North-South Collaboration: Flora projects and training

Review of presentations and discussion by the chairperson of this session, Ghillean Tolmie Prance, Royal Botanic Gardens, Kew, Richmond, Surrey, UK.

This session of the symposium showed that North-South synergy has improved greatly since colonial days and is now generally very collaborative rather than just one-way North-South. This, in part, is because over the last forty years many researchers have contributed to education rather than just removing specimens from tropical countries to the North. View from the speakers from both regions showed good examples of collaboration today. Herbarium specimens no longer end up exclusively in herbaria of developed countries and examples were shown of good functional herbaria in Ecuador, Cameroon, Ethiopia, and Brazil and also of collaborative research and the resultant publications. Local taxonomists are now able to carry out much more work on the specimens in local herbaria, but continued effort is needed to repatriate data from the large herbaria of the developed world, especially images and data on type specimens.

Capacity building featured strongly in this session both in the presentations and the discussion that followed. The example of Norway presented by Nordal showed the many ways in which education is being taken to the less developed world by the researchers and government of that dedicated country. There is a place for training both in-country and by sending students overseas. In the subsequent discussion there was a consensus that short-term "sandwich" periods were most useful and that greater effort needs to be made to train students in their own countries. An example of this is the post-graduate courses in Manaus, Brazil, run by the Instituto Nacional de Pesquisas da Amazonia and the Universidade de Amazonas described in Prance (2017). The Consortium of European Taxonomic Facilities (CETAF) was mentioned several times and it was suggested that greater effort should be made in collaboration with countries of the South.

In the discussions the importance of starting education younger persons than students was repeatedly raised. There is a need for greater efforts with school education if there is to be a future generation of taxonomists and conservationists in an increasingly urban world.

The digitization of data has helped the synergy between the North and the South. The usefulness of GBIF, Tropicos, IPNI and other databases was mentioned several times by speakers from the developing world. There are now many data available, but the consensus was that still more needs to be done to make herbarium data readily available to researchers in developing areas. The need to connect with politicians was discussed. The attention of scientists both in the North and the South is necessary for this, and each scientist must take his or her turn in their own country. To achieve conservation goals there needs to be more political action and the consensus at the symposium was that we as scientists have not been effective enough. We need to encourage North-South synergy for con-

servation amongst the politicians at both ends if there is to be a future for the species that we study.

References

Prance, G.T. (2017). Some experiences of North-South synergy from the New World tropics. *Scientia Danica, B (Biologica)* 6: 207–210.