

ROLE OF NATIONAL BIOSAFETY COMMITTEES

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ABSTRACT

National Biosafety Committees are responsible to the national government and the population within a country to ensure safe research, development and application of biotechnology. Advice is often drawn from advisory committees and interest groups consisting of a range of experts. The cross border movement of genetically modified organisms for research and commerce makes it important that National Biosafety Committees also have a responsibility to work for internationally agreed standards of biosafety.

Key Words: Advisory committee, biotechnology, genetically modified plants

RÉSUMÉ

Les comités nationaux de biosécurité sont responsables vis à vis du gouvernement et de la population d'un pays, pour assurer que la recherche, le développement et l'application biotechnologiques sont menés sans risques à la santé humaine et à l'environnement. De plus, ils pourvoient un conseil objectif aux groupes intéressés comprenant une game d'experts. Le mouvement, à travers les frontières, des plantes transgéniques pour la recherche et le commerce exige que les comités nationaux de biosécurité puissent aussi opérer selon les règles internationales de biosécurité.

Mots Clés: Comité consultatif, biotechnologie, plantes génétiquement modifiées

INTRODUCTION

The role of a national biosafety committee is to act on behalf of government and the population of a country, to ensure that biotechnology research, development and application are carried out carefully and responsibly, and without unacceptable risks or impacts on human health and the environment (Alvarez-Morales, 1995; Wafula, 1995). Biosafety committees are usually part of, or associated with, government departments (e.g. Departments of the

Environment) and are responsible to government ministers. There is usually some way of obtaining the views of experts in different disciplines and of gathering views from interest groups. It is important that decision-making procedures are as transparent as possible. Secrecy often breeds suspicion.

THE SECRETARIAT

The core of national biosafety committees is the secretariat, which acts as an intermediary between

government, advisory groups, interest groups and proposers wanting to develop and release transgenic organisms. The secretariat can seek advice in different ways. In some cases, proposals to release transgenic organisms or questions on policy are sent out to different groups within the country (e.g. farmer groups, ecologists, general and specialist consumer organisations, academic scientists, religious organisations, medical experts). These groups are asked to comment on a proposal, and on the basis of these comments and other appropriate evidence, the secretariat makes a recommendation to government on the action to be taken.

ADVISORY COMMITTEES

An alternative method of aiding decision making is to have an advisory committee consisting of independent experts who are brought together to discuss proposals and issues, and to make recommendations to government for action to be taken. In the United Kingdom it was decided to use an advisory committee called the Advisory Committee on Release to the Environment (ACRE).

The UK advisory committee consists of 12 independent experts selected to cover a range of disciplines including molecular genetics, population genetics, breeding, agriculture, ecology, industry and human health. There are also observers from several government departments. The full proposals to release transgenic organisms are seen by all ACRE members, and each member is given the opportunity to comment. For releases that have novel features, the proposal is debated thoroughly and a decision is arrived at. It is important to emphasise that each member of ACRE is an independent specialist and is free to express opinion based on his/her expertise and experience. If any member has a professional interest in a proposal, they are excluded from the discussion and from formulating the recommendation. Once a decision is arrived at, a recommendation goes to the Secretary of State who authorises the action to

be taken on behalf of government. There is no requirement on ACRE to reach a unanimous view; a majority and minority view can be communicated to the Secretary of State.

WIDER ROLE

It is important that the national biosafety committee is not simply a "handle turning bureaucracy", but that it is a dynamic and proactive force to learn by the "case by case" consideration of proposals. The national biosafety committees within the European Union meet frequently for this purpose, to learn from experience and to streamline, simplify and speed up procedures. There are also active moves to define crops and genes that are considered to be low risk and can be given a fast-track through the regulatory process. Another vitally important role of national biosafety committees is to harmonise release criteria and procedures between countries and continents. For this purpose, there are regular international discussions between national biosafety committees (organised by OECD, EU, etc). There are also other international organisations which provide information to help the safety assessment process (e.g. Biosafety Information Network and Advisory Service, BINAS). As transgenic organisms become commercialised and are moved around the world as live organisms (e.g. seeds, fruits, microorganisms) or as unprocessed or processed foods, it is vitally important that there are common international standards, along with openness and respect for the procedures used in different countries.

USE AS FOOD

Once the products of transgenic organisms are developed and are ready for use as food, there are other committees responsible for approval. In the UK, the Advisory Committee on Novel Foods and Processes (ACNFP), like ACRE, advises Government through a secretariat based in the Ministry of Agriculture, Fisheries and Food. This committee consists of representatives with

different expertise and from interest groups, including consumer organisations. Recently the ACNFP has considered a range of issues, including the presence of antibiotic resistance genes in transgenic plants used for food, and ethical issues raised by the incorporation into plants of animal and human genes.

CONCLUSION

The national biosafety committees carry considerable responsibilities in facilitating the careful development and application of genetically modified organisms. There is a responsibility to strive to make decisions that command the respect of the scientific community, consumers and interest groups alike. There is also the responsibility to harmonise procedures across the world so that similar standards and criteria apply. Transgenic organisms offer important and

significant opportunities for agriculture in the future (House, 1995). The national biosafety committees have a vitally important contribution to make in achieving those objectives safely and responsibly.

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