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**INSTITUTIONAL BIOSAFETY COMMITTEE (IBC)**

**PUSAT PENGURUSAN PENYELIDIKAN**

**UNIVERSITI PUTRA MALAYSIA**

**Reference no:**

**FORM IBC(E1) : NOTIFICATION OF EXEMPTED LIVING MODIFIED ORGANISME CONTAINED USE ACTIVITIES**

**Please fill the information required as below**

1. **General Information**

|  |  |  |
| --- | --- | --- |
| **No.** | **ITEM** |  |
| 1. | Name of applicant (principle investigator) |  |
| 2. | Address of Faculty/institute |  |
| 3. | i. Telephone no (office)ii. Telephone no (mobile)iii. Email |  |
| 4. | Project title |  |
| 5.  | Vote no. (if applicable) |  |

1. **Project Information**

|  |  |  |
| --- | --- | --- |
| **No.** | **ITEM** |  |
| 1. | Objective of the project |  |
| 2. | Description of the project (please attached research proposal) |  |
| 3. | Estimation duration of the project (please prove Gantt chart) |  |
| 4. | List of personnel authorized to undertake activities with the GMO (research staff, students, technician)\**please use template in Table 1* |  |

**Table 1: List of personnel involved in the research**

|  |  |  |
| --- | --- | --- |
| **Name** | **Address/telephone no/email** | **Qualifications/Experience** |
|  |  |  |
|  |  |  |
|  |  |  |

1. **Description of the LMO for the LMO for contained use activities**
2. **Description of the LMO for contained use activities:**

Parent organism: is the FINAL recipient of the intended genetic modification

Donor organism : is the source of the genetic sequences used for modification

Vector: include all vectors/method(s) used

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **LMO** | **Common And Scientific Name(s) of parent organism(recipient)** | **Common and scientific name(s) of donor organism** | **Vector(s) and method of genetic modification** | **Class of modified trait: (refer to Box 1)** | **Modified trait** |  **Number of genes involved (Please provide the gene construct(s))** | **Identity and function of the gene(s) involved**  |
| e.g | Bacteria | *E. coli* B | Bacteriophage:-F1, M13, Agrobacterium mediated system |  15. Pest resistance | Resistance to silk worm | *1 gene**(Please see gene construct in Appendix 1)* | *cry*1Ac gene, expresses Bt protein |
| 1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**Box 1 : Various Classes or Types of Traits**

|  |  |
| --- | --- |
| **NO** | **Class (type) of trait** |
| 1 | Abiotic stress resistance |
| 2 | Altered agronomic characteristics |
| 3 | Altered nutritional characteristics |
| 4 | Altered pharmaceutical characteristics |
| 5 | Altered physical product characteristics |
| 6 | Antibiotic resistance |
| 7 | Attenuation |
| 8 | Bacterial resistance |
| 9 | Disease resistance  |
| 10 | Flower colour |
| 11 | Foreign antigen expression |
| 12 | Fungal resistance |
| 13 | Herbicide tolerance |
| 14 | Immuno-modulatory protein expression |
| 15 | Pest resistance *e.g.* insect resistance |
| 16 | Protein expression |
| 17 | Reporter/marker gene expression |
| 18 | Virus resistance  |
| 19 | Others (please specify) |

1. **Describe how your research exempted from the notification (Biosafety (Approval and Notification) and Regulations 2010 First Schedule (Regulation 2).Please provide supporting evidence.**
2. **Laboratory information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** |  | **Premise 1** | **Premise 2\*** | **Premise 3\*** |
|  | Name of laboratory |  |  |  |
|  | Address of laboratory |  |  |  |
|  | Biosafety level (1, 2, 3 or 4)-*please refer microorganism risk group in Biosafety Guidelines and risk assessment* |  |  |  |
|  | i. Name of laboratory person in chargeii. Telephone no(office/hp)iii. Email address |  |  |  |

**Applicant/Principal Investigator:**

**………………………………………………..**

**Name:**

**Date:**

**Endorsed by:**

………………………………………………..

IBC Chairperson

Universiti Putra Malaysia