4.35 Thailand

4.35.1 Thailand Biosafety Guidelines (1992)

The Guidelines embraces all work related to gene manipulation employing r-DNA technology for all purposes including the development of transgenic plants, animals and microorganisms, production of vaccines, commercial and industrial manufacturing of r-DNA derived products, and releases of transgenic materials and products into the environment.

The Guidelines consists of two parts; the first one concerns transgenic work in laboratories and the second on field testing. Both parts have common Guidelines as follows:

(a) The classification of work relating to GMOs according to level of risk and safety. There are three categories: work bearing no risk, work bearing low risk, and work with high risk. On the basis of the risk, risk management and controls are made in three levels.

(b) Three groups of personnel and organizations have been identified for institutional arrangement in monitoring and control of risk. The Guidelines also gives details on roles and responsibilities of these persons and committees.

4.35.2 Biosafety Guidelines in Genetic Engineering and Biotechnology for Field Work and Planned Release (1992)

The Guidelines covers all research work involved in the field test/trial of GM plants and microorganisms.

As a standard practice, GM organisms from laboratory work must be field tested before planned commercial application or planned release into the environment. Such GM field work is meant to address the following, underlying objectives:

(a) To confirm the observations made during laboratory work, and the results from tests conducted at the laboratory level

(b) To gather accurate information/data on the stability, transmission/heredity and expression of transgenes under field conditions

(c) To assess the viability (e.g. survival, propagation, competitive ability) of genetically manipulated organisms under field conditions.

(d) To assess the adaptive or evolutionary potential of genetically manipulated organisms under changing environmental conditions

4.35.3 Biosafety Guidelines in Genetic Engineering and Biotechnology for Laboratory Work (1992)

The Guidelines is applicable for all research work- whether conducted in laboratories of the government, of state enterprises, of independent research institutes or of private companies involved in the construction and/or propagation of viroids, viruses, cells or organisms, carrying novel genetic material which are either improbable to arise naturally or are potentially detrimental towards public safety and environmental health.

The Guidelines define regulated work and refers to all GM materials (DNA and RNA preparations, viroids, viruses, cells and organisms, modified or constructed through genetic engineering), derivatives thereof and the wastes or by-products of genetic engineering practices (containing viable organisms or otherwise).

Classification of laboratory genetic engineering and biotechnological work has been done in accordance with levels of risk and safety:

Category 1: Exempted Work (requiring minimal direction from the IBC or NBC)

Category 2: Work bearing low levels of risk towards laboratory personnel, the community or the environment.

Category 3: Work bearing an appreciable level of risk towards laboratory personnel, the community or the environment; gene therapy work; and work for which the risks have yet to be clearly identified and assessed.

4.35.4 Plant Quarantine Act (1964) (amended in 1994)

In 1994 the Department of Agriculture, Ministry of Agriculture and Cooperatives, made a "Ministerial Declaration" under the "Plant Quarantine Act" prohibiting import and transit of all transgenic plants, unless permission is granted by the Director General of Department of Agriculture and only for experimental purpose.

4.35.5 Food Act 1965 (Amendment 2002)

Ministerial order (2002) requires labeling of GMO products

4.35.6 Cabinet Order 31 August 2002

The Order halts field trial and commercial adoption of GM crops till biosafety legislation is put in place.

4.35.7 National Biosafety Framework (2006)

Thailand is in the process of drafting its National Biosafety Framework to monitor and enforce laws on biosafety management. The legislation seeks to establish the necessary framework for ensuring the safety of agricultural GM products in Thailand, and is being developed in relationship to their commitments as a party to The Protocol. The Framework covers eight concepts:

(a) Sustainable use and conservation of biotechnology

(b) Risk assessment and management

(c) Risk classification

(d) Risk communication

(e) Cautionary preparedness

(f) Freedom of choice

(g) Domestic capacity building

(h) Encouraging education and public comment

Source:

1. *Biosafety Guidelines in Genetic Engineering and Biotechnology for Field Work and Planned Release (1992). (Available on http://www.opbw.org/nat_imp/leg_reg/Thailand/biosafety.pdf ; accessed on February 12, 2008)*
2. *USDA Foreign Agricultural Service, GAIN Report Number TH7090: Thailand Biotechnology Agricultural Biotechnology Report 2007. (Available on http://www.fas.usda.gov/gainfiles/200707/146291754.pdf ; accessed on 12 February 2008)*
3. *Thailand Country Report on Biosafety – Risk Assessment and Management by Nipon Iamsupasit, Thailand Biodiversity Center, 73/1, 4th Floor, National Science and Technology Development Agency Building, Rama VI Road, Rajdhevee, Bangkok 10400, Thailand. (Available on http://roksait-cbik.ait.ac.th/data/Thailand_biosafety_and_risk_assessment%5B1%5D.pdf ; accessed on 26 August 2007)*
4. *(http://bch-thai.onep.go.th/law_e.html; accessed on 7 October 2007)*