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Snub Publishing: Evidence from the *Anthurium* Literature

Jaime A. Teixeira da Silva

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Abstract Snub publishing is a new term that was coined in 2013 to describe a range of publishing cases in which the failure of quality control manifested itself through references in such a way that it would cause unintended damage to snubbed scientists whose names or identity were incorrectly represented in the literature. In this paper, real case studies are presented, mostly related to the author as a "victim" of incompetent editorial oversight, inexperienced or biased authors, or as a "victim" of direct professional conflicts of interest. In essence, this paper serves as a prototype showing in concrete terms how a scientist can or may be professionally snubbed (intentionally or unintentionally). Using the *Anthurium* literature, this paper aims to raise awareness about snub publishing and seeks to encourage other scientists to also quantify how they too may have been professionally snubbed in the literature.

Keywords False representation · Incomplete literature review · Lack of quality control · Manipulation · Misrepresentation · Oversight · Poor peer review

Who Snubs and Who Gets Snubbed?

Snub publishing (SP), a novel term coined in early 2013, is defined as "the intentional or unintentional omission of important references in a scientific paper, the erroneous or deliberate manipulation of a name such that it becomes distorted in the literature, or the removal of a name from a manuscript's author's list" [1].

This paper deals with 26 case studies of the former two situations, all directly related to *Anthurium*, an important ornamental plant. *Anthurium* was selected due to

J. A. Teixeira da Silva (✉)
Miki-cho Post Office, Ikenobe 3011-2, P.O. Box 7, Takamatsu, Kagawa-ken 761-0799, Japan
e-mail: jaimetex@yahoo.com

the personal involvement of the author with this plant and due to the relatively limited literature that exists on this plant, approximately 150 papers in total until 2013 in any available data-base. The first place for scientists to initiate a search of the literature when starting to write a paper (and in fact earlier when researching the literature regarding their experimental design) would be public data-bases such as Google Scholar, Yahoo, or in publisher's data-bases such as Elsevier's Sciencedirect, Springer's SpringerLink, Taylor and Francis/Informa, or Wiley-Blackwell's Wiley Online, NIH's PubMed, among others. If one were to enter the terms "anthurium" and "Teixeira da Silva", the author's family name, into these data-bases, one would come across several papers published by the author and his collaborators [i.e., 2–7]. The first two papers [2, 3] are available as open access PDF files and are readily downloadable from the first page of a Yahoo or Google search. The remaining Winarto papers [4–7] are prominently visible on Elsevier and Springer data-bases. In other words, these papers are highly visible and easily accessible, much more than in fact many other anthurium papers. In these data-bases, the family name, Teixeira da Silva, is clear. The anthurium *in vitro* and micropropagation literature between 2006 and 2013 encompasses (excluding the papers listed above) approximately 34 papers for *Anthurium andreanum* Hort. and 5 papers for other *Anthurium* spp. Usually, with such a limited literature, scientists would search the literature carefully to obtain as much information as possible to develop the Introduction and Discussion of a manuscript, at least in theory. Oddly, the name Teixeira da Silva, when crossed with the terms "anthurium", and "*in vitro*" or "micropropagation" on the above indicated data-bases does not link to the 26 papers published between 2006 and 2013 while only eight did. This oddity spurred an informal investigation that led to the findings of this paper. Upon closer examination of the 26 papers, listed next as Cases 1–26, each with their own screenshot(s) represented by Figs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 and 26, respectively, it is abundantly evident that the authors of these 26 papers have misrepresented the name of the author, reducing it to Silva JA, Silva JAT, or other even more indescribable forms, or errors. In essence, each error represents a professional snub. Next listed are the authors, the country of origin and the figure number.

Case 1: Atak and Çelik [8] Turkey (Fig. 1).
Case 2: Raad et al. [9] Iran (Fig. 2).
Case 3: Gantait et al. [10] India (Fig. 3).
Case 4: Farsi et al. [11] Iran (Fig. 4).
Case 5: Pinto de Carvalho et al. [12] Brazil (Fig. 5).
Case 6: Ancy et al. [13] India (Fig. 6).
Case 7: Bliss and Suzuki [14] USA (Fig. 7).
Case 8: Reddy and Bopaiah [15] India (Fig. 8).
Case 9: Sedaghati et al. [16] Indonesia (Fig. 9).
Case 10: Gantait and Sinniah [17] India (Fig. 10).
Case 11: Kumari et al. [18] India (Fig. 11).
Case 12: Gantait and Mandal [19] India (Fig. 12).
Case 13: Harb et al. [20] Egypt (Fig. 13).

[5] Dobranszki J, Silva JAT. Micropropagation of apple – A review. Biotechnology Advances 2010; 28 462-488.

[10] Viegas J, Rosa da Rocha MT, Ferreira-Moura I, Lairia da Rosa D, Almeida de Souza J, Correa MGS, Telxelra da Silva JA. *Anthurium andraeanum* [Linden ex Andre] culture: *in vitro* and ex vitro. Floricult. Ornamental Biotechnology 2007;1 61-65.

[14] Silva JAT, Nagae S, Tanaka M. Effect of physical factors on micropropagation of *Anthurium andreanum*. Plant Tissue Culture 2005;15(1) 1-6.

[22] Winarto B, Rachmawati F, Silva JAT. New basal media for half –anther culture of *Anthurium andreanum* Linden ex Andre cv. Tropical. Plant Growth Regulation 2011;65 513-529.

Fig. 1 Screenshots of case 1 snub publishing. 4 cases of errors with name. Failure to indicate other Winarto references

a

(Chen et al., 1997). Various physical and biological factors play important roles during in vitro propagation of Anthurium (Silva et al., 2005). Geier (1986) showed that plant genotype

Silva JAT, Nagae S, Tanaka M (2005) Effectof physical factors on micropropagation of *Anthurium andraeanum*. Plant Tiss Cult 15 (1): 1-6.

Viégas J, Da Rocha MTR, Ferreira-Moura I, Da Rosa DL, De Souza JA, Corrêa MGS, Da Silva JAT (2007) *Anthurium andreanum* (Linden ex André) culture: *In vitro* and *Ex vitro*. Floriculture Ornamental Biotechol 1 (1): 61-65.

b

Viégas, J., M.T.R. da Rocha, I. Ferreira-Moura, D.L. da Rosa, J.A. de Souza, M.G.S. Corrêa and J.A.T. da Silva, 2007. *Anthurium andreanum* (Linden ex André) culture: *In vitro* and *Ex vitro*. Floriculture Ornamental Biotechnol., 1(1): 61-65.

Silva, J.A.T., S. Nagae and M. Tanaka, 2005. Effect of physical factors on micropropagation of *Anthurium andraeanum*. Plant Tiss. Cult., 15(1): 1-6.

Geier, T., 1986. Factors affecting plant regeneration

Fig. 2 Screenshots of case 2 snub publishing. 5 cases of errors with name (2012a, b). Failure to indicate any Winarto references (2012a, b)

Case 14: Islam et al. [21] Bangladesh (Fig. 14).
Case 15: Atak and Çelik [22] Turkey (Fig. 15).
Case 16: Jahan et al. [23] Bangladesh (Fig. 16).
Case 17: Kurnianingsih et al. [24] Indonesia (Fig. 17).
Case 18: Liendo and Mogollón [25] Venezuela (Fig. 18).
Case 19: Yu et al. [26] China (Fig. 19).
Case 20: Bejoy et al. [27] India (Fig. 20).
Case 21: Beyramizade et al. [28] Iran/Japan (Fig. 21).
Case 22: Gantait et al. [29] India (Fig. 22).
Case 23: del Rivero-Bautista et al. [30] Cuba/Mexico (Fig. 23).

of Agrobacterium-mediated genetic transformation in *Arabidopsis thaliana*. Planta 188:439–456
SAS Institute, Inc. (1999) 1st Printing SAS/STATS User's Guide Version 8, vol. 2. SAS Institute, Inc., Cary
Sgarbi E, Grimaudo M, Del Prete C (2009) In vitro asymbiotic germination and seedling development of *Limodorum abortivum* (Orchidaceae). Plant Biosyst 143:114–119
Sharry ES, Teixeira da Silva JA (2006) Effective organogenesis, somatic embryogenesis and salt tolerance induction in vitro in the Persian Lilac tree (*Melia azedarach* L.). In: Teixeira da Silva JA (ed) Floriculture, ornamental and plant biotechnology: advances and topical issues, vol 2. Global Science Books Ltd., Isleworth, UK, pp 317–324
Sheelavanthmath SS, Murthy HN, Hema BP, Hahn EJ, Paek KY (2005) High frequency of protocorm like bodies (PLBs) induction and plant regeneration from protocorm and leaf sections of *Aerides crispum*. Sci Hortic 106:395–401
Sheffer RD, Kamemoto H (1976) Cross compatibility in the genus *Anthurium*. J Am Soc Hort Sc 101:709–713
Smith DL, Krikorian AD (1990) Low external pH replaces 2,4-D in maintaining and multiplying 2,4-D initiated embryogenic cells of carrot. Plant Physiol 72:329–336
Teixeira da Silva JA, Norikane A, Tanaka M (2007) *Cymbidium*: successful in vitro growth and subsequent acclimatization. Acta Hortic 748:207–214
Thomas P, Ravindra MB (1997) Effect of pruning or removal of in vitro formed roots on *ex vitro* root regeneration and growth in micropropagated grapes. Plant Cell, Tissue Organ Cult 51:177–180
Tian C, Chen Y, Zhao X, Zhao L (2008) Plant regeneration through protocorm-like bodies induced from rhizoids using leaf explants of *Rosa* spp. Plant Cell Rep 27:823–831
Treub M (1890) E "tudes sur les Lycopodiace" es. Ann Jard Bot Buitenzorg 8:1–37
Wang QM, Gao FZ, Gao X, Zou FY, Sui X, Wang M, Hui YJ, Wang L (2011) Regeneration of *Clivia miniata* and assessment of clonal fidelity of plantlets. Plant Cell Tiss Organ Cult (Published Online). doi:10.1007/s11240-011-0085-6
Xin W, Xu B, Wang GD, Guo WM, Wen FD, Jin JP (2006) Somatic embryogenesis and plant regeneration of *Anthurium andraeanum*. Acta Hort Sinica 33:1281–1286
Yu KJ, Paek KY (1995) Effect of microelement levels in the media on shoot tip culture of *Anthurium spp.* and reestablishment of plantlets in soil. J Korean Soc Hort Sc 36:893–899
Yu Y, Liu L, Liu J, Wang J (2009) Plant regeneration by callus-mediated protocorm-like body induction of *Anthurium andreanum* Hort. Agri Sc China 8:572–577

Fig. 3 Screenshots of case 3 snub publishing. Failure to indicate any Teixeira da Silva, Viegas or Winarto references. Referencing an almost totally unrelated paper

grower can control. Silva et al. (2005) concluded that various physical and biological factors including media play important roles in propagation of *A. andreanum*.

explants, shoot and root regeneration capacity from callus. J. Appl. Hort. 8:135-137
Pierik RLM, Mayes J, Steegmans HHM (1974). Vegetative propagation of *Anthurium andreanum* in propagating tubes. J.Vaklad-Voor.de-Bloemisterij. 29:12-15
Pierik RLM, Steegmans HHM (1976). Vegetative propagation of *Anthurium scherzerianum* Schott through callus cultures. J. Sci. Hort. 4:291-292
Silva JAT, Nagae S and Tanaka M (2005). Effect of physical factors on micropropagation of *Anthurium andraeanum*. J. Plant Tissue Cult. 15(1):1-6
Te-Chato S, Susano T and Sontikun Y (2006). Medium influcing embryo genesis and organogenesis in Anthurium spp. 06. Cultivar, explant type and culture. J. Songklanakarin. Sci. Technol. 28(4):717-722
Vargas TE, Mejias A, Oropeza M and Garcia E. (2004). Plant regeneration of Anthurium andreanum cv.Ruburn. J. Electronic J. Biotechnol. 7(3):282-286
Yi-xun Y, Ling L, Juan-xu L, Jing W (2009). Plant regeneration by callus-mediated proto-corm-like body induction of *Anthurium andraeanum* Hort. China. J. Agric. Sci. 8(5):572-577.

Fig. 4 Screenshots of case 4 snub publishing. 2 cases of errors with name. Failure to indicate Viegas or any Winarto references

Case 24: Lima et al. [31] Brazil (Fig. 24).
Case 25: Nhut et al. [32] Vietnam (Fig. 25).
Case 26: Te-chato et al. [33] Thailand (Fig. 26).

Only studies from 2006 were considered since the objective was to assess which papers after the author's earliest study [2] had been snubbing his identity. In every single case, two clear aspects are obvious. Firstly, there has been author negligence in not ensuring that the name of the author of the study that they were referencing was correct. Even so, an astute scientist would easily be able to identify the family name from the published paper and represent it faithfully in their text and reference list. There may be some cultural bias since in most of these cases, the most frequent being from Indian scientists (31 % of all cases), a cultural ignorance of global scientists' names may exist. The fact that 26 papers by scientists from 15 countries misrepresented my professional name in the literature is of great concern and shows just how wide-spread snub publishing may be taking place. The second glaring aspect that is revealed by this error in the incorrect or fraudulent representation of

MAIRA, O.; ALEXANDER, M.; VARGAS, T. E. Micropropagation and organogenesis of *Anthurium andraeanum* Lind cv. Rubrun. In: JAIN, S. M.; OCHATT, S. J. (Ed.). **Protocols for in vitro propagation of ornamental plants.** New York: Human Press, 2010. p. 3-14. (Methods in Molecular Biology, v. 589).

MATSUMOTO, T. K.; WEBB, D. T.; KUEHNLE, A. R. Histology and origin of somatic embryos derived from *Anthurium andraeanum* Linden ex Andre Lamina. **Journal of the American Society for Horticultural Science**, Alexandria, v. 121, n. 3, p. 404-407, 1996.

MURASHIGE, T.; SKOOG, F. A revised medium for rapid growth and bio-assays with tobacco tissue cultures. **Physiologia Plantarum**, Oxford, v. 15, n.3, p. 473-497, 1962.

O'BRIEN, T.P., MCCULLY, M. E. **The study of plant structure:** principles and select methods. Melbourne: Termarcarphi Pty, 1981. 352 p.

PIERIK, R. L. M. *Anthurium andraeanum* Lindl. plantlets produced from callus tissues cultivated in vitro. **Physiologia Plantarum**, Oxford, v. 37, n. 1, p. 80-82, 1976.

PINHEIRO, M. V. M. **Propagação in vitro de antúrio (*Anthurium andraeanum* cv. Eidibel) via embriogênese somática**. 2010. 67 f. Tese (Mestrado em Fisiologia Vegetal) – Departamento de Biologia Vegetal, Universidade Federal de Viçosa, Viçosa, MG.

RAAD, M. K.; ZANJANI, S. B.; SAYYAD, A. R.; MAGHSUDI, M.; KAVIANI, B. Effect of cultivar, type and age of explant, light conditions and plant growth regulators on callus formation of *Anthurium*. **American-Eurasian Journal of Agriculture & Environmental Science**, v. 12, n .6, p. 706-712, 2012.

ROCHA, D.; I.; VIEIRA, L. M.; TANAKA, F. A.; SILVA, L. C.; OTONI, W.C. Somatic embryogenesis of a wild passion fruit species *Passiflora cincinnata* Masters: histocytological and histochemical evidences. **Protoplasma**, Wien, v. 249, p. 747-758, 2012.

SANTOS-SEREJO, J. A.; SOUZA, A. da S.; MORAIS, L. S.; SOARES, T. L.; SOUZA, F. V. D.; KOBAYASHI, A. K.; FERREITA, C. F. SILVA, S. de O. e. Biotecnologia: algo mais que plantas transgênicas. In: REUNIÃO INTERNACIONAL DA ASSOCIAÇÃO PARA A COOPERAÇÃO NAS PESQUISAS SOBRE BANANA NO CARIBE E NA AMÉRICA TROPICAL, 17., 2006, Joinville. **Anais ...** Joinville: ACORBAT/ACAFRUTA, 2006 p. 10-23. 1 CD-ROM.

TE-CHATO, S.; SUSANON, T.; SONTIKUN, Y. Cultivar, explant type and culture medium influencing embryogenesis and organogenesis in *Anthurium* spp. **Songklanakarin Journal of Science and Technology**, Songkla, v. 28, n. 4, p. 717-722, 2006.

TOMBOLATO, A. F. C.; CASTRO, A. C. R. de. Araceae. In: TERAO, D.; CARVALHO, A. C. P. P. de; BARROSO, T. C. da S. F. (Ed.). **Flores tropicais**. Brasília, DF: Embrapa Informação Tecnológica; Fortaleza: Embrapa Agroindústria Tropical, 2005. il. p. 42-57.

TOMBOLATO, A. F. C.; FURLANI, P. R.; CASTRO, C. E. F.; MATHES, L. A. F.; TAGLIACOZZO, G. M. D.; SAES, L. A.; RIVAS, E. B.; COUTINHO, L. N.; BERGAMANN, E. C.; LEME, J. M. Antúrio: *Anthurium andraeanum* Lindl. In: TOMBOLATO, A. F. C.; FURLANI, P. R.; CASTRO, C. E. F. de; MATHES, L. A. F.; TAGLIACOZZO, G. M. D.; SAES, L. A.; RIVAS, E. B.; COUTINHO, L. C.; BERGMAN, E. C.; IMENES, D. de LAMONICA; COSTA, A. M.; LEME, J. M. C. (Ed.). **Cultivo comercial de plantas ornamentais**. Campinas: Instituto Agronômico de Campinas, 2004a. p. 61-94.

TOMBOLATO, A. F. C.; QUIRINO, E. A.; COSTA, A. M. M. Antúrio (*Anthurium andraeanum* Lindl.). In: TOMBOLATO, A. F. C.; COSTA A. M. M. (Coord.). **Micropropagação de plantas ornamentais**. Campinas: Instituto Agronômico de Campinas, 1998. p. 18-21. (IAC. Boletim técnico, 174).

TOMBOLATO, A. F. C.; MATHES, L. A. F.; UZZO, R. P.; CASTRO, A. C.; SAKAI, M.; SAES, L. A. Recursos genéticos e melhoramento do antúrio (*Anthurium andraeanum* Linden) no IAC-APTA. **Revista Brasileira de Horticultura Ornamental**, Campinas, v. 10, n.1/2 p. 1-5, 2004b.

VIÉGAS, J., ROCHA, M. T. R., FERREIRA-MOURA, I., ROSA, D. L., SOUZA, J. A., CORRÊA, M. G. S.; SILVA, J. T. *Anthurium andraeanum* (Linden ex André) culture: in vitro and ex vitro. **Floriculture and Ornamental Biotechnology**, Kagawa, v. 1, n. 1, p. 61-65, 2007.

XIN, W.; XU, B.; WANG, G. D.; GUO, W. M.; WEN, F. D.; JIN, J. P. Somatic embryogenesis and plant regeneration of *Anthurium andraeanum*. **Acta Horticulturae Sinica**, Benjing, v. 33, n. 6, p. 12821-1286, 2006.

YEUNG, E. C. Structural and developmental patterns in somatic embryogenesis. In: THORPE, T. A. (Ed.). **In vitro embryogenesis in plants**. Dordrecht: Kluwer Academic Publishers, 1995. p. 205-247.

Fig. 5 Screenshots of case 5 snub publishing. One case of error with name. Failure to indicate any Winarto references

Budi winarto, Fitri Rachmawat, Dewi Pramanik, Jaime A. Teixeira DA Silva. S (2011). Morphological and cytological diversity of regenerator derived from half –anthers culture of Anthurium. Plant cell this organ cult 105:363-374.

Fig. 6 Screenshots of case 6 snub publishing. One case of error with name. Failure to indicate any other Winarto references or TdS 2005 or Viegas references

my professional name is the serious level of editorial oversight and possibly inadequate or biased peer review. Peer reviewers and editors have the responsibility to ensure the scientific integrity of a manuscript, to ensure that the information contained therein is accurate and correct, including the name of authors and peers in that field of study. This is also a basic requirement of authors [34]. When submitting

Cell Reports 30: 1183–1191.
Rabinowicz PD, Bennetzen JL. 2006. The maize genome as a model for efficient sequence analysis of large plant genomes. *Current Opinion in Plant Biology* 9: 149–56.
SanMiguel P, Tikhonov A, Jin Y-K, Motchoulskaia N, Zakharov D, Melake-Berhan A, Springer PS, Edwards KJ, Lee M, Avramova Z, Bennetzen JL. 1996. Nested retrotransposons in the intergenic regions of the maize genome. *Science* 274: 765–768
Vision TJ, Brown DG, Tanksley SD. 2000. The origins of genomic duplications in *Arabidopsis*. *Science* 290: 2114–7.
Wang X, Shi X, Hao B, Ge S, Luo J. 2005. Duplication and DNA segmental loss in the rice genome: implications for diploidization. *New Phytologist* 165: 937–946.
Wendel JF. 2000. Genome evolution in polyploids. *Plant Molecular Biology* 42: 225–249.
Yogeeswaran K, Frary A, York TL, Amenta A, Lesser AH,

Fig. 7 Screenshot of case 7 snub publishing. Failure to indicate Winarto 2011b reference

Puchooa D, SookunD (2003). Induced mutation and *In vitro* cultured of *A. andraeanum*. AMAS, Food Agric. Res. Council, Reduit, Mauritius, pp. 17-27.
Vargas TE, Mejias A, Oropeza M, Garcia E (2004). Plant regeneration of A. andraeanum cv. Rubrun. Electronic J. Biotechnol. 7(3): 282-286.

Fig. 8 Screenshot of case 8 snub publishing. Failure to indicate TdS 2005, Viegas Winarto 2010–2012 references. Last reference in reference list indicated

organogenesis in *Anthurium* Spp. Songklarakarin J. Sci Techno Vol 28 No 4: 717-722
Teng WL (1997) Regeneration of *Anthurium* adventitious shoots using liquid raft culture. Plant Cell, Tissue and Organ Culture. V 49 (2): 153-156
Varargas TE, Mejias A, Oropeza M, Garica E (2004) Plant regeneration of *Anthurium andraeanum* C.V Rubrun. Electronic Journal of Biotechnology. Vol 7 No 3: 285-289
Viegas J, Rocha MTR, Ferreira-Moura I (2006) *Anthurium andraeanum* (Linden ex Andre) Culture: *In Vitro* and *Ex Vitro*. Floriculture and Ornamental Biotechnology 1(1): 61-15
Yu LIU, Juan LIU, Jing W (2009) Plant regeneration by callus-mediated porotocorm-like body induction of *Anthurium andraeanum* Hort. Agricultural Sciences in China 8(5): 572-577

Fig. 9 Screenshot of case 9 snub publishing. Failure to indicate TdS 2005, Viegas or any 2010/2011 Winarto reference

Fig. 10 Screenshot of case 10 snub publishing. Failure to indicate TdS 2005, Viegas or Winarto 2011b reference

Smith MK, Hamill SD (1996). Filed evaluation of micropropagated and conventionally propagated ginger in subtropical Queensland. Aust. J. Exp. Agrc. 36: 347-354.
Tremblay L, Levasseur C, Tremblay FM (1999). Frequency of somaclonal variation in plants of black spruce (*Picea mariana*, Pinaceae) and white spruce (*P. glauca*, Pinaceae) derived from somatic embryogenesis and identification of some factors involved in genetic instability. Am. J. Bot. 86: 1373–1381.
Winfield M, Davey MR, Karp A (1993). A comparison of chromosome instability in cell suspensions of diploid, tetraploid and hexaploid wheats. Heredity, 70: 187-194.

Sreelatha, U., S.R. Nair and K. Rajmohan, 1998. Factors affecting somatic organogenesis from leaf explants of Anthurium species. *J. Orn. Hort.*, New series, 1(2): 48-54.
Yu, W.J. and K.Y. Peak, 1995. Effect of macronutrient levels in the media

Fig. 11 Screenshot of case 11 snub publishing. Failure to indicate TdS 2005, Viegas or Winarto 2010 + 2011 references

to a journal that would be reviewing a paper on anthurium, one would expect that an anthurium specialist would be revising the manuscript. An anthurium specialist or even ornamental scientist who is familiar with this literature would undoubtedly

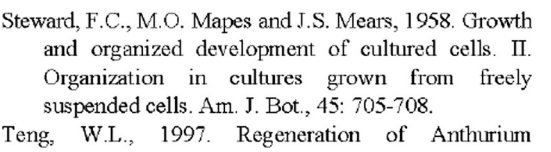

Steward, F.C., M.O. Mapes and J.S. Mears, 1958. Growth and organized development of cultured cells. II. Organization in cultures grown from freely suspended cells. Am. J. Bot., 45: 705-708.
Teng, W.L., 1997. Regeneration of Anthurium

Fig. 12 Screenshots of case 12 snub publishing. Failure to indicate TdS 2005 reference

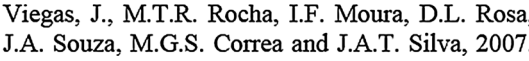

Viegas, J., M.T.R. Rocha, I.F. Moura, D.L. Rosa, J.A. Souza, M.G.S. Correa and J.A.T. Silva, 2007.

Fig. 13 Screenshots of case 13 snub publishing. One case of error with name. Failure to indicate TdS 2005 reference

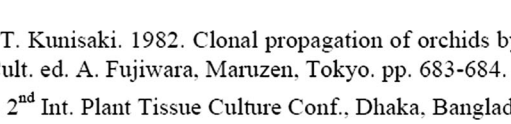

Sagawa, Y. and J. T. Kunisaki. 1982. Clonal propagation of orchids by tissue culture. In: Plant Tissue Cult. ed. A. Fujiwara, Maruzen, Tokyo. pp. 683-684.
Ullah, M. H. 1995. 2nd Int. Plant Tissue Culture Conf., Dhaka, Bangladesh.

Fig. 14 Screenshots of case 14 snub publishing. Failure to indicate TdS 2005 or Viegas references

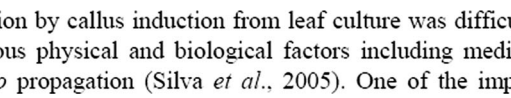

Micropropagation by callus induction from leaf culture was difficult step for *In vitro* propagation. Various physical and biological factors including media play role during *Anthurium In vitro* propagation (Silva *et al*., 2005). One of the important factors was

Fig. 15 Screenshots of case 15 snub publishing. One case of error with name. Failure to indicate Viegas reference

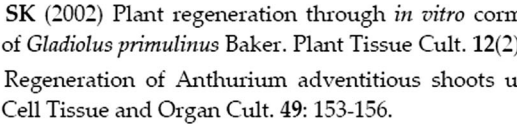
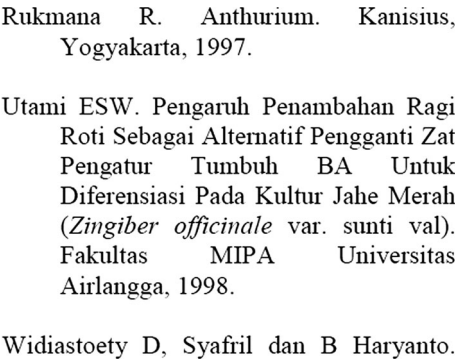

Sinha P and **Roy SK** (2002) Plant regeneration through *in vitro* cormel formation from callus culture of *Gladiolus primulinus* Baker. Plant Tissue Cult. **12**(2): 43-50.
Teng W-L (1997) Regeneration of Anthurium adventitious shoots using liquid or raft culture. Plant Cell Tissue and Organ Cult. **49**: 153-156.

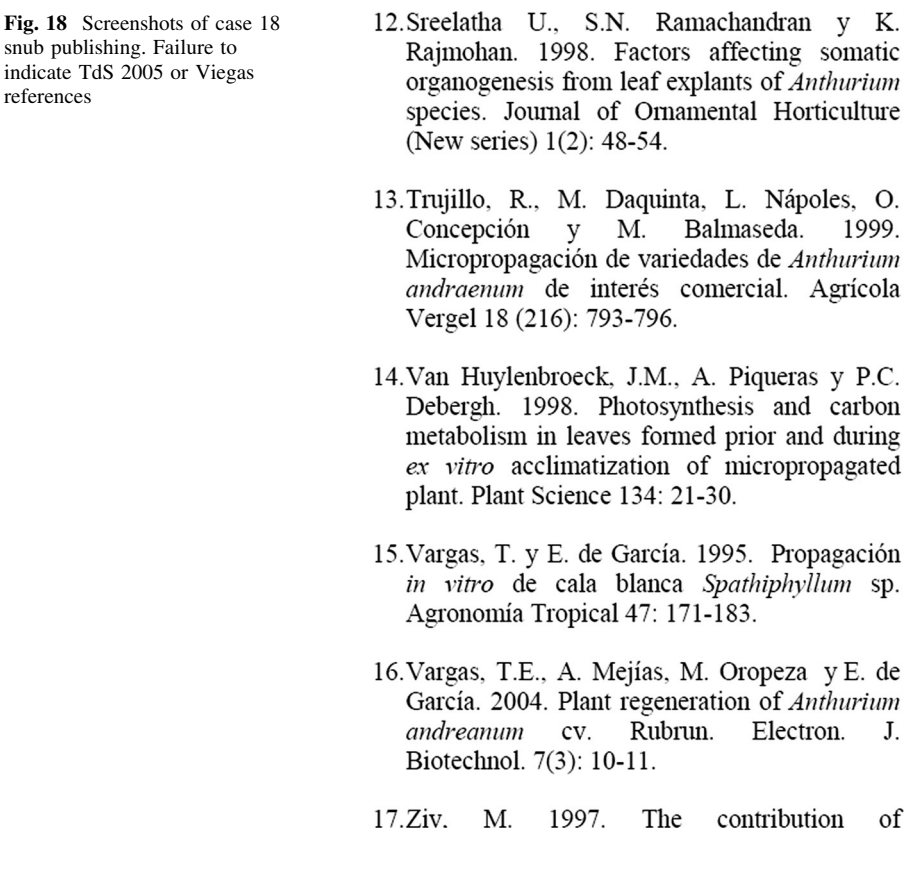
Fig. 16 Screenshots of case 16 snub publishing. Failure to indicate TdS 2005 or Viegas references. Teng (1997) is last reference in the list


Rukmana R. Anthurium. Kanisius, Yogyakarta, 1997.

Utami ESW. Pengaruh Penambahan Ragi Roti Sebagai Alternatif Pengganti Zat Pengatur Tumbuh BA Untuk Diferensiasi Pada Kultur Jahe Merah (*Zingiber officinale* var. sunti val). Fakultas MIPA Universitas Airlangga, 1998.

Widiastoety D, Syafril dan B Haryanto.

Fig. 17 Screenshots of case 17 snub publishing. Failure to indicate TdS 2005 or Viegas references


12. Sreelatha U., S.N. Ramachandran y K. Rajmohan. 1998. Factors affecting somatic organogenesis from leaf explants of *Anthurium* species. Journal of Ornamental Horticulture (New series) 1(2): 48-54.

13. Trujillo, R., M. Daquinta, L. Nápoles, O. Concepción y M. Balmaseda. 1999. Micropropagación de variedades de *Anthurium andraenum* de interés comercial. Agrícola Vergel 18 (216): 793-796.

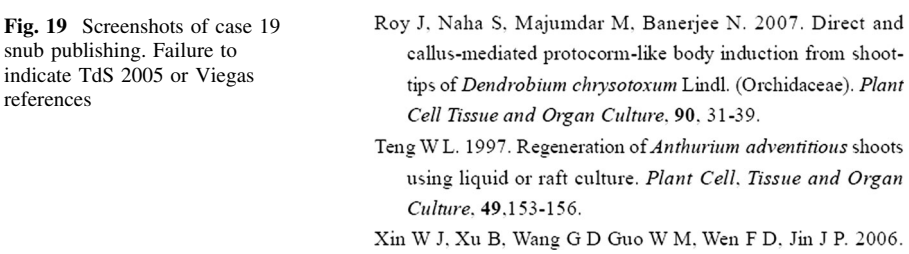
14. Van Huylenbroeck, J.M., A. Piqueras y P.C. Debergh. 1998. Photosynthesis and carbon metabolism in leaves formed prior and during *ex vitro* acclimatization of micropropagated plant. Plant Science 134: 21-30.

15. Vargas, T. y E. de García. 1995. Propagación *in vitro* de cala blanca *Spathiphyllum* sp. Agronomía Tropical 47: 171-183.

16. Vargas, T.E., A. Mejías, M. Oropeza y E. de García. 2004. Plant regeneration of *Anthurium andreanum* cv. Rubrun. Electron. J. Biotechnol. 7(3): 10-11.

17. Ziv. M. 1997. The contribution of

Fig. 18 Screenshots of case 18 snub publishing. Failure to indicate TdS 2005 or Viegas references

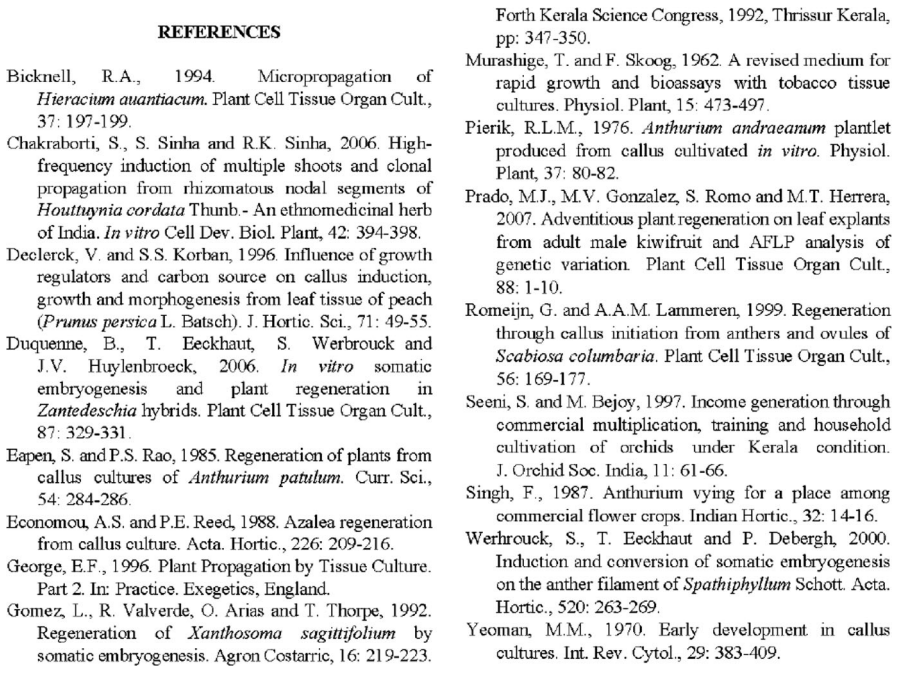

Roy J, Naha S, Majumdar M, Banerjee N. 2007. Direct and callus-mediated protocorm-like body induction from shoot-tips of *Dendrobium chrysotoxum* Lindl. (Orchidaceae). *Plant Cell Tissue and Organ Culture*, **90**, 31-39.

Teng W L. 1997. Regeneration of *Anthurium adventitious* shoots using liquid or raft culture. *Plant Cell, Tissue and Organ Culture*, **49**,153-156.

Xin W J, Xu B, Wang G D Guo W M, Wen F D, Jin J P. 2006.

Fig. 19 Screenshots of case 19 snub publishing. Failure to indicate TdS 2005 or Viegas references

have identified that my name had been incorrectly represented and would have then requested the authors to correct the record. The fact that 26 papers failed to detect such a basic error provides evidence that no, fake, unprofessional or incomplete peer review took place. Such a pseudo-peer review would essentially render the scientific quality and integrity of the paper invalid since it would run counter to what all these journals are advertising, i.e., that they are peer reviewed international journals. A non-peer reviewed or poorly peer reviewed paper should, very plainly stated, never have been published. According to [1], all of these 26 papers would receive a snub score of 2–3 on a scale of 1–8, according to Table 1 in that paper. Moreover, the



REFERENCES

Bicknell, R.A., 1994. Micropropagation of *Hieracium auantiacum*. Plant Cell Tissue Organ Cult., 37: 197-199.

Chakraborti, S., S. Sinha and R.K. Sinha, 2006. High-frequency induction of multiple shoots and clonal propagation from rhizomatous nodal segments of *Houttuynia cordata* Thunb.- An ethnomedicinal herb of India. *In vitro* Cell Dev. Biol. Plant, 42: 394-398.

Declerck, V. and S.S. Korban, 1996. Influence of growth regulators and carbon source on callus induction, growth and morphogenesis from leaf tissue of peach (*Prunus persica* L. Batsch). J. Hortic. Sci., 71: 49-55.

Duquenne, B., T. Eeckhaut, S. Werbrouck and J.V. Huylenbroeck, 2006. *In vitro* somatic embryogenesis and plant regeneration in *Zantedeschia* hybrids. Plant Cell Tissue Organ Cult., 87: 329-331.

Eapen, S. and P.S. Rao, 1985. Regeneration of plants from callus cultures of *Anthurium patulum*. Curr. Sci., 54: 284-286.

Economou, A.S. and P.E. Reed, 1988. Azalea regeneration from callus culture. Acta. Hortic., 226: 209-216.

George, E.F., 1996. Plant Propagation by Tissue Culture. Part 2. In: Practice. Exegetics, England.

Gomez, L., R. Valverde, O. Arias and T. Thorpe, 1992. Regeneration of *Xanthosoma sagittifolium* by somatic embryogenesis. Agron Costarric, 16: 219-223.

Forth Kerala Science Congress, 1992, Thrissur Kerala, pp: 347-350.

Murashige, T. and F. Skoog, 1962. A revised medium for rapid growth and bioassays with tobacco tissue cultures. Physiol. Plant, 15: 473-497.

Pierik, R.L.M., 1976. *Anthurium andraeanum* plantlet produced from callus cultivated *in vitro*. Physiol. Plant, 37: 80-82.

Prado, M.J., M.V. Gonzalez, S. Romo and M.T. Herrera, 2007. Adventitious plant regeneration on leaf explants from adult male kiwifruit and AFLP analysis of genetic variation. Plant Cell Tissue Organ Cult., 88: 1-10.

Romeijn, G. and A.A.M. Lammeren, 1999. Regeneration through callus initiation from anthers and ovules of *Scabiosa columbaria*. Plant Cell Tissue Organ Cult., 56: 169-177.

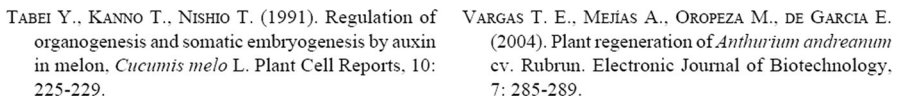
Seeni, S. and M. Bejoy, 1997. Income generation through commercial multiplication, training and household cultivation of orchids under Kerala condition. J. Orchid Soc. India, 11: 61-66.

Singh, F., 1987. Anthurium vying for a place among commercial flower crops. Indian Hortic., 32: 14-16.

Werhrouck, S., T. Eeckhaut and P. Debergh, 2000. Induction and conversion of somatic embryogenesis on the anther filament of *Spathiphyllum* Schott. Acta. Hortic., 520: 263-269.

Yeoman, M.M., 1970. Early development in callus cultures. Int. Rev. Cytol., 29: 383-409.

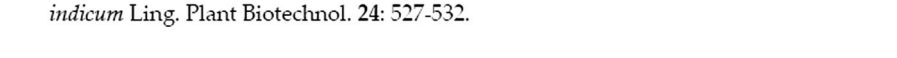
Fig. 20 Screenshot of case 20 snub publishing. Failure to indicate TdS 2005 or Viegas references



TABEI Y., KANNO T., NISHIO T. (1991). Regulation of organogenesis and somatic embryogenesis by auxin in melon, *Cucumis melo* L. Plant Cell Reports, 10: 225-229.

VARGAS T. E., MEJÍAS A., OROPEZA M., DE GARCIA E. (2004). Plant regeneration of *Anthurium andreanum* cv. Rubrun. Electronic Journal of Biotechnology, 7: 285-289.

Fig. 21 Screenshots of case 21 snub publishing. Failure to indicate TdS 2005 or Viegas references



Sivanesan I and **Jeong BR** (2007) Micropropagation and *in vitro* flowering in *Pentanema indicum* Ling. Plant Biotechnol. **24**: 527-532.

Fig. 22 Screenshots of case 22 snub publishing. Failure to indicate TdS 2005 or Viegas references. Last reference in reference list indicated

existence of snub publishing is one characteristic of predatory open access publishers [35].

What are the consequences of snub publishing? The very first and most obvious one is that the snubbed scientist, in this case the author as an example, will have lost 26 opportunities to be referenced accurately in the literature. Potentially, this could translate into 26 opportunities for indexing in data-bases and thus the potential loss of dozens of valid literature attributions over the past 8 years. For a scientist, one of the most important aspects is for their work to be referenced. But if their names are not being accurately or correctly referenced, then what is the purpose of even being referenced, or even publishing for that matter when the peer pool appears to act

Tan, N. D., van, Le Bui y Thanh, V. T. 2001. **Manipulation of the morphogenetic pathways of *Lilium longiflorum* transverse thin cell layer explants by auxin and cytokinin.** In Vitro Cell. Dev. Biol.-Plant 37:44-49.

Vasil, K. I. 2003. **Somatic embryogenesis and its applications to plant biotechnology.** V Reunión de la Sociedad Española de Cultivo *in vitro* de Tejidos Vegetales. 29 Junio-2 Julio Pamplona, España.

Vega, A. y Prehn, D. 2005. **Inducción e inicio de maduración *in vitro* de tejido embriogénico de *Quillaja saponaria*.** Ciencia e Investigación Agraria 32(3):197-207.

Zaidi, N., Habib, N. K., Zafar, F. y Zafar, S. 2000. **Bulbous and cormous**

Fig. 23 Screenshots of case 23 snub publishing. Failure to indicate TdS 2005 or Viegas references

Fig. 24 Screenshots of case 24 snub publishing. Failure to indicate TdS 2005 reference

Siqueira, J.O.; Lambais, M.R.; Stürmer, S.L. Fungos micorrízicos arbusculares: características, associação simbiótica e aplicação na agricultura. Biotecnologia Ciência e Desenvolvimento, v.25, p.12-21, 2002.

Vargas, T.E.; Mejías, A.; Oropeza, M.; García, E. Plant regene-

Pierik, R.L.M. 1976. *Anthurium andraeanum* plantlets produced from callus tissues cultivated *in vitro*. *Plant Physiol.*, 37: 80-82.

Fig. 25 Screenshots of case 25 snub publishing. Failure to indicate TdS 2005 reference. Last reference in reference list indicated

Te-chato, S., Naksombut, S. and Boonsiri, J. 2002. Effect of variety and explant on callus formation and micropropagation of anthurium. Songklanakarin J. Sci. Technol. 24: 569-578.

Fig. 26 Screenshots of case 26 snub publishing. Failure to indicate TdS 2005 reference. Last reference in reference list indicated

irresponsibly? The second unintentional but direct consequence is that any researcher from now on (2014-future) who reads any of these snub papers will potentially carry forward the fraud (claimed so because information is falsely represented) into the future literature and its reference lists, especially if the authors of as-yet-to-be published papers do not bother to access the original source. The risk of professional damage thus becomes not linear, but exponential. In this case, we are referring to a plant with limited research (average of between 5 and 10 papers yearly in the global literature), but the dimension of the damage caused were the plant to be tomato, maize, wheat or another major crop, could be devastating to a career and a *curriculum vitae*.

Why would such false and fraudulent representation of an author's name not be considered libel? Why would the authors not be held accountable for correcting the

literature? Why would the editors, journals and publishers not be held accountable and be made to publish errata to set the academic record straight? In cases where an author feels that their name has been snubbed, and that their name is not correctly represented in the literature, they should have the right to request the publisher to correct the scientific record and to publish an erratum.

SP is one form of predatory publishing, but in which the act of predation might be used by the author, using a journal or publisher in an unsuspecting manner, to derive benefit in a dishonest or fraudulent way, or to inflict damage to the professional status or image of another scientist, possibly a competitor. SP can be subtle, or can be blatant. This paper shows one case of how SP takes place in both veiled and blunt forms.

Conclusions

The acts that define SP have most likely always been present throughout the history of publishing. Yet, the fact that a concrete term to this phenomenon has now been assigned, and somewhat qualified in this paper, brings to light a new form of fraud in science publishing that deserves greater scrutiny. Other scientists are urged to examine the text and reference lists of their own papers within fields of science that they are specialists of to begin to quantify the level of SP that is taking place in the open access and print literature. References suddenly become a form by which fraud is permitted, legalized and perpetuated. The legitimization of false and inaccurate information through SP by predatory publishers, by ignorant or lazy authors, or by careless editors, peers and journals must not be allowed to continue unpunished, otherwise there will be no sense of justice and correction of the scientific record for posterity [36].

Regrettably, when data and figure duplication (partial or total)—for example, [9] and [37] or [28] and [38]—are allowed to remain published without any action by the authors, publishers or peer community, in this case the anthurium, horticultural and plant science communities, or without any repercussions, these very same communities should not be surprised when the system of ethical publishing implodes once total failure in quality control has been lost. In such cases, quality control must be implemented by scientists and the peer pool in an independent analysis, using one key tool, post-publication peer review [39].

Napoleon Bonaparte once stated "Never ascribe to malice that which is adequately explained by incompetence", which may be pertinent to the topic at hand. However, whether errors in the literature are introduced via malice or via incompetence does not remove the fact that they remain errors in the literature and that they should be corrected.

References

1. Teixeira da Silva JA. Snub publishing: theory. Asian Australas J Plant Sci Biotechnol. 2013;7(Special Issue 1):35–7.

2. Teixeira da Silva JA, Murasei F, Tanaka M. Growth vessel and substrate affect *Anthurium* micropropagation. Plant Tissue Cult. 2005;15(1):1–6.
3. Viégas J, da Rocha MTR, Ferreira-Moura I, Corrêa MGS, da Silva JB, dos Santos NC, Teixeira da Silva JA. *Anthurium andraeanum* (Linden ex André) culture: *in vitro* and *ex vitro*. Floriculture and ornamental. Biotechnology. 2007;1(1):61–5.
4. Winarto B, Mattjik NA, Teixeira da Silva JA, Purwito A, Marwoto B. Ploidy screening of anthurium (*Anthurium andreanum* Linden ex André) regenerants derived from anther culture. Sci Hortic. 2010;127:86–90.
5. Winarto B, Rachmawati F, Pramanik D, Teixeira da Silva JA. Morphological and cytological diversity of regenerants derived from anthurium anther culture. Plant Cell Tissue Organ Cult. 2011;105(3):363–74.
6. Winarto B, Rachmawati F, Teixeira da Silva JA. New basal media for half-anther culture of *Anthurium andreanum* Linden ex André cv. Tropical. Plant Growth Regul. 2011;65(3):513–29.
7. Winarto B, Teixeira da Silva JA. Influence of isolation technique of half-anthers and of initiation culture medium on callus induction and regeneration in *Anthurium andreanum*. Plant Cell Tissue Organ Cult. 2012;110(3):401–11.
8. Atak Ç, Çelik Ö. Micropropagation of *Anthurium spp*. In: Plant science. Intech, Croatia; 2012. p. 241–54.
9. Raad MK, Zanjani SB, Shoor M, Hamidoghli Y, Sayyad AR, Kharabian-Masouleh A, Kaviani B. Callus induction and organogenesis capacity from lamina and petiole explants of *Anthurium andreanum* Linden (Casino and Antadra). Aust J Crop Sci. 2012;6(5):928–37.
10. Gantait S, Sinniah UR, Mandal N, Das PK. Direct induction of protocorm-like bodies from shoot tips, plantlet formation, and clonal fidelity analysis in *Anthurium andreanum* cv. CanCan. Plant Growth Regul. 2012;67:257–70.
11. Farsi M, Taghavizadeh Yazdi ME, Qasemiomran V. Micropropagation of *Anthurium andreanum* cv. Terra. Afr J Biotechnol. 2012;11(68):13162–6.
12. Pinto de Carvalho ACP, Pinheiro MVM, Martins FB, Ferreira da Cruz FC, Otoni WC. Produção de mudas micropropagadas de antúrio (*Anthurium andraeanum*) cv. Eidibel por embriogênese somática. Embrapa Circ Técnica (Fortaleza). 2012;41:1–14.
13. Ancy D, Bopaiah AK, Reddy JM. *In vitro* seed culture studies in *Anthurium bicolor* (Agnihothri). Int J Integr Sci Innov Technol. 2012;1(4):16–20.
14. Bliss BJ, Suzuki JY. Genome size in *Anthurium* evaluated in the context of karyotypes and phenotypes. AoB Plants pls006; 2012.
15. Reddy JM, Bopaiah AK. Studies on the intiation [sic] of callusing and regeneration of plantlets in three different basal media with varied plant growth regulators for the micropropagation of *Anthurium scherzeriaum* [sic] using leaf and spathe as explants. Afr J Biotechnol. 2012;11(23): 6259–68.
16. Sedaghati B, Babaeiyan N-A, Bagheri N-A, Salehiyan H, Khademian R. Effect of type and concentration of growth regulators on plant regeneration of *Anthurium andraeanum*. Int J Agric Res Rev. 2012;2(S):998–1004.
17. Gantait S, Sinniah UR. Morphology, flow cytometry and molecular assessment of *ex-vitro* grown micropropagated anthurium in comparison with seed germinated plants. Afr J Biotechnol. 2012;10(64):13991–1399867.
18. Kumari S, Desai JR, Shah RR. Callus mediated plant regeneration of two cut flower cultivars of *Anthurium andraeanum* Hort. J Appl Hortic. 2011;13(1):37–41.
19. Gantait S, Mandal N. Tissue culture of *Anthurium andreanum*: a significant review and future prospective. Int J Botany. 2010;6(3):207–19.
20. Harb EM, Talaat NB, Weheeda BM, El-Shamy M, Omira GA. Micropropagation of *Anthurium andreanum* from shoot tip explants. J Appl Sci Res. 2010;6(8):927–31.
21. Islam SA, Dewan MMR, Mukul MHR, Hossen MA, Khatun F. *In vitro* regeneration of *Anthurium andreanum* cv. Nitta. Bangladesh J Agric Res. 2010;35(2):217–26.
22. Atak Ç, Çelik Ö. Micropropagation of *Anthurium andraeanum* from leaf explants. Pak J Bot. 2009;41(3):1155–61.
23. Jahan MT, Islam MR, Khan R, Mamun ANK, Ahmed G, Hakim L. *In vitro* clonal propagation of anthurium (*Anthurium andraeanum* L.) using callus culture. Plant Tissue Cult Biotechnol. 2009;19(1):61–9.

24. Kurnianingsih R, Marfuah, Matondang I. Pengaruh pemberian bap (6-benzyl amino purine) pada media multiplikasi tunas *Anthurium hookerii* Kunth. Enum. secara *in vitro*. Vis Vitalis. 2009;2(2): 23–30 (in Indonesian with English abstract).
25. Liendo M, Mogollón N. Multiplicación clonal *in vitro* del anturio (*Anthurium andraeanum* Lindl. cv. Nicoya). Bioagro. 2009;21(3):179–82 (in Spanish with English abstract).
26. Yu YX, Liu L, Liu JX, Wang J. Plant regeneration by callus-mediated protocorm-like body induction of *Anthurium andraeanum* Hort. Agric Sci China. 2009;8(5):572–7.
27. Bejoy M, Sumitha VR, Anish NP. Foliar regeneration in *Anthurium andreanum* Hort. cv. Agnihothri. Biotechnology (Pakistan). 2008;7(1):134–8.
28. Beyramizade E, Azadi P, Mii M. Optimization of factors affecting organogenesis and somatic embryogenesis of *Anthurium andreanum* Lind. Tera. Propag Ornam Plants. 2008;8:198–203.
29. Gantait S, Mandal N, Bhattacharyya S, Das PK. *In vitro* mass multiplication with pure genetic identity in *Anthurium andreanum* Lind. Plant Tissue Cult Biotechnol. 2008;18(2):113–22.
30. del Rivero-Bautista N, Agramonte-Peñalver D, Barbón-Rodríguez R, Camacho-Chiu W, Collado-López R, Jiménez-Terry F, Pérez-Peralta M, Gutiérrez-Martínez O. Somatic embryogenesis in (*Anthurium andraeanum* Lind.) variety 'Lambada'. Ra Ximhai. 2008;4(1):135–49 (in Spanish with English abstract).
31. Lima FC, Ulisses C, Camara TR, Cavalcante UMT, Albuquerque CC, Willadino L. *Anthurium andraeanum* Lindl. cv. Eidibel *in vitro* rooting and acclimation with arbuscular mycorrhizal fungi. Revista Brasileira de Ciências Agrarias (Recife). 2006;1:13–6.
32. Nhut DT, Duy N, Vy NNH, Khue CD, Khiem DV, Vinh DN. Impact of *Anthurium* spp. genotype on callus induction derived from leaf explants, shoot and root regeneration capacity from callus. J Appl Hortic. 2006;8(2):135–7.
33. Te-chato S, Susanon T, Sontikun Y. Cultivar, explant type and culture medium influencing embryogenesis and organogenesis in *Anthurium* spp. Songklanakarin J Sci Technol. 2006;28(4): 717–22.
34. Teixeira da Silva JA. Responsibilities and rights of authors, peer reviewers, editors and publishers: a *status quo* inquiry and assessment. Asian Australas J Plant Sci Biotechnol. 2013;7(Special Issue 1):6–15.
35. Teixeira da Silva JA. Predatory publishing: a quantitative assessment, the predatory score. Asian Australas J Plant Sci Biotechnol. 2013;7(Special Issue 1):21–34.
36. Teixeira da Silva JA. How to better achieve integrity in science publishing. Eur Sci Ed. 2013;39(4):97-8.
37. Raad MK, Zanjani SB, Sayyad AR, Maghsudi M, Kaviani B. Effect of cultivar, type and age of explants, light conditions and plant growth regulators on callus formation of anthurium. Am–Eurasian J Agric Environ Sci. 2012;12(6):706–12.
38. Beyramizade E, Azadi P. Effect of growth regulators on shoot formation of *Anthurium andreanum* Lind. Tera. Pajouhesh & Sazandegi. 2008;76:179–84 (in Farsi with English abstract).
39. Teixeira da Silva JA. The need for post-publication peer review in plant science publishing. Frontiers Plant Sci. 2013;4:485.