and Nicobar, and Sri Lankan coasts, including gill netting and dynamite fishing also cause severe damage. In the Gulf of Kutch, dugong oil is valued as a preservative and conditioner for wooden boats[8]. The meat is believed to have medicinal value, and rejuvenating and aphrodisiac properties[9]. Between April 1983 and August 1984 more than 250 dugongs were reported caught and killed in the Kilakkarai–Tondi region[10] (Figure 1). Low reproductive rate is an important reason for population decline. A large number of infections and parasitic diseases affect dugongs. The greatest threat dugongs face today is from the Sethu Samudram ship channel project (SSCP), which will disrupt the biosphere of sea grass. Constant trenching of the canal system will result in the deposition of sediments on the sea grass. Due to SSCP, the dugong population will be permanently wiped out from the 'Gulf of Mannar'[11]. Suggested conservation initiatives include aerial surveys; it is important to locate sea grass beds for subsequent mapping and studies of community composition. The most effective way of doing this is by local-scale aerial surveys. Satellite tracking is an excellent technique for mapping the movements of dugongs. A project to increase community awareness, assess populations, and monitor deliberate and accidental killing of coastal cetaceans in Sri Lanka has been proposed by IUCN Sri Lanka and the IUCN/SSC Cetacean Specialist Group (CSG). The development of local capacity to conduct at-sea surveys, collect biological samples, estimate the species age and sex composition of landed catches, and assess fishing efforts by area and season would be the major aim. Extension of the project to include dugongs would add greatly to our knowledge of the species in Sri Lanka and provide a basis for establishing conservation priorities[12].

1. Reynolds, J. E. and Odell, D. K., *Manatees and Dugongs*, Facts on File Inc, New York, 1991.
2. Anon., Our land our future. A strategy for sustainable land use and economic and social development, Cape York Regional Advisory Group, Cairns, Australia, 1996.
3. Winger, J., *What's in a Name: Manatees and Dugongs*, Smithsonian National Zoological Park, 2000.
4. Gillespie, A., *Ocean Dev. Int. Law*, 2005, **36**, 135–158.
5. Reeves, R. R. *et al.*, *National Audubon Society Guide to Marine Mammals of the World*, Knopf, Canada, 2002, pp. 478–481.
6. Das, H. S. and Dey, S. C., *J. Bombay Nat. Hist. Soc.*, 1999, **96**, 195–198.
7. Lal Mohan, R. S., *Indian J. Fisher.*, 1993, **28**, 217–232.
8. Frazier, J. G. and Mundkur, T., *J. Bombay Nat. Hist. Soc*., 1990, **87**, 368–379.
9. Jones, S., *Int. Zoo. Year*, 1967, **7**, 215–220.
10. Nair, R. V., Lal Mohan, R. S. and Rao, K. S., *Bull. Cent. Mar. Fish. Res. Inst*., 1975, **26**, 1–44.
11. Sacratees, J. and Karthigarani, R., Environment impact assessment, 2008.
12. Smith, A. J. and Marsh, H., *Environ. Manage.*, 1990, **14**, 47–55.

M. ANANDHARAJ*
S. SIVAKUMAR
M. RIZWANA PARVEEN RANI

Department of Biology,
Gandhigram Rural Institute – Deemed University,
Gandhigram,
Dindigul 624 302, India
**e-mail: anandharaj49@gmail.com*

Meeting abstracts: a waste of space?

Since the year 2000 the percentage of meeting abstracts among all publications in Life Sciences and Biomedicine included in Thomson Reuters' *Web of Science* has never been below 17. In some years this percentage grew even above 25 (Figure 1). Restricting to the fields of Clinical Medicine, Health Care and Pharmacology even yields a peak of nearly 30% (in 2004). Exact research queries are given in Appendix 1 (see supplementary material online). Clearly, in terms of absolute numbers meeting abstracts are important in Life Sciences and Biomedicine. Often conferences are organized by editors of journals, making access to a journal relatively easy (S. M. Duan, pers. commun.).

However, the percentage of uncited meeting abstracts tells another story. Figure 2 shows the percentage of uncited meeting abstracts in Life Sciences and Biomedicine as on March 2013, for meeting abstracts published in the year on the abscissa.

It is completely logical that the percentage of uncited items increases the more recent these items are. What is alarming, however, is that more than 86% of the meeting abstracts is still uncited after 13 years. Even assuming that some of these are wrongly considered as uncited[1], this percentage is still astonishing. Would one not assume that at least its authors cite the original abstract when they publish the corresponding full paper? Low numbers of cited meeting abstracts are not a new phenomenon. About 25 years ago, Moed and Van Leeuwen[2] considered the top 20 journals in terms of their impact factor in 16 subject categories (including 9 categories in Life Sciences and Biomedicine, but also totally different categories such as Mathematics and Physics). These journals published 20,270 meeting abstracts or 10.57% of all publications in the years 1986 and 1987. Yet, these meeting abstracts received in 1988 a total of 2017 citations or an average of 0.10 citations per abstract, while the average overall publications was 2.60. Although occasionally a meeting abstract is highly cited, especially when its content is not re-published in a full journal article, Dhar's[3] with 112 citations being a case in point.

Publishing (and buying) scientific journals is a costly affair, even if exact numbers are hard to come by[4]. Why then are so many meeting abstracts published if they have – at least as measured by received citations – so little practical use? Are these just a claim on the ideas expressed in them? Let us first consider possible reasons why these meeting abstracts are cited so little? An important reason seems to be that abstracts provide little concrete information on one hand, and on the other hand, peer review of such meeting abstracts is at best superficial (for the same reason). Hence colleagues turn to the full publication if they are interested and consequently

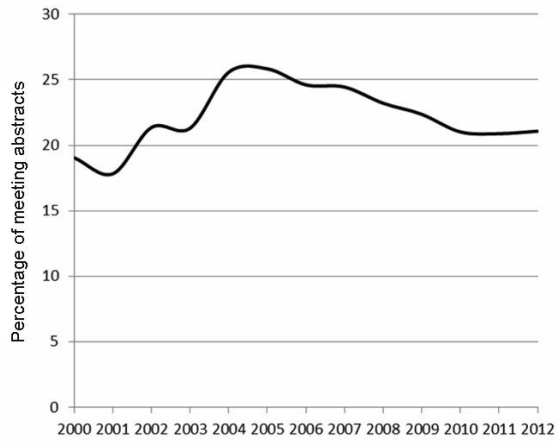

Figure 1. Percentages of meeting abstracts in Life Science and Biomedicine (*Web of Science* data).

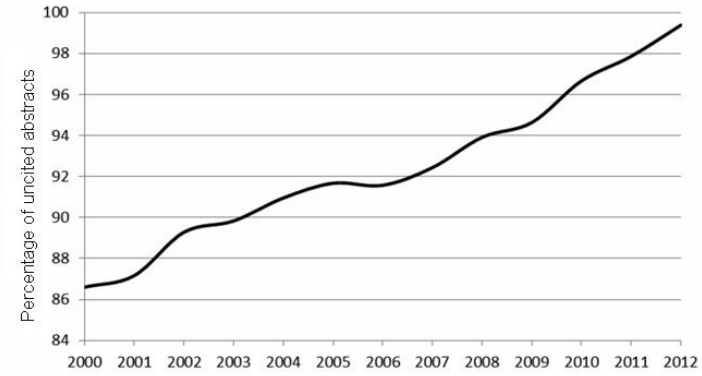

Figure 2. Percentage of uncited meeting abstracts.

cite it if they use it in their research (D. K. Niu; H. Yu, pers. commun.). Yet, this does not explain why the authors of the abstracts themselves do not cite them.

As mentioned above, publishing and especially formal publishing, is a costly business. Hence we propose that the colleagues in the biological and life sciences follow the trend of other disciplines[5] and publish meeting abstracts in dedicated archives. In this way they still can claim priority, if necessary, and do not take up space in formal journals.

Moreover, in view of the new trend of using altmetrics–influmetrics in research evaluation such archives, in the wake of the famous arXiv developed by Paul Ginsparg, may give their contributors extra visibility[6].

1. Heneberg, P., *J. Am. Soc. Inf. Sci. Technol.*, 2013, **64**, 448–454.
2. Moed, H. F. and Van Leeuwen, Th. N., *J. Am. Soc. Inf. Sci. Technol.*, 1995, **16**, 461–467.
3. Dhar, D., *Pha. Trans.*, 1987, **9**, 51.
4. Van Noorden, R., *Nature*, 2013, **495**, 426–429.
5. Desjardins-Proulx, P., White, E. P., Adamson, J. J., Ram, K., Poisot, T. and Gravel, D., *PLoS Biol.*, 2013, **11**, e1001563.
6. Chaddah, P., *Sci. Dev. Net.*, 2011; http://www.scidev.net/en/south-asia/opinions/e-print-archives-ensure-credit-for-original-ideas.html

XIAOJUN HU[1]
RONALD ROUSSEAU[2,*]

[1]*Medical Information Centre,*
Zhejiang University School of Medicine,
866 Yuhangtang Road,
Hangzhou, 310058, China
[2]*VIVES (Association KU Leuven),*
Faculty of Engineering Technology,
Zeedijk 101,
8400 Oostende, Belgium;
Universiteit Antwerpen (UA),
IBW, Stadscampus,
Venusstraat 35,
2000 Antwerpen, Belgium;
KU Leuven,
3000 Leuven, Belgium
**e-mail: ronald.rousseau@ua.ac.be*

Management of *Leptocybe invasa*

The note entitled 'Present status of eucalyptus gall insect, *Leptocybe invasa* Fisher and La Salle in Tamil Nadu'[1] highlighted the fact that this gall-inducing eulophid (Hymenoptera) is spreading rapidly in different parts of India, wherever different species and sub-specific variants of *Eucalyptus* are raised as commercial plantations.

Jacob and Kumar[2] characterized levels of susceptibility and resistance by measuring the densities of galls on *Eucalyptus camaldulensis* and *E. tereticornis* seedlings from nine seed sources raised in Tamil Nadu, Kerala and Andhra Pradesh, demonstrating that under identical environmental conditions, seedlings from seed sources 'Ongole red', 'Kennedy River', 'Pudukkottai' and 'Rudrapur' were severely affected and therefore were more susceptible to *L. invasa* infestation. Seedlings from seed sources 'Sathyavedu 1' were least susceptible and were therefore resistant to *L. invasa* population. The study also revealed that in resistant seedlings the eggs of *L. invasa* were deposited in the cortical region immediately outside the vascular ring, whereas in the susceptible seedlings the eggs were found in the parenchyma within the vascular ring. The study demonstrated variation in physical characters in different seed sources of *E. camaedulensis* and *E. tereticornis* grown in southern India to varying levels of susceptibility to the gall-inducing *L. invasa*.

The insect is a major pest of young eucalyptus trees and seedlings, and affects commercial forestry. To overcome this