

THE PROCUREMENT OF FORESTRY SEEDS

The Procurement of Forestry Seeds in Tropical and Subtropical Countries – The Example Kenya. H. Wolf & J. Albrecht (eds.). Forstwissenschaftliche Beiträge Tharandt – Contribution to Forest Science **10**, Verlag Eugen Ulmer, Stuttgart, 232 pages., ISBN 3–8001–4713–0; ISSN 1434–8233 (obtainable from Institut für Dendrochronologie, Baumpflege und Gehölzmanagement Tharandt e.V. (Dendro-Institut), Wilsdruffer Str. 18, D–01737 Tharandt, Germany; fax: +49-35203-381272, email: dendro@forst.tu-dresden.de or from the publisher Verlag Eugen Ulmer, Wollgrasweg 41, D-70599 Stuttgart, Germany, fax +49-711-4507120; email: info@ulmer.de), price 27.80 DEM.

In many tropical and subtropical countries the deforestation continues in alarming rate. It has not only consequences for the subsequent procurement of seed for afforestation and reforestation but, in many cases, it results in loss of valuable gene resources and/or their genetic deterioration. In 1985 the German Agency for Technical Cooperation (GTZ GmbH) supported the establishment of the Kenya Forestry Seed Centre and the German support ended as scheduled in the 1993. At present the Seed Centre is at present running under the Kenya Forestry Research Institute.

The proceedings contain in total 16 papers which are divided into 5 chapters altogether:

- The forestry sector of Kenya
- Strategies for the development of the forestry sector under special consideration of forest reproductive material
- The procurement of forestry seeds in Kenya
- Investigation of the forestry seeds and of the genetic variation of tropical tree species: some selected results
- Consideration on future forestry research in Africa.

For the readers of Forest Genetics the five papers published in the fourth chapter are the most important. H. Wolf discusses the results and pitfalls of the seed research in tropical countries. He lists 37 priority species of Gymnosperms and Angiosperms for seed research and points out the urgent research task for extraction, drying, germination including pretreatment and seed storage. Detailed data on germination are given for *Olea europaea* ssp. *africana*, *Terminalia brownii*, *Milicia excelsa*, *Podocarpus falcatus* and *P. latifolius* and *Vitex keniensis*. In the second paper J. M. Were describes the mechanisms of dormancy in cold-stored seed of *Juniperus procera*.

Other three papers are aimed at the population genetics studies of *Vitex keniensis*, *Maesopsis eminii* and *Pinus patula*. All the three papers are aimed at gene diversity and differentiation of seed stands as possible resources for seed procurement and gene conservation strategy. Since the knowledge of the population genetic parameters in tropical and subtropical tree species are not so common, these contributions are significant not only for gene conservation strategy but also for population biology in general. The last paper is aimed at the comparison of the indigenous central American (Mexican) seed sources of *Pinus patula* with those from seed orchards established from the semi-domesticated south African sources.

Although the editors are the authors and co-authors of the ten published papers, there are many contributions presented by the local staff of the above Seed Centre.

In the Epilogue the editors pay the main attention to the danger threatening the forest and gene resources the present socio-economic conditions which are also not favourable for forestry. The forest area is still declining and the afforestation efforts are permanently hampered by damages due to wildlife and rural population. Natural forests are transformed to farmland and the efforts to save the forests and gene resources seem to be unsuccessful.

Having all these aspects in mind the publication came just at the proper time when all the measures for gene conservation gain on importance. The proceedings is also a good example of the technical assistance for the developing countries which resulted not only in the formation of Seed Testing facilities but also in an example of practical results.

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