A benefit sharing agreement for the commercialisation of Chilean plants in the UK

David Rae ¹, Antonio Lara ², Paulina Hechenleitner V.², Philip I Thomas ¹ and Martin F Gardner ¹

¹Royal Botanic garden Edinburgh and ²Universidad Austral de Chile

Abstract

In 2002 the International Conifer Conservation Programme (ICCP) based at the Royal Botanic Garden Edinburgh (RBGE) was awarded a three year grant from the Darwin Initiative for the Survival of Species to collaborate with the Universidad Austral de Chile (UACh) on a project entitled "The integration of ex situ and in situ conservation of threatened Chilean rainforest species". Part of this project was to put in place a Benefit Sharing Agreement for the commercialisation of Chilean plants in the UK. This paper briefly discusses the process of obtaining such an agreement and the potential of securing funding for plant conservation from commercialising novel Chilean plants. This initiative specifically addresses Article One of the CBD - the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources

Introduction

It is estimated that about 800 plant species, hybrids and named cultivars of Chilean origin are cultivated in Britain and Ireland today (Gardner 2002). The first significant introductions were made during the mid 1800s mainly through the British horticultural nursery James Veitch and Sons (Veitch 1906). This famous enterprise specialised in sending plant explorers across the world in order to discover and collect novel horticultural plants that could be commercialised in the UK. Three such collectors, George Downton, William Lobb and Richard Pearce, explored the rainforests of southern Chile and introduced many horticultural-worthy plants. These plants and many more have since made a significant contribution to both commercial and amenity horticulture, with relatively large amounts of money being generated from their sale. Some of these, such as the climber *Berberidopsis corallina* and the conifer *Fitzroya cupressoides*, are now listed by IUCN as threatened in their native habitats (Hechenleitner *et al* 2005). A key objective of a recent Darwin Initiative project working in collaboration with the Universidad Austral de Chile (UACh) has been to develop the protocols for commercialising novel Chilean plants in the UK. It is believed that if those involved in the production of such species and indeed the consumer, are made aware of the plight of many of these plants species, then they would welcome the thought that profits from such a venture could benefit plant conservation in Chile.

The Partners

In Chile negotiations for obtaining an access and benefit sharing agreement were led by the Universidad Austral de Chile (UACh) and held with the Instituto de Investigaciones Agropecuarias (INIA), the Chilean authority responsible for access to genetic resources and for ensuring compliance with the Convention on Biological Diversity. It was clear from an early stage that it would not be possible to obtain any sort of signed agreement with the Chilean government because of the lack of legislation in place to accommodate such an agreement, therefore INIA acted on their behalf. Liss Forest Nursery Ltd. (LFN) in Hampshire was chosen as the UK partner for commercialising the plants. Since 1971 this highly respected nursery has been working actively to source and raise a varied range of trees, shrubs and herbaceous plants to offer to garden centres throughout the UK, and has latterly expanded into global markets. The choice of this nursery was strongly influenced by their success as a relatively small business but with an extensive network of outlets and an established track record of commercialising new horticultural plants. Furthermore, the owner, Peter

Catt, has a personal interest in Chilean plants and their conservation and has travelled to Chile to study the Chilean flora. The leading negotiators from UACh also had the opportunity to visit LFN in order to discuss elements of the agreement.

This process of obtaining the agreement took a considerable amount of time as many issues relating to the control and responsibility for genetic resources in Chile along with the management and the nature of the benefits required considerable discussion. After three years and at least six drafts of the documents, two agreements of the Benefit and Access Agreement were finally signed. The first agreement is an Access to Plant Genetic Resources Contract between the RBGE, UCAh and LFN. This details 19 clauses and seven annexes which cover the collection, transfer and use of the genetic material plus the monetary share resulting from any sale of the plant material. It also details the legal provisions of the contract. The second document is a Plant Genetic Resources Access Agreement between the RBGE and UACh and includes 23 clauses and legal provisions which regulate the actual collection and transfer of the selected Chilean native plant species. It is not an agreement for the commercialisation of the plants. Both agreements, which were approved by INIA are the first of their kind between Chile and the UK.

Plants with commercial potential

A total of 28 Chilean plant species and forms new to cultivation have been chosen as having commercial potential. These include mainly shrubs but some herbaceous plant species have also been chosen. Additional species can be added to this list but only with prior consent from all the parties. For obvious commercial reasons it would not be appropriate to identify any of these species here and indeed there are specific clauses within the agreement preventing any of the parties from disclosing this type of information. Some of the species selected are currently threatened in the wild and because of this there are specific clauses within the agreement that prohibit over collection. For example, it was agreed that seed would be collected from populations that contain a minimum of 15 mature individuals and that not more than 20% of the total seed available in each population would be collected.

Plant Breeders Rights (PBRs)

After lengthy discussions all parties agreed that Plant Breeders Rights (PBRs) would not be used as the administration costs would be too expensive in relation to the amount of money the selected plants were likely to raise. The main strategy would be to build up stocks and then flood the market at premium prices before other nurseryman had the opportunity to market the plants themselves. Furthermore, the Chilean authorities were not happy for PBRs to be used unless the plants offered for sale were significantly different from the wild plants, for example the result of hybridisation or selections made in cultivation. It was agreed that UACh would own 100% of the Trademarks and any other intellectual property derived from the material provided by UACh to LFN through RBGE, including the individual plants, their progeny, gene sequences, as well as hybrids, cultivars, varieties, or any other derivatives or products. This restriction does not include copyright over research outputs from the material collected under this agreement. In this case, RBGE and other co-authors will own the copyright.

Management of income generated

The agreed ratio for the allocation of net profits from the sale in the UK of specified plants is 60% to LFN, 32% for UACh and 8% to RBGE. Any income generated from the sale of Chilean plants in the UK will be managed by and administered through UACh in a fund to be specifically used for activities that will benefit the conservation of Chilean plants. A committee comprising of representatives from UACh, INIA, Comisión Nacional del Medio Ambiente (CONAMA) and RBGE will be responsible for assigning the funds through a competitive process. A call will be given for projects that support either students training in plant conservation or conservation initiatives by private land owners.

Protocols

Protocols have been designed to cover issues of prior informed consent, the collecting of material from private land owners and access to monies eventually returned to Chile as part of this agreement. Protocols for the recording and monitoring of material transferred from Chile to the UK have also been developed and have been tested by a Chilean student through a separately funded Darwin Initiative Scholarship programme. See Flow Charts 1 and 2 which explain these protocols.

Conclusion

The long and complicated process of securing the agreement has been valuable for several reasons, for instance, the situation regarding benefit sharing and access to genetic resources within Chile is much clearer and the Chilean organisations have been able to build on and implement ideas generated from this and other related CBD issues. RBGE has also clarified its policies regarding CBD compliance and strengthened its accessioning and curatorial policies within its Living Collections. Even if this initiative proves not to generate significant income then at least the procedures developed benefit other similar initiatives. Indeed, several nurseries, botanic and private gardens and arboreta have approached the UK project team for advice on how to go about setting up similar agreements in other countries

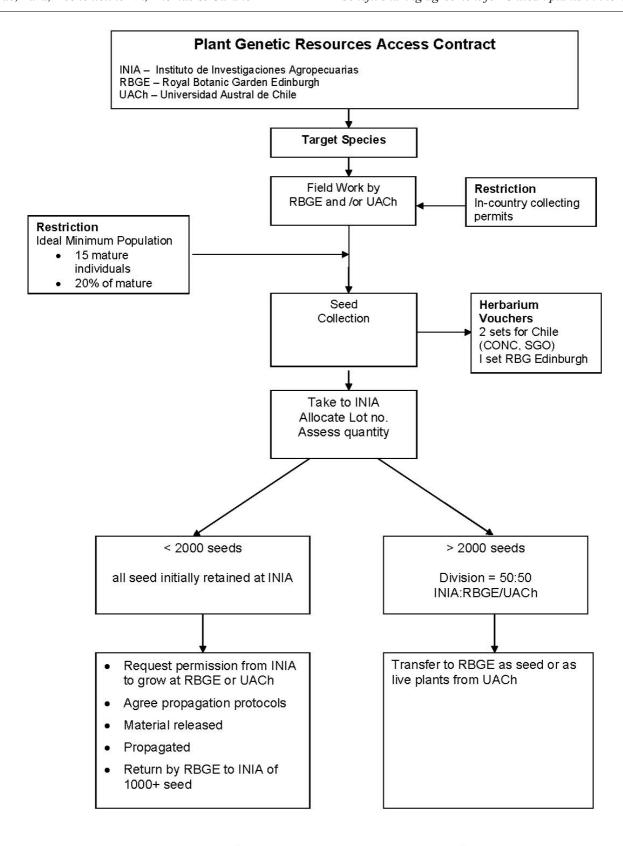
One of the problems experienced during the process was the management of people's expectations regarding the income that could be generated. Considering the overall number of species in cultivation, very few are of high commercial potential and it is unlikely that any of the targeted species will generate tens of thousands of pounds. However, there are some plants that do have the potential to generate a significant profit, at least when they are first released. The actual amount generated is very difficult to predict. It is important that whatever money is generated is put into projects that, even though they are relatively small, focused funding can make a real difference for conservation. Not only is this important for conservation but it is vital in highlighting conservation issues to the horticultural industry and consumers and to send them a clear message that they can make a genuine and lasting contribution to conservation.

References

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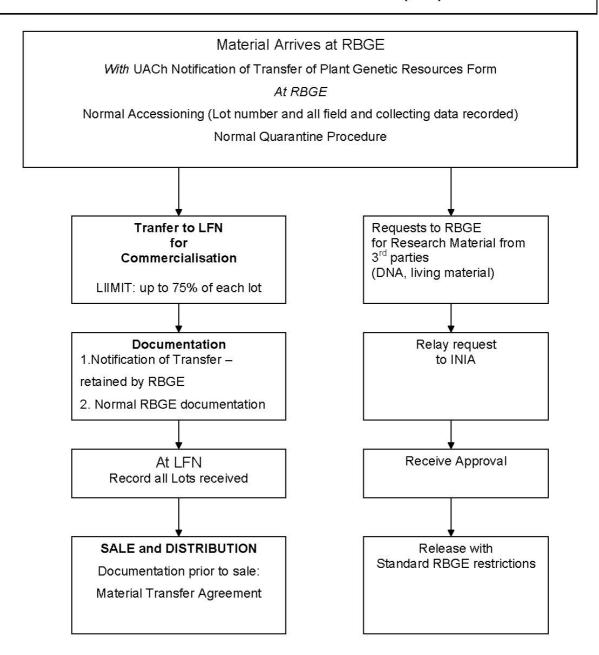
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Flow Chart 1

Monitoring the movement of Chilean material within the UK as part of RBGE-UACh-Liss Forest Nurseries (LFN)



FLOW CHART 2