Table 1

|  |  |  |  |
| --- | --- | --- | --- |
|  | Strata 1 | Strata 2 | Strata 3 |
| Journals in Sample Frame | 10 | 100 | 1,345 |
| Articles in Sample | 30 | 30 | 30 |
| Journals in Sample | 5 | 23 | 30 |

Table 2

|  |  |
| --- | --- |
| **Journal Name** | **Article Count** |
| Science | 7 |
| Nature | 5 |
| Cell | 7 |
| Nature Biotechnology | 5 |
| Nature Genetics | 5 |

Table 3

|  |  |  |
| --- | --- | --- |
| Code | Definition | Agreement (kappa) |
| software name | The name of the software package | k = 1 |
| url | A web address for the software or project | k = 1 |
| version number | A version number (or source code label) identifying a specific version of the software | k = 1 |
| date | A date used to indicate a version of the software (not date of paper or reference) | k = 1 |
| configuration details | Any mention of configuration of the software. | k = 0.75 |
| software used | For mentions of software that was used in the research | k = 0.875 |
| software not used | For mentions of software that the authors didn't use (e.g., they discuss why they didn't use particular software, or the method realized in the software) | k = 1 |
| creator | A mention of the creator of the software (could be applied to in text mention or reference) | k = 1 |

Table 4

|  |  |
| --- | --- |
| software publication | Formal publication primarily describing software |
| domain publication | Formal publication primarily describing mainline domain science |
| users guide/manual | Project documentation, typically online but not published in a journal/conference proceeding or similar |
| project name | Reference with just project name |
| project page | Reference to URL of project |

Table 5

|  |  |
| --- | --- |
| Code | Explanation |
| identifiable | Can we identify which software has been mentioned (e.g., Is there a name used at all, beyond “a program we wrote”? Can we find references to that software, even if we cannot find the software itself.) |
| findable | Given an identifiable piece of software, can we find an online source that details the software (not necessarily the software itself, but any official presence) (e.g., A project page or online manual) |
| findable version | Can we find the specific version listed in the paper, if there was one. |
| access | Can we access the software now? Can take three values: No Access, Purchase Access, Free Access. |
| source available | Can we access the source code in any way? |
| permission to modify | Do the creators give permission to modify the program (if no mention of modification, assume no); if permission only by contact, then no |
| matches preferred citation | If the project page lists a preferred citation, does the mention match it? |

|  |  |  |  |
| --- | --- | --- | --- |
| **Mention Type** | **Count (n=286)** | **Proportion (95% CI)** | **Example** |
| Cite to Publication | 105 | 0.37 ­ (0.31–0.43) | *… was calculated using biosys (Swofford & Selander 1981).* |
| Cite to Users manual | 6 | 0.02  (0.01—0.05) | *… as analyzed by the BIAevaluation software (Biacore, 1997).*  Reference List has: Biacore, I. (1997). BIAevaluation Software Handbook, version 3.0 (Uppsala, Sweden: Biacore, Inc) |
| Cite to Project Name or Website | 15 | 0.05  (0.03–0.09) | … *using the program Autodecay version 4.0.29 PPC (Eriksson 1998).*  Reference List has: *ERIKSSON, T. 1998. Autodecay, vers. 4.0.29 Stockholm: Department of Botany.* |
| Instrument-like | 53 | 0.19  (0.14–0.24) | … *calculated by t-test using the Prism 3.0 software (GraphPad Software, San Diego, CA, USA).* |
| URL in text | 13 | 0.05  (0.03–0.08) | *… freely available from http://www.cibiv.at/software/pda/ .* |
| In-text name mention only | 90 | 0.31  (0.26–0.37) | … *were analyzed using MapQTL (4.0) software.* |
| Not even name mentioned | 4 | 0.01  (0.00–0.04) | *… was carried out using software implemented in the Java programming language.* |

Table 7 (in appendix):

|  |  |
| --- | --- |
| Biochemistry & Molecular Biology | Biology |
| Biotechnology & Applied Microbiology | Cell Biology |
| Developmental Biology | Entomology |
| Evolutionary Biology | Genetics & Heredity |
| Marine & Freshwater Biology | Mathematical & Computational Biology |
| Microbiology | Multidisciplinary Sciences |
| Mycology | Ornithology |
| Parasitology | Plant Sciences |
| Reproductive Biology | Zoology |

Table 8 (in appendix):

|  |  |  |
| --- | --- | --- |
| **1-10** | **11-110** | **111-1455** |
| Nature Genetics | Nucleic Acids Research | Applied Biochemistry and Biotechnology |
| Science | Nature Cell Biology | BMC Plant Biology |
| Nature Biotechnology | Molecular Systems Biology | Academie des Sciences. Comptes Rendus. Biologies |
| Cell | Molecular Ecology | American Journal of Botany |
| Nature | The FASEB Journal | Israel Journal of Plant Sciences |
|  | Genome Research | Advances in Complex Systems |
|  | Molecular Therapy | Biochimica et Biophysica Acta. Proteins and Proteomics |
|  | Nature Structural and Molecular Biology | Journal of Molecular Neuroscience |
|  | Developmental Cell | BMC Molecular Biology |
|  | Cladistics | Turkish Journal of Biochemistry |
|  | The Plant Journal | Phytomedicine |
|  | Systematic Biology | Molecular Diagnosis and Therapy |
|  | Acta Crystallographica. Section D: Biological Crystallography | Zoological Studies |
|  | Human Molecular Genetics | Journal of Molecular Catalysis B: Enzymatic |
|  | Stem Cells | Australian Journal of Entomology |
|  | Nanomedicine | Journal of Computer - Aided Molecular Design |
|  | New Phytologist | Waterbirds |
|  | Cell Research | The Journal of Parasitology |
|  | PLoS Biology | Acta Parasitologica |
|  | National Academy of Sciences. Proceedings | Biochimica et Biophysica Acta. General Subjects |
|  | The Journal of Infectious Diseases | Journal of Thermal Biology |
|  | The Journal of Cell Biology | Protoplasma |
|  | Molecular Psychiatry | Aquatic Ecosystem Health & Management |
|  |  | Turkish Journal of Zoology |
|  |  | Arthropod Structure & Development |
|  |  | Cytotechnology |
|  |  | Undersea & Hyperbaric Medicine |
|  |  | Systematic Botany |
|  |  | Nucleosides, Nucleotides and Nucleic Acids |
|  |  | Journal of Integrative Plant Biology |

Table 9 (in Appendix 2) (best if section in columns?):

|  |  |
| --- | --- |
| CCP4 | 4 |
| ClustalW | 4 |
| Excel | 4 |
| PAUP | 4 |
| Adobe Photoshop | 3 |
| BLAST | 3 |
| HKL | 3 |
| ImageJ | 3 |
| MetaMorph | 3 |
| NIH Image | 3 |
| O | 3 |
| SPSS | 3 |
| CNS | 2 |
| ModelTest | 2 |
| R | 2 |
| REFMAC | 2 |
| SAS | 2 |
| SOLVE | 2 |
| Stereo Investigator | 2 |
| Treeview | 2 |
| Adobe INDesign CS | 1 |
| Agilent 2100 Expert Software | 1 |
| AMoRe | 1 |
| AMOVA | 1 |
| Autodecay | 1 |
| BeadStudio | 1 |
| BIAevaluation | 1 |
| BioDataFit | 1 |
| BioEdit | 1 |
| BioNJ | 1 |
| BIOSYS | 1 |
| BLAT | 1 |
| BOXSHADE | 1 |
| cactus online smiles translator | 1 |
| CAD | 1 |
| Calcusyn | 1 |
| CALPHA | 1 |
| Chart 5 | 1 |
| CHIMERA | 1 |
| ChipViewer | 1 |
| Cluster | 1 |
| COLLAPSE | 1 |
| COOT | 1 |
| DatLab | 1 |
| DENZO | 1 |
| DYMEX® | 1 |
| EIGENSTRAT | 1 |
| Ensembl | 1 |
| EnzFitter | 1 |
| EPMR | 1 |
| ESCET | 1 |
| GAP | 1 |
| GDE | 1 |
| Gelworks 1D Advanced | 1 |
| GenePix | 1 |
| GENESPRING | 1 |
| Genome Analyser II | 1 |
| geNorm | 1 |
| GoMiner | 1 |
| Grafit | 1 |
| Graph Pad Prizm | 1 |
| GraphPad Prism | 1 |
| GRASP | 1 |
| GRID | 1 |
| GRIN | 1 |
| IDEG6 | 1 |
| Jalview | 1 |
| JAZZ | 1 |
| JMP(R) | 1 |
| jMRUI | 1 |
| Kodak Digital Science 1D | 1 |
| KS300 | 1 |
| limma R package | 1 |
| LSM510 | 1 |
| LSQKAB | 1 |
| MacClade | 1 |
| MapMaker | 1 |
| MapQTL | 1 |
| MATLAB | 1 |
| Mfold | 1 |
| Minitab | 1 |
| MitoProt | 1 |
| MOLREP | 1 |
| MOLSCRIPT | 1 |
| MorphoCode | 1 |
| MrBayes | 1 |
| NeuroZoom | 1 |
| NormFinder | 1 |
| NTSYS-pc | 1 |
| Opticon Monitor 2 | 1 |
| OPUS | 1 |
| PC-ORD | 1 |
| PHASE | 1 |
| PHASER | 1 |
| Phred/Phrap/Consed | 1 |
| PHYLIP | 1 |
| PHYML | 1 |
| PONDR | 1 |
| POST | 1 |
| PREDATOR | 1 |
| Prism | 1 |
| PROCHECK | 1 |
| PSORT | 1 |
| qBasePlus | 1 |
| QUANTA | 1 |
| Quantity One | 1 |
| RACE | 1 |
| RASTER3D | 1 |
| RESOLVE | 1 |
| RIBBONS | 1 |
| SCALEPACK | 1 |
| SCAMP | 1 |
| Sedfit | 1 |
| Sednterp | 1 |
| Sequence Navigator | 1 |
| SHELLSCALE | 1 |
| SHP | 1 |
| SIGMAA | 1 |
| Sigmaplot | 1 |
| Software for Zeiss LSM 510 | 1 |
| software-Unknown-a2003-22-CR\_BIOL-C01-mention | 1 |
| software-Unknown-a2003-44-SCIENCE-C09-mention | 1 |
| software-Unknown-a2003-44-SCIENCE-C10-mention | 1 |
| software-Unknown-a2006-05-SYST\_BIOL-C05-mention | 1 |
| software-Unknown-a2006-05-SYST\_BIOL-C08-mention | 1 |
| software-Unknown-a2006-47-SYST\_BIOL-C02-mention | 1 |
| software-Unknown-a2007-11-GENOME\_RES-C09-mention | 1 |
| software-Unknown-a2008-06-NAT\_GENET-C04-mention | 1 |
| Staden | 1 |
| STATA | 1 |
| Statistica | 1 |
| Statview | 1 |
| Swiss-Model | 1 |
| SYSTAT | 1 |
| TargetP | 1 |
| TIMAT2 | 1 |
| TMHMM | 1 |
| TRIM\_DENZO | 1 |
| tRNAScan-SE | 1 |
| TRUNCATE | 1 |
| Useq | 1 |
| WinNONLIN | 1 |
| X-PLOR | 1 |
| X-Score | 1 |
| XPREP | 1 |
| Zeiss LSM Image Browser | 1 |