

Empowering the next generation of tropical forage researchers: A new e-journal for the 21st Century

Rainer Schultze-Kraft^A, Lyle Winks^B, Changjun Bai^C, Robert J Clements^D,
Asamoah Larbi^E, Michael Peters^F and Cacilda B do Valle^G

^A Centro Internacional de Agricultura Tropical (CIAT), Apartado Aéreo 6713, Cali, Colombia.

^B Formerly: Tropical Grassland Society of Australia Inc., Brisbane, Queensland, Australia.

^C Chinese Academy of Tropical Agricultural Sciences (CATAS), Danzhou, Hainan, People's Republic of China.

^D Formerly: Tropical Grassland Society of Australia Inc., Brisbane, Queensland, Australia.

^E International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.

^F Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia.

^G Embrapa Gado de Corte, Campo Grande-MS, Brazil.

Contact email: r.schultzekraft@cgiar.org

Abstract. Grassland researchers in the 21st Century need 21st Century publication opportunities. A new, open-access online journal, *Tropical Grasslands–Forrajes Tropicales*, to continue the tradition of the former *Tropical Grasslands* (published by the Tropical Grassland Society of Australia Inc. during 1967-2010) and the former CIAT journal *Pasturas Tropicales* (1984-2006), is presented. It is published by CIAT in Cali, Colombia, and sponsored by CATAS, China, and ACIAR, Australia. Articles appear in English or Spanish with abstracts in both languages, and include research papers, short communications, review papers and farmer communications.

Keywords: Knowledge sharing, tropical forages, online periodical, pasture science.

Introduction

The scientific-publication environment

Scientific journals remain the main vehicle for dissemination of scientific knowledge. Scientific publishing is a USD 7-11 billion business, but a rather strange one. Most scientific research (including agricultural research) is still publicly-funded, and the output of researchers is provided at no cost to publishers. Similarly, peer refereeing is provided cost-free. The prime users (the researchers) do not buy directly from the publishers; instead, the main purchasers are publicly-funded libraries. There is a multitude of publishers. Two groups of publishers (For-Profit and Not-For-Profit publishers) compete for material and readers, and most market power lies with the publishers, not with the purchasers. Scientists seek to publish their work in high-impact journals, which are often published by For-Profit publishers. Subscriptions to such high-impact journals often cost more than for those journals published by Not-For-Profit publishers, and therefore, strangely, high citation rates are correlated with high publishing costs and with low subscription rates. This disadvantages researchers in developing countries (Dewatripont *et al.* 2006).

The challenge

Globally, research scientists, research organisations and an increasing number of research funders demand that publicly-funded research should be freely-accessible to all readers. This includes also the archiving and ongoing provision of older scientific literature, a public good that the market cannot ensure; it requires the ongoing provision

of public money.

Free and speedy access to research results can easily be achieved using facilities provided on the internet. Consequently, there has been a recent proliferation of scientific online journals at the expense of print journals with their time-consuming and costly production procedures. However, not all electronic journals are free-of-charge to readers or authors. In principle, there are roughly three main journal categories: (1) completely open-access journals, where neither authors nor readers are charged for publishing or accessing articles; (2) “hybrid” open-access journals, where authors are charged a publication fee but access to articles is free of charge; and (3) journals that can be accessed only by readers who hold a subscription or pay a fee to download an article. (Journals of the latter two categories usually also offer concessions such as waiving publication fees for particular authors, granting open access to selected articles of an issue or, after some time, to entire issues, and the like.)

Completely open-access status is what the research community expects from a modern, state-of-the-art journal, but this status is dependent on the availability of funds to cover expenses incurred through proper editorial and publication procedures. It is essential that rapid publication is not achieved at the expense of a thorough manuscript review to ensure that high scientific standards are maintained in the published papers.

In late 2011, we undertook a project to fill the gap left by the termination of the two former print journals, *Tropical Grasslands* and *Pasturas Tropicales*, by producing a modern online journal, *Tropical Grasslands–*

Forrajes Tropicales. In doing so, we aimed to have both “completely open-access” and “high quality standards”.

The former journals

Until 2010 and early 2007, the only international scientific journals specializing in tropical pastures and forages were *Tropical Grasslands* and *Pasturas Tropicales*, respectively. Upon the discontinuation of these journals, no relevant international publication platform remained.

Tropical Grasslands

This journal, established in 1967, was the scientific publication of the Tropical Grassland Society of Australia Inc. (TGS). It published articles, in English, relating to production and utilization of tropical and subtropical pastures and forages, initially focusing on Australia and Southeast Asia but, with time, becoming truly international. The journal was available to members of the TGS and other paying subscribers. In later years, volumes were made freely available on the internet two years after publication. *Tropical Grasslands* was discontinued in 2010 as a consequence of the winding up of the TGS.

Pasturas Tropicales

This journal developed from a newsletter (*Pastos Tropicales Boletín Informativo*) established by Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia, in 1984 within the activities of the center’s Tropical Pastures Program and RIEPT (the Spanish acronym for the International Pasture Evaluation Network). It focused on tropical America and was published in Spanish and, occasionally, Portuguese. *Pasturas Tropicales* was distributed free of charge to subscribers. It was discontinued at the beginning of 2007, as a consequence of structural changes at CIAT.

The new journal

The name of the new journal, *Tropical Grasslands–Forrajes Tropicales*, indicates both its bilingualism (English or Spanish, with abstracts in both languages) and our desire to continue the tradition of both former journals. It is an online journal only (no print version) and accessible at <http://tropicalgrasslands.info>. The website uses the open-source journal management and publishing system OJS (Open Journal Systems) and provides links to the complete archives of the former journals, from which all 44 and 29 volumes (*Tropical Grasslands* and *Pasturas Tropicales*, respectively) can be downloaded.

Tropical Grasslands–Forrajes Tropicales is published three times per year by CIAT in Cali, Colombia, and is sponsored by the Chinese Academy of Tropical Agricultural Sciences (CATAS) and the Australian Centre for International Agricultural Research (ACIAR). The contribution of an anonymous donor, *in memoriam* of Dr José M. Toledo, Leader of CIAT’s Tropical Pastures Program in the 1980s, provided the seed money that enabled the journal to get off the ground.

Scope

The journal’s areas of interest span a wide range of disciplines and include:

- Forage Genetic Resources and Livestock Production: Genetic resources of forage plants; Improvement of rangelands, pastures, and cut-and-carry feeding using sown forage plants; Role of forage plants in crop-livestock systems (incl. agroforestry); Multi-purpose potential of forage plants including forage shrubs and trees; Pasture and forage plants for marginal environments; Livestock production potential of improved forage technologies; Forages for non-ruminants and ruminants;
- Environmental Functions of Forages: Rehabilitation of degraded pastures and reversing land degradation; Natural-resource management role of pastures and forages; Potential of forages for adaptation to and mitigation of climate change effects; Pasture sustainability; Pastures and biodiversity; and
- Socio-economic Aspects: Forages, smallholders and participatory research; Socio-economic impact of improved forage technologies; Cross-site research (such as multi-locational evaluations).

The focus is on sown (“improved”) pastures and forages rather than rangeland-specific aspects of natural grasslands. While there is no regional focus, the research published should be of interest to a wide readership.

Editorial aspects

The journal publishes Research Papers, Short Communications, Review Papers, and Farmer Communications. All submissions are subjected to a peer-review process, involving members of the journal’s Editorial Board and external specialists. The editors are committed to ensuring a speedy manuscript review and publication process.

We also intend to publish special issues when the need arises, including the occasional publication of results from closely-related but rather specialized research (such as the former *Genetic Resources Communication* series of the former CSIRO Division of Tropical Crops and Pastures).

Management

Tropical Grasslands–Forrajes Tropicales utilizes two editors (for submissions in English and Spanish, respectively) and an editorial assistant. It is managed by a 7-member Management Team. The journal’s Editorial Board is composed of 23 internationally-recognized scientists with a balanced regional and scientific-discipline representation.

Future developments

We intend to complement, in time, the “News” section of the journal’s website with regional newsletters for (sub) tropical Australia, SE Asia, Sub-Saharan Africa and (sub)tropical America. Furthermore, the organization of occasional discussion fora on particular subjects is envisaged.

Conclusions

- *Tropical Grasslands–Forrajes Tropicales* is the only international and bilingual scientific journal specializing in tropical pastures and forages.
- The journal’s open-access policy ensures unrestricted

and speedy dissemination of information to a wide readership throughout the tropics and subtropics.

- Maintaining and providing free access to the complete archives of the former print journals *Tropical Grasslands* and *Pasturas Tropicales* ensures that older scientific literature is readily available also and at no charge.
- Peer review, involving both the journal's Editorial Board members and external specialists, will maintain high scientific standards of published articles.
- The journal section Farmer Contributions should improve links between researchers and practitioners.
- The intended development of the News section on the journal's website into regional newsletters is likely to lead to a global information exchange platform and to

facilitate networking with subsequent benefits for R&D.

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