

## Part 2: Description of the Dealings and GMO(s)

Briefly describe the purpose of the Dealing (in no more than a few sentences) and proposed methods to be undertaken in the dealing (as dot points).

### Purpose of the Dealing:

We seek approval to conduct all types of dealings with the GMO's described here and in the following Table of this application. That is, we wish to create, culture, propagate, grow, import, transport, store, possess, conduct experiments with and dispose of the described GMOs.

### Proposed methods:

*Exempt dealings relevant to this application:* IBC/88E/SMMS/2008

### *Description of NLRD dealings:*

- Importing T-DNA insertion mutant lines of *Arabidopsis thaliana*
- Doing crosses with T-DNA insertion lines with other genotypes of *Arabidopsis thaliana*
- Cloning genes, promoters or other regulatory forms of sequences from *Arabidopsis*, manipulating them in vitro and testing their function in *Arabidopsis* natural populations and in various GM *Arabidopsis*.
- Transformation of *Arabidopsis* with genetically modified DNA sequences.
- Transformation of other plant species including tobacco, tomato, sugarcane, potato, wheat, barley, soybean, Lotus, Medicago with genetically modified DNA sequences.
- This project will include storage of GMOs and GMO products.

**Table 2.1:** is intended to generate a concise, accurate record of all the GMOs to be generated or used and the purpose of the proposed dealings. Attachment 1 provides example reference responses to the description of the GMOs. Attachment 2 provides information relating to the completion of the column headed 'NLRD Type'.

2A	2B	2C	2D	2E	2F	2G
COMMON NAME OF PARENT ORGANISM	SCIENTIFIC NAME OF PARENT ORGANISM	VECTOR(S) & METHOD OF TRANSFER	EXEMPT HOST/ VECTOR SYSTEM ?	IDENTITY & FUNCTION OF NUCLEIC ACID & ORGANISM OF ORIGIN	ORGANISMS OR TISSUES TO BE USED WITH THE GMO(S)	NLRD TYPE
Thale cress, tobacco, tomato, wild relatives of tomato, sugarcane, potato, wheat, barley, ryegrass, grasses, soybean, Lotus, Medicago	<i>Arabidopsis thaliana</i> , <i>Nicotiana tobaccum</i> , <i>N. benthamiana</i> , <i>Lycopersicon</i> <i>esculentum</i> , other <i>Lycopersicon</i> sp., hybrids of <i>Saccharum officinarum</i> and <i>S. spontaneum</i> , <i>Solanum tuberosum</i> , <i>Triticum</i> sp., <i>Hordeum</i> sp., <i>Lolium</i> sp., <i>Triticeae</i> sp., <i>Glycine max</i> , <i>G. soja</i> , <i>Lotus japonicus</i> , <i>Medicago truncatula</i>	Non-tumorigenic disarmed <i>Agrobacterium tumefaciens</i> and <i>A. rhizogenes</i> strains carrying non-tumorigenic disarmed <i>Ti plasmids</i> or <i>Ri plasmids</i> , and particle bombardment (biolistics)	No	Coding and non-coding genes involved in gene silencing, development and disease resistance from <i>Arabidopsis</i> , and from other plant and animal species. Also herbicide and antibiotic resistance genes from various organisms, synthesized reporter genes or reporter genes cloned from various organisms, viral suppressors of gene silencing and plant virus resistance genes. Mammalian non-coding DNA for regulating mRNA stability and/or translation efficiency. No genes encoding known toxins will be used.	Micro-organisms involved in symbioses (e.g. <i>Rhizobium</i> involved in legume nodulation) and pathogenic interactions with transgenic plants	PC2(b)