | List price |
|--|------|------|-----|------|--------------|-------|------------|
| Nature | 989 | 341 | 59 | 511 | 753 | 2653 | \$ 2130 |
| PNAS | 1225 | 325 | 29 | 787 | 166 | 2532 | \$ 471 |
| Science | 970 | 239 | 99 | 529 | 594 | 2431 | \$ 609 |
| Applied and environmental microbiology | 696 | 257 | 27 | 1320 | 139 | 2439 | \$ 993 |
| Journal of dairy science | 92 | 1169 | 149 | 212 | 38 | 1660 | \$ 365 |
| Plant physiology | 1296 | 4 | 2 | 379 | 59 | 1740 | \$ 292 |
| ... | ... | ... | ... | ... | ... | ... | ... |
| Limosa | 4 | 0 | 0 | 0 | 22 | 26 | \$ 39 |

Allocation costs journal subscriptions - fractions

| Journal | PSG | ASG | SSG | AFSG | ESG | List price |
|--|------|------|------|------|------|------------|
| Nature | 0.37 | 0.13 | 0.02 | 0.19 | 0.28 | \$ 2130 |
| PNAS | 0.48 | 0.13 | 0.01 | 0.31 | 0.07 | \$ 471 |
| Science | 0.40 | 0.10 | 0.04 | 0.22 | 0.24 | \$ 609 |
| Applied and environmental microbiology | 0.29 | 0.11 | 0.01 | 0.54 | 0.06 | \$ 993 |
| Journal of dairy science | 0.06 | 0.70 | 0.09 | 0.13 | 0.02 | \$ 365 |
| Plant physiology | 0.74 | 0.00 | 0.00 | 0.22 | 0.03 | \$ 292 |
| ... | ... | ... | ... | ... | ... | ... |
| Limosa | 0.15 | 0.00 | 0.00 | 0.00 | 0.85 | \$ 39 |

Allocation costs journal subscriptions - prices

| Journal | PSG | ASG | SSG | AFSG | ESG | List price |
|--|--------|--------|-------|--------|--------|------------|
| Nature | \$ 794 | \$ 274 | \$ 47 | \$ 410 | \$ 605 | \$ 2130 |
| PNAS | \$ 228 | \$ 60 | \$ 5 | \$ 146 | \$ 31 | \$ 471 |
| Science | \$ 243 | \$ 60 | \$ 25 | \$ 133 | \$ 149 | \$ 609 |
| Applied and environmental microbiology | \$ 283 | \$ 105 | \$ 11 | \$ 537 | \$ 57 | \$ 993 |
| Journal of dairy science | \$ 20 | \$ 257 | \$ 33 | \$ 47 | \$ 8 | \$ 365 |
| Plant physiology | \$ 217 | \$ 1 | \$ 0 | \$ 64 | \$ 10 | \$ 292 |
| ... | ... | ... | ... | ... | ... | ... |
| Limosa | \$ 6 | \$ 0 | \$ 0 | \$ 0 | \$ 33 | \$ 39 |

Allocation costs journal subscriptions – total prices

| Journal | PSG | ASG | SSG | AFSG | ESG | Total price |
|--------------|------------|------------|-----------|-----------|------------|--------------|
| All journals | \$ 323,382 | \$ 232,247 | \$ 57,037 | \$621,071 | \$ 270,389 | \$ 1,504,125 |

Allocation costs journal subscriptions – Spikman factor

| Journal | PSG | ASG | SSG | AFSG | ESG |
|--------------|------|------|------|------|------|
| All journals | 0.21 | 0.15 | 0.04 | 0.41 | 0.18 |

Journal recommendation (catalogue browser)

Wageningen UR Library collection of journals [about Wageningen UR Library collection of journals](#)

wageningen ur (home) > digital library > journals > search result

» Collections

- All Journals
- Electronic journals
- All databases
- Recommended databases
- All dictionaries
- Recommended dictionaries
- All encyclopedia
- Recommended encyclopedia
- Textbooks by course

» Filter by subject

- » Basic Sciences
 - Molecular Biology
- » Subject
 - Molecular Biology (General) (113)
 - Plant Molecular Biology (15)
 - Nucleic Acids (17)
 - Genetic Engineering (22)

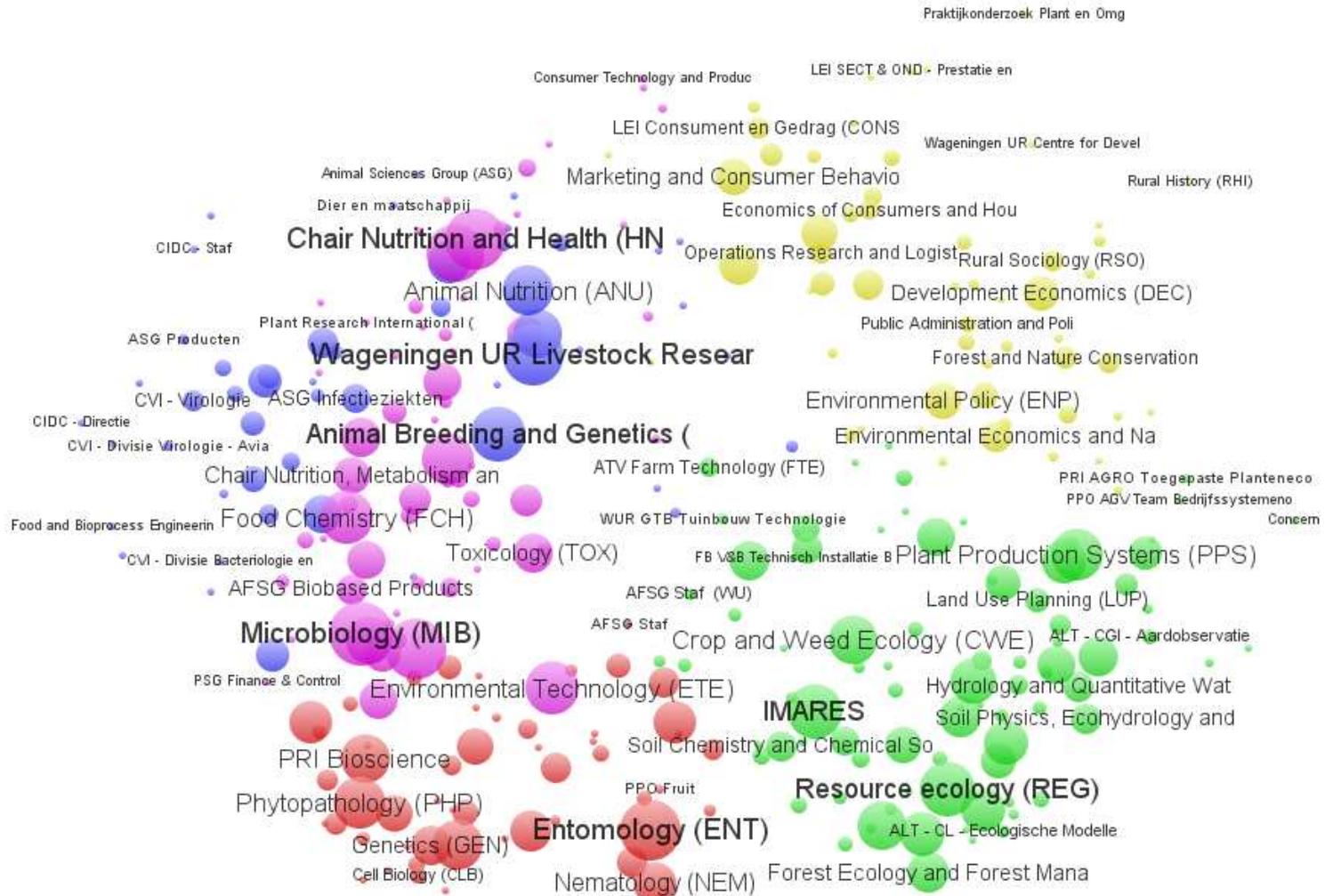
Sort result by: Importance [?](#)

Records 1 - 10 / 163 [alert](#) [export](#) [print](#) [?](#) [help](#)

check title to add to marked list [<< previous](#) | [next >>](#)

| | |
|---|---|
| <input type="checkbox"/> Plant physiology : a bimonthly journal devoted to all phases of plant physiology [Journal] American Society of Plant Physiologists \ 1926- plant physiology - agriculture - usa - botany - cytology - cellular biology - genetics - molecular biology | more info ... |
| <input type="checkbox"/> The plant cell [Journal] American Society of Plant Physiologists \ American Society of Plant Biologists \ 1989- botany - cell culture - cellular biology - cytology - experiments - meristems - plant physiology - tissue culture - cell physiology | more info ... |
| <input type="checkbox"/> The plant journal [Journal] 1991- genetics - genetic variation - evolution - speciation - immunogenetics - botany - cytology - molecular biology | more info ... show abstract |
| <input type="checkbox"/> Nucleic acids research [Journal] 1974- metabolism - nucleic acids - physical chemistry - physics | more info ... show abstract |
| <input type="checkbox"/> Theoretical and applied genetics : internationale Zeitschrift fuer theoretische und angewandte Genetik [Journal] 1968- genetics - genetic variation - evolution - speciation - immunogenetics - animal breeding - plant breeding - zootechny - inheritance - breeds - races - heritability - zoology | more info ... |
| <input type="checkbox"/> Journal of experimental botany : an official organ of the Society of Experimental Biology [Journal] Society of Experimental Biology \ 1950- biochemistry - biology - biophysics - botany - great britain - molecular biology - plant physiology | more info ... show abstract |

Similarity between groups in journal citations



VOSviewer

References per journal (example)

| | Number of references in articles | | | | |
|--------------|----------------------------------|---------|---------|---------|---------|
| | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
| Journal 1 | 107 | 52 | 170 | 72 | 32 |
| Journal 2 | 25 | 0 | 359 | 171 | 394 |
| Journal 3 | 366 | 136 | 0 | 5 | 205 |
| Journal 4 | 10 | 4 | 135 | 56 | 158 |
| Journal 5 | 0 | 8 | 14 | 6 | 0 |
| All journals | 508 | 200 | 678 | 310 | 789 |

Relative contribution per journal (example)

| | Relative number of references per journal | | | | |
|-----------|---|---------|---------|---------|---------|
| | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
| Journal 1 | 0.21 | 0.26 | 0.25 | 0.23 | 0.04 |
| Journal 2 | 0.05 | 0.00 | 0.53 | 0.55 | 0.50 |
| Journal 3 | 0.72 | 0.68 | 0.00 | 0.02 | 0.26 |
| Journal 4 | 0.02 | 0.02 | 0.20 | 0.18 | 0.20 |
| Journal 5 | 0.00 | 0.04 | 0.02 | 0.02 | 0.00 |

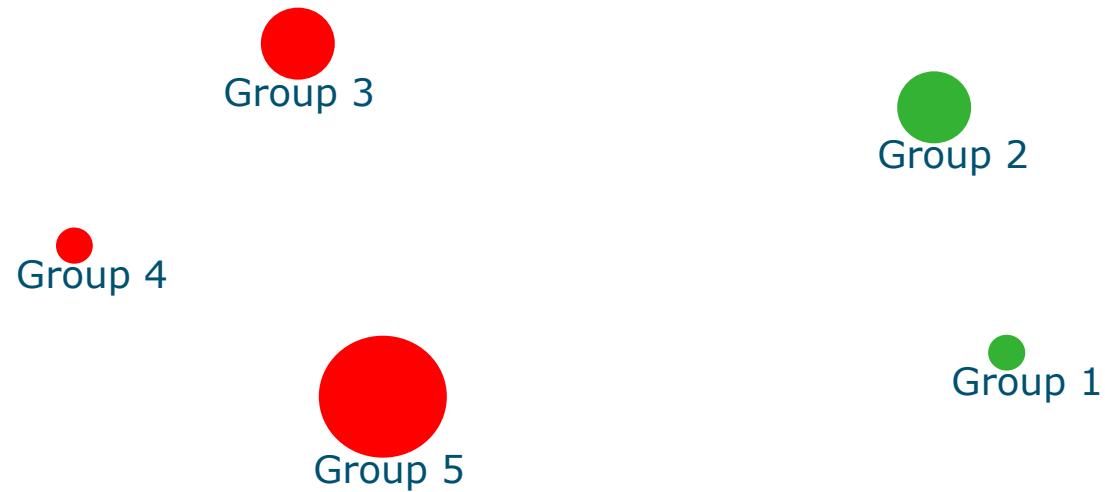
Similarity between groups (example)

| | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|---------|---------|---------|---------|---------|---------|
| Group 1 | 1 | 0.91 | 0.28 | 0.3 | 0.37 |
| Group 2 | 0.91 | 1 | 0.29 | 0.29 | 0.32 |
| Group 3 | 0.28 | 0.29 | 1 | 0.96 | 0.74 |
| Group 4 | 0.3 | 0.29 | 0.96 | 1 | 0.74 |
| Group 5 | 0.37 | 0.32 | 0.74 | 0.74 | 1 |

| | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|--------------------|---------|---------|---------|---------|---------|
| Number of articles | 20 | 4 | 18 | 7 | 35 |

Jaccard index

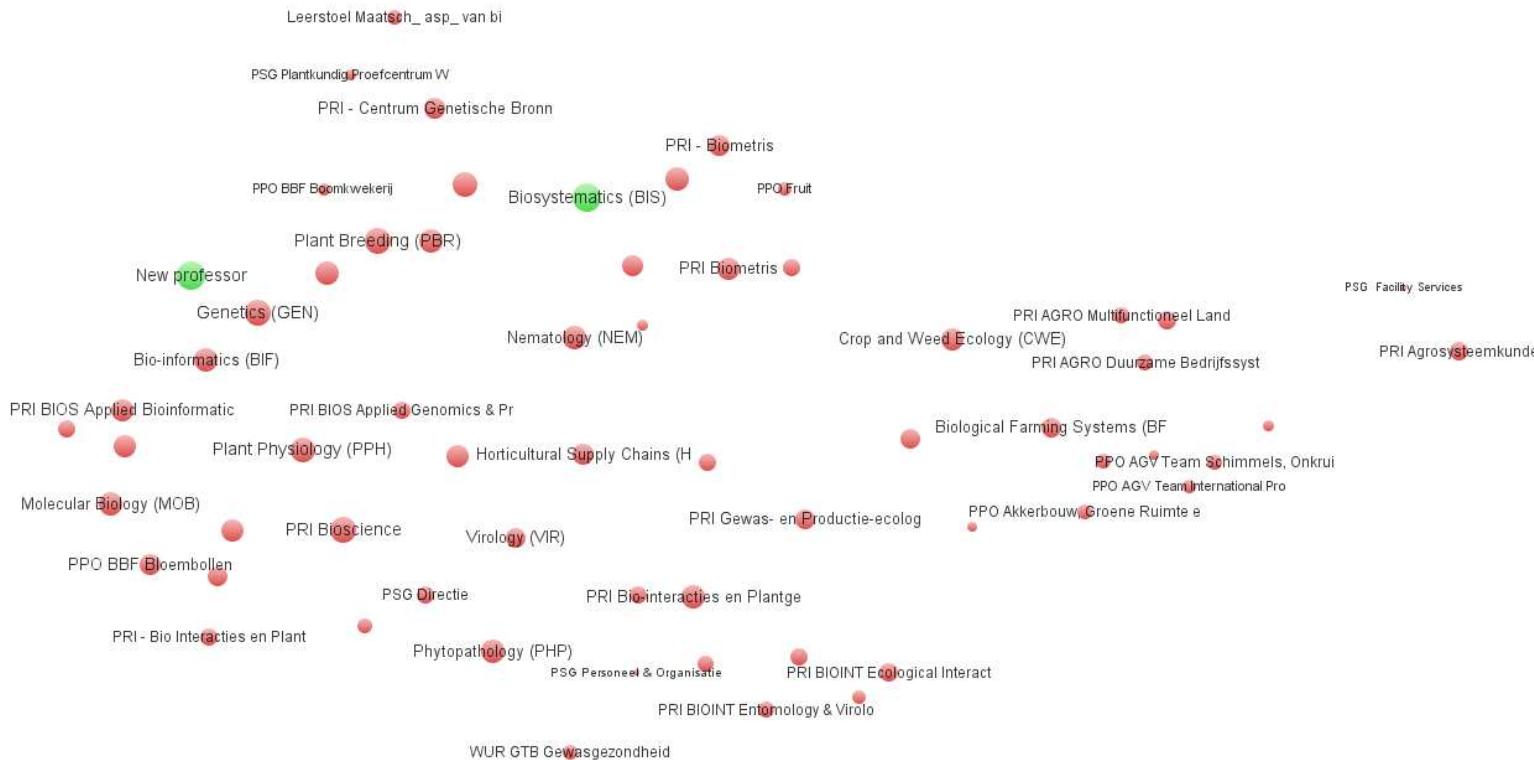
Network of groups (example)



Similarity to Plant breeding in journal citations

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------------------|----------------------|-----------------------------|--------------------------|--------------------------|--------------------------|
| Plant breeding (PBR) | Plant breeding (PBR) | Plant breeding (PBR) | Plant breeding (PBR) | Plant breeding (PBR) | Plant breeding (PBR) |
| PRI Biodiversity | Genetics | PRI Biodiversity | PRI Biodiversity | WUR Plant Breeding | PRI Biodiversity |
| Phytopathology | Molecular biology | Genetics | Genetics | PRI Biodiversity | WUR Plant Breeding |
| AFSG Quality in chains | Plant physiology | Biosystematics | Centre Genetic Resources | Biosystematics | Genetics |
| Genetics | Plant cell biology | Centre Genetic Resources | Genetics | Cell biology | Centre Genetic Resources |
| Biosystematics | Phytopathology | Horticultural supply chains | PRI Biointeractions | Genetics | PRI Biointeractions |
| | PRI Biodiversity | | | Centre Genetic Resources | |

Application new professor Biosystematics



Questions

