

## Workshop report: The Nagoya Protocol on Access to Genetic Resources under the Convention on Biological Diversity

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The Convention on Biological Diversity (CBD)'s access and benefit sharing (ABS) protocol was agreed at the tenth Conference of Parties to the CBD at Nagoya, Japan, in October 2010, and is now known as the Nagoya Protocol (UN 2010). The Nagoya Protocol is an agreement between the countries of the CBD as to how access and benefit sharing of genetic resources (including all biological control agents or BCAs) will be handled in future. Put at its simplest, the protocol provides a framework for the country receiving the genetic resources being required to pay forms of 'royalties' to the exporting country, for example, as a proportion of the financial benefits gained. However, Article 8 'Special Considerations' of the Nagoya Protocol also states:

In the development and implementation of its access and benefit-sharing legislation or regulatory requirements, each Party shall:

(a) Create conditions to promote and encourage research which contributes to the conservation and sustainable use of biological diversity, particularly in developing countries, including through simplified measures on access for non-commercial research purposes, taking into account the need to address a change of intent for such research;

(b) Pay due regard to cases of present or imminent emergencies that threaten or damage human, animal or plant health, as determined nationally or internationally. Parties may take into consideration the need for expeditious access to genetic resources and expeditious fair and equitable sharing of benefits arising out of the use of such genetic resources, including access to affordable treatments by those in need, especially in developing countries;

(c) Consider the importance of genetic

resources for food and agriculture and their special role for food security.

Based on the protocol, each country will prepare its own legislation and regulations. If it is accepted that biological control is non-commercial research, simplified measures for access and benefit sharing should facilitate biological control research. Furthermore, the use of biological control to address emergencies and the needs of food and agriculture should also be facilitated.

However, in practice, a lot will depend on the actual national legislation and regulations put in place by each country, and there is still a risk that biological control is not considered in this process. Some countries may see this as an opportunity to receive substantial payments for biological control agents, while others may inadvertently make it unnecessarily difficult or impossible to access biological control agents. The biological control community in each country has been encouraged to make its inputs into the national legislation and regulation process to encourage the facilitation of biological control along with other non-commercial research activities, e.g., relating to taxonomy, ecology and conservation (Cock *et al.*, 2010; van Lenteren *et al.*, 2011).

Nevertheless, we have already heard of delays of up to four years trying to get permits issued for export of BCAs, while the whole biological control process seems to be indefinitely blocked in some South American countries. What can we do about this and how can we manage this issue?

This workshop was attended by only a few people, mostly from New Zealand and Australia although there were attendees from Chile, Argentina, Hawaii and North America. Questions and comments were made during the workshop about: why is there

a problem, how can we avoid any problems in the future, who has a problem now, what is the reasoning behind ABS? It was stated by more than one attendee that so far no country had refused to issue a permit to collect or export indigenous species. The process for applying and receiving these permits had taken years, in some cases, but a permit had still eventually been issued by the exporting country. Currently agreements and permits with South American countries to collect and export genetic resources as potential biological control agents have been particularly difficult to obtain.

Australia is calling for national comment on the protocol (presumably they have not yet ratified it). It apparently comes into force after 50 countries ratify it and this is expected in 2012. Possibly other countries are also calling for comment and this may be one forum to get any concerns raised. See <http://www.environment.gov.au/biodiversity/science/access/biological-diversity.html>

The NZ government is not planning to ratify at the moment until some issues are clarified. See <http://www.mfat.govt.nz/Foreign-Relations/1-Global-Issues/Environment/7-Species-Conservation/genetics.php>

The Nagoya protocol has the potential to make the present situation worse when it comes into force. The access and benefit sharing scheme will pose major problems for us all if it does not take into consideration the non-commercial beneficial role of biological control in environmental and agricultural systems. It was agreed at the workshop to seek further information from our own countries about the protocol. Secondly we agreed to send out a survey to conference delegates seeking information from them. This was aimed to give us an idea of how many of us know about the protocols and how many of us are affected by them.

Thus, a link to a 12 question anonymous survey was sent out via SurveyMonkey.com to all 204 delegates of the conference and 56 responses were received from people representing 12 countries. Of those who responded almost 60% were unaware of the Nagoya Protocol. Of the remainder, when asked what they thought the impact would be on biocontrol, all believed it to be negative through delay or regulatory controls whilst a quarter mentioned the financial compensation aspect.

When asked if they were worried about the

possible impacts, 47% of respondents were worried and 49% didn't know, but 45% had experienced delays or refusals to make biocontrol agents available on ABS grounds, most often citing trouble with securing survey/collection permits. Seventeen countries were listed as having been difficult to gain access and exporting from, with Argentina dominating (Table 1).

Around a quarter of respondents said that ABS issues had prevented them from starting or continuing biocontrol projects and 32% said that ABS issues would influence their choice of biocontrol project and/or survey country in the future. A further 62% responded that ABS issues may influence their choice.

Regarding the respondents' understanding of their host country's regulations for import and export of BCAs the results to the three questions are summarised below in Table 2. It is interesting to note that with all questions some representatives from the same country contradicted their colleagues so there is a lack of understanding even amongst experts.

When asked about financial recompense 38% said that they thought their countries would pay a share of the anticipated benefits in order to have access to a BCA but when asked whether their country would support shared scientific activities with a BCA source country, this figure rose to 92%.

There were plenty of suggestions about how to overcome any ABS issues, by far the most common was the importance of engaging local co-operators who operate at the appropriate level. Other suggestions included:

- Ensure free flowing communication
- Attempt to get higher level support for negotiations
- Make it worthwhile for the country involved
- Make it clear there are no profits to be made
- Reciprocal cooperation should be encouraged
- Establish treaties to facilitate mutual sharing
- Always go by the book

In conclusion, there are still many involved in weed biological control who are not aware of the

issues, but most anticipate that the export of BCAs will get more difficult. The experiences generated at the workshop were often of long term and sustained frustration at what were seen as unclear, ever changing but unavoidable obstacles. However, in some cases it seemed that the fault lay with the bureaucracy rather than the regulations or interpretation of the CBD. It would also seem that countries may be more willing to provide payments in kind through supporting collaborators' research, training and equipment purchase than any pro-rata payment based on savings through biocontrol successes.

It is clear that biocontrol researchers have a challenge ahead as countries get to grips with the Nagoya protocol and its eventual application to classical biocontrol agents. It can only be hoped that common sense prevails and their use against environmental weeds, for which no direct profit is generated, is not hindered by the application of an instrument that was clearly not designed to prevent such mutually beneficial sharing of biodiversity.

## References

- Cock, M.J.W., van Lenteren, J.C., Brodeur, J., Barratt, B.I.P., Bigler, F., Bolckmans, K., Cónsoli, F.L., Haas, F., Mason, P.G. & Parra, J.R.P. (2010) Do new access and benefit sharing procedures under the Convention on Biological Diversity threaten the future of biological control? *BioControl* **55**, 199–218.
- United Nations (2010) Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity. <http://treaties.un.org/doc/source/signature/2010/Ch-XXVII-8-b.pdf>
- van Lenteren, J.C., Cock, M.J.W., Brodeur, J., Barratt, B.I.P., Bigler, F., Bolckmans, K., Haas, F., Mason, P.G. & Parra, J.R.P. (2011) Will the Convention on Biological Diversity put an end to biological control? *Revista Brasileira de Entomologia* **55**, 1–5.

Table 1. Countries survey respondees listed as difficult to access, or to export from

Country	Number of times cited
Argentina	16
India	5
Brazil	9
Spain, Nepal	2
Canada, Madagascar, Cuba, Ecuador, Kenya, China (concern), Mexico, Thailand, Morocco, Algeria, Libya	1

Table 2. Summary of responses - host country's regulations for import and export of BCAs.

Is there any legislation or guidelines in your country regarding:				
	Yes	No	Don't know	Response Count
The importation and release of BCAs (excluding phytosanitary rules)?	92.0% (all 12 countries)	0.0% (0)	8.0% (4 countries)	50
The export of BCAs from your country?	36.0% (4 countries)	30.0% (7 countries)	34.0% (6 countries)	50
Imported BCAs meeting ABS requirements of the source country?	26.0% (7 countries)	8.0% (3 countries)	66.0% (9 countries)	50