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Editorial

How long does it take to deliver a peer review report? A decade of data from the European Journal of Plant Pathology

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Peer reviewers are in great demand in most areas of science. Requests to peer review manuscripts are a time-consuming, additional burden on already over-committed researchers (Hoppin 2002; Snell and Spencer 2005; Alberts et al. 2008; Kumar 2014). On the other hand, delays in the peer review process can be a frustrating bottleneck in the communication of new research findings (Bornmann and Daniel 2010; Cornelius 2012; Lyman 2013). Swift decisions might be regarded by authors as a sign of good organization and standing of a journal (Zhang et al. 2012; Lievers 2013). However, reviewers might tend to find the time to review manuscripts preferentially for journals that already have a good standing (Pautasso and Schäfer 2010). But how long does it take to deliver a peer review report for those researchers who do find the time? Available investigations are mainly based on data from medical journals, where a wide range of average peer review delays has been reported (Kljaković-Gašpić et al. 2003; Chen et al. 2013; Berquist 2014; Rosenkrantz and Harisinghani 2015). This editorial is based on data on about 7300 review reports delivered by 3001 reviewers for the European Journal of Plant Pathology (EJPP) over the last decade (2006–March 2015).

The average number of days needed to submit a peer review report was 29.2 (standard deviation = 19.1 days), the median was 27. This is very close to the deadline of 28 days suggested by the web-based manuscript handling system of the EJPP. However, there was important variation among reviewers, ranging from average delivery on the same day to taking 166 days (5 months and 10 days) (Fig. 1). About half of the reviewers needed up to 1 month on average (Fig. 2), with a further third of reviewers needing up to an additional 3 weeks on average to complete their report. There were about 7.5 % of reviewers needing more than 2 months. This long tail in the frequency distribution of the time needed to deliver a peer review report has also been documented for other journals (e.g. McPeek et al. 2009). These data do not include reviewers who were unassigned after agreeing to review a manuscript, because of late delivery.

About half of the reviewers registered in the EJPP peer reviewer database contributed one peer review report over the studied period, with a further 20 % of reviewers providing two reports, and another 20 % contributing three to five reports. However, there were 86 reviewers (3 %) who delivered at least 10 reports (maximum 32) over the 10 years studied. This 3 % of reviewers contributed about 17 % of the reports needed by the journal. Similarly, there were 379 reviewers (ca. 12 %) who delivered at least five reports. This 12 % of reviewers was responsible for about 40 % of reports. These assiduous reviewers are not necessarily prolific

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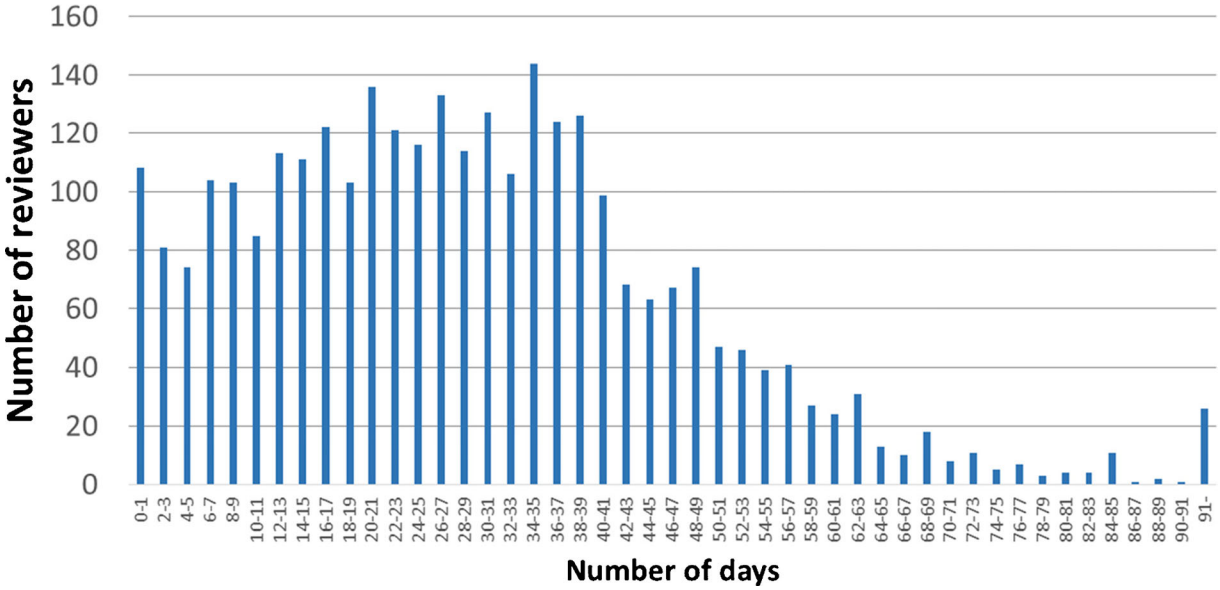

Fig. 1 Average number of days to complete a peer review report for the European Journal of Plant Pathology (2006–March 2015) by 3001 peer reviewers completing 7327 reports

authors and conversely productive authors are not necessarily committed reviewers (Hochberg et al. 2009; Ghazoul 2011; Petchey et al. 2014).

The EJPP peer reviewer database also shows that for each completed peer review report, there is one peer review request which is either declined, not answered within 10 days, or not delivered after agreeing to do so. This obviously makes it more difficult and lengthy for handling editors to take a decision on a submitted manuscript (Bourne and Korngreen 2006; Hauser and Fehr 2007; Rohr and Martin 2012).

Overall, this database shows that it is possible for a good fraction of a scientific community to deliver timely review reports, but also that many researchers are not able to deliver on time, or to find the time do the job at all. An issue on which little information is available in the database is the quality of peer review reports (which can be graded, but is rarely assessed by editors), so that

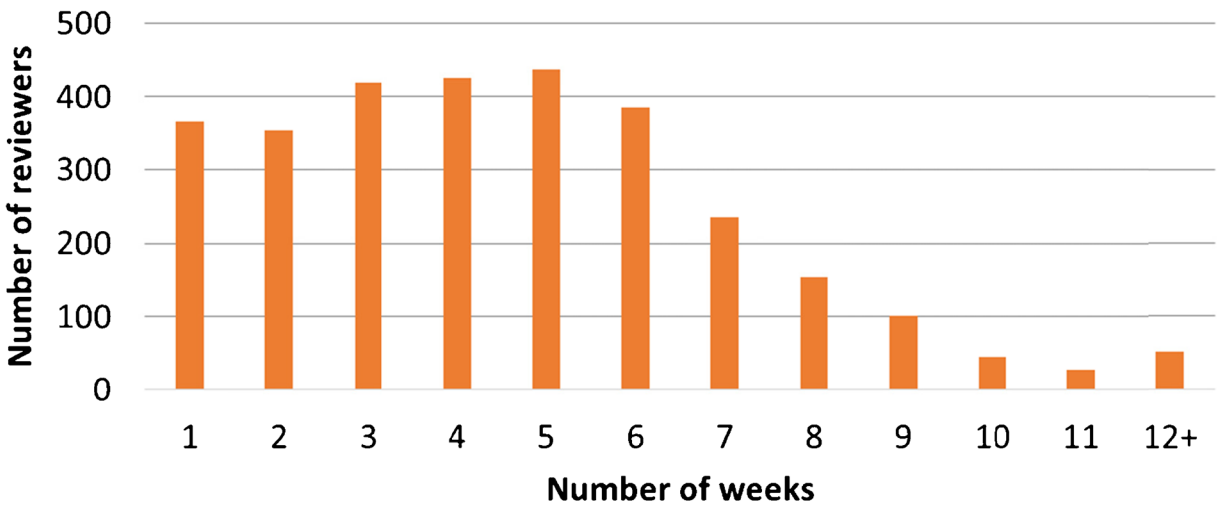

Fig. 2 As in Fig. 1, but with the peer review time expressed in weeks rather than days

it is not possible to study whether there is a correlation between peer review delay and quality of the report (Paulus 2008; Hochberg 2015). Nevertheless, the time taken to deliver peer review reports should be included in metrics of peer reviewer contributions (Veríssimo and Roberts 2013; Cantor and Gero 2015).

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References

Alberts, B., Hanson, B., & Kelner, K. L. (2008). Reviewing peer review. *Science*, *321*(5885), 15.

Berquist, T. H. (2014). Submission to final decision: what can authors do to facilitate the process? *American Journal of Roentgenology*, *202*(6), 1165.

Bornmann, L., & Daniel, H. D. (2010). How long is the peer review process for journal manuscripts? A case study on Angewandte Chemie International edition. *CHIMIA International Journal for Chemistry*, *64*(1), 72–77.

Bourne, P. E., & Korngreen, A. (2006). Ten simple rules for reviewers. *PLoS Computational Biology*, *2*(9), e110.

Cantor, M., & Gero, S. (2015). The missing metric: quantifying contributions of reviewers. *Royal Society Open Science*, *2*, 140540.

Chen, H., Chen, C. H., & Jhanji, V. (2013). Publication times, impact factors, and advance online publication in ophthalmology journals. *Ophthalmology*, *120*(8), 1697–1701.

Cornelius, J. L. (2012). Reviewing the review process: identifying sources of delay. *The Australasian Medical Journal*, *5*(1), 26.

Ghazoul, J. (2011). Reviewing peer review. *Biotropica*, *43*(1), 1–2.

Hauser, M., & Fehr, E. (2007). An incentive solution to the peer review problem. *PLoS Biology*, *5*(4), e107.

Hochberg, M. E. (2015). Good science depends on good peer review. *Ideas in Ecology and Evolution*, *7*, 1.

Hochberg, M. E., Chase, J. M., Gotelli, N. J., Hastings, A., & Naeem, S. (2009). The tragedy of the reviewer commons. *Ecology Letters*, *12*(1), 2–4.

Hoppin, F. G. (2002). How I review an original scientific article. *American Journal of Respiratory and Critical Care Medicine*, *166*(8), 1019–1023.

Kljaković-Gašpić, M., Hren, D., Marušić, A., & Marušić, M. (2003). Peer review time: how late is late in a small medical journal? *Archives of Medical Research*, *34*(5), 439–443.

Kumar, M. N. (2014). Review of the ethics and etiquettes of time management of manuscript peer review. *Journal of Academic Ethics*, *12*(4), 333–346.

Lievers, W. B. (2013). Manuscript processing times are negatively correlated with journal impact factors. *Canadian Journal of Information and Library Science*, *37*(4), 225–236.

Lyman, R. L. (2013). A three-decade history of the duration of peer review. *Journal of Scholarly Publishing*, *44*(3), 211–220.

McPeek, M. A., et al. (2009). The golden rule of reviewing. *The American Naturalist*, *173*(5), 155–158.

Paulus, W. (2008). Why are the Acta Neuropathologica so fast, with a mean time from submission to first decision of 16 days? *Acta Neuropathologica*, *115*(3), 371–372.

Pautasso, M., & Schäfer, H. (2010). Peer review delay and selectivity in ecology journals. *Scientometrics*, *84*(2), 307–315.

Petchey, O. L., Fox, J. W., & Haddon, L. (2014). Imbalance in individual researcher's peer review activities quantified for four British Ecological Society journals, 2003–2010. *PloS One*, *9*(3), e92896.

Rohr, J. R., & Martin, L. B. (2012). Reduce, reuse, recycle scientific reviews. *Trends in Ecology and Evolution*, *27*(4), 192.

Rosenkrantz, A. B., & Harisinghani, M. (2015). Metrics for original research articles in the AJR: from first submission to final publication. *American Journal of Roentgenology*, *204*(6), 1152–1156.

Snell, L., & Spencer, J. (2005). Reviewers' perceptions of the peer review process for a medical education journal. *Medical Education*, *39*(1), 90–97.

Veríssimo, D., & Roberts, D. L. (2013). The academic welfare state: making peer-review count. *Trends in Ecology & Evolution*, *28*(11), 623–624.

Zhang, Z., Zhang, Z., & Law, R. (2012). Editorial responsiveness, journal quality, and total review time: an empirical analysis. *Journal of the American Society for Information Science and Technology*, *63*(5), 1054–1058.