## **Editorial**

It was half a year ago that Robert Koebner wrote his 'Farewell to PGR' after 12 years as an editor of Plant Genetic Resources: Characterization and Utilization (PGR:C&U). Quietly, I took over his responsibilities as editor. Since this editorial transition, I have been getting better acquainted with the manuscript submission workflow, and trying to identify the appropriate level of selectiveness needed to fill the journal with a sufficient number of high-quality papers. Thankfully, the supply of manuscripts is more than satisfactory, permitting a degree of selectivity even before the process of peer review. With this luxury comes the difficult task of informing many authors that, despite an appropriate quality of the science, their paper has to be rejected simply because it is not of sufficiently broad interest for our international audience. For example, screening a moderate number of landraces from the northern part of a country with a moderate number of markers, followed by a standard statistical analysis showing a number of rather distinct groups, is no longer sufficient to merit publication in PGR:C&U.

However, from the journal's point of view, these circumstances provide an opportunity to make choices and slowly move into more specific areas of interest. Although it is mild negative mass selection, to use a plant breeding term, and the results will thus be modest, there is some space to navigate. So, where will PGR:C&U go if it is up to the new editor? Well, it is clear that the journal should be about PGR, and more specifically characterization and utilization. Characterization is adding value to the PGR by gaining knowledge about their properties. Utilization is selecting PGR for use in, among others, breeding and scientific research, based on their properties. For me, at this point, the choice in which direction to move is easy.

These are the times of the genomic revolution, and hence the management, use and study of PGR will never be the same again. Our understanding of the relationship between genotype and phenotype is increasing dramatically, and plant breeding will increasingly be based on this knowledge. Breeding is becoming marker-assisted, and marker-assisted breeding asks for

new genes, alleles or genotypes. Genebanks will have to supply these genetic resources to 'stay into business'. Or, if they cannot supply the individual alleles, they will be asked to supply the proper sets of accessions or populations that most probably contain the new alleles and that are suited for the research aimed at identifying them. Furthermore, genebanks and their users will somehow have to deal with the information generated from these research activities. The massive amounts of data that the increasingly accessible sequencing techniques will generate, supplemented by proteomic and metabolomics data, will create equally massive opportunities to explore the PGR and mine them for alleles, genes and genotypes. However, with these opportunities come challenges. Genebanks generally lack the bioinformatics skills to understand, manage and use this information. Fortunately, scientists, projects, initiatives and organizations are working on the development of solutions, namely the creation of tools and methodologies to exploit these new opportunities. PGR:C&U aims to be a platform to report about these new tools and methodologies, and thus make them better accessible to its readership.

Despite this specific area of interest, *PGR:C&U* will obviously continue publishing the interesting and important results of phenotypic or molecular characterization of diversity, and will still be very interested to report about traditional genetic diversity and clever techniques to characterize PGR and identify new diversity. However, the omics-science wave is too exciting not to be ridden!

In the forthcoming period, I hope *PGR:C&U* will continue to evolve from the fundaments laid by Robert Koebner. To achieve this, your manuscripts and willingness to review papers remain indispensable. I hope that *PGR:C&U* may continue to count on your support. If Robert wrote a 'Farewell to PGR', consider this my 'Go for it'.

Theo van Hintum

Editor-in-Chief Wageningen, May 27, 2015.