



Biosprospecting Review
Ministry of Economic Development
PO Box 1473
Wellington.

NIWA Submission on “Biosprospecting: Harnessing the Benefits for New Zealand”.

NIWA has been involved in marine biosprospecting for many years. It has strived to optimise the value of New Zealand’s biodiversity for the benefit of New Zealand through the identification of unique properties associated with various marine organisms ranging from invertebrates to fish.

NIWA is supportive of the introduction of a biosprospecting regulatory framework that encourages biosprospecting activities in a manner that optimises the value of our biodiversity through benefit sharing while being cognoscente of engaging with Maori.

New Zealand has a rich biodiversity and there is an opportunity to utilise this as a source of valuable materials for a wide range of applications. The MoRST roadmap for biotechnology research states that biotechnology is crucial for the transformation of New Zealand’s biological economic base through, among others, producing value-added products, and, to fuel the new biotechnology-based industries and enterprises.

Biosprospecting has a role to play in attaining these goals and failure to do so is a missed opportunity not only for New Zealand, but potentially for the rest of the world of which we are part.

We believe the absence of a regulatory framework is acting as a disincentive to some organisations wishing to undertake biosprospecting. Uncertainties include: which organisation to approach for a permit to collect (currently a number of different

organisations can supply permits); how, if required, to initiate consultation with Maori; legal ownership of intellectual property; New Zealand's stance on benefit sharing.

More than this, lack of regulation is resulting in a loss of control of material leaving the country with no benefit share to New Zealand.

NIWA's submission:

We submit the following:

1. That bioprospecting is defined as follows: "Bioprospecting is the access to and the collection of biological material and the analysis of its material properties, or its molecular, biochemical or genetic content."

Comment

The last part of the current definition which states "for the purpose of developing a commercial product" should be removed because some bioprospecting is undertaken for the sake of knowledge, and commercial imperative or targets are not the driver. More over, commercialisation strategies are beyond the government's responsibility.

2. That a code of conduct is established to provide guidance on expected behavior regarding the environment, engaging with Maori and benefit sharing.

Comment:

A code of conduct would provide timely, flexible guidance to bioprospectors especially as WAI262 decisions or other formal regulations may be some way off.

3. That a regulatory framework be developed that encourages bioprospecting through creating certainty.

Comment:

Regulations need to be easily accessed, simple and with practical compliance requirements.

4. That a single government department should be responsible for bioprospecting activities.

Comment

Activities should include: permitting, keeping a data base of who is conducting the bioprospecting, how many species collected under a specific permit, the location of the collection and any outcomes (e.g., papers published, patents filed).

Currently there are too many different organisations involved in granting permission for bioprospecting, e.g., Min of Conservation; Min of Foreign Affairs and Trade; CEO Min Fisheries. This leads to an overly complex permitting system and means that the New Zealand has a lesser chance of monitoring bioprospecting activity.

Formulating a single high-level policy for collections on all land whether government administered, privately owned land etc together with a single agency being responsible for all permits would help achieve retaining benefit to New Zealand.

5. That a data base of traditional knowledge claims should be created and maintained.

Comment:

New Zealand needs a register that identifies knowledge holders and determines the scope of the traditional knowledge. This would serve several purposes. It would allow researchers to engage in a dialogue with the knowledge holders or alternatively avoid areas where there is potential overlap.

6. That a policy on the export of biological materials, currently not covered by legislation, be developed.

Comment:

The removal of biological resources from New Zealand needs to be controlled by permitting through a single agency and be linked to the collecting permit and the data base. This will help control both intentional and unintentional removal.

7. That the regulatory framework should only apply to indigenous flora and fauna and that it should include both ex situ and in situ collections

General comments to consider:

Who conducts bioprospecting? Much bioprospecting both in New Zealand and overseas doesn't involve the research community but is conducted by private companies. Examples of New Zealand companies who bioprospect are: Living Nature, Phytomed Medicinal Herbs, etc. The policy needs to be able to encompass all potential bioprospectors.

International frameworks: Bonn Guidelines from the Convention of Biological Diversity (Article 8) are not able to be universally applied as much of the knowledge gained from bioprospecting in the marine environment for example is not based on traditional knowledge.

Global correctness is OK if it works both ways otherwise New Zealand biodiversity will be exploited by overseas concerns while other countries protect their biodiversity for their exclusive use.

If you have any further queries, please don't hesitate to contact me.

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