

**MINISTRY OF AGRICULTURE AND WORKS  
(FOOD AND AGRICULTURE DIVISION)**

S.R.O. 129(K)/67—In exercise of the powers conferred by sub-section (1) of Section 3, Section 4A and 4D of the Destructive Insect and Pests Act, 1914 (II of 1914) and in supersession of all other rules, orders and notifications in these behalf, the Central Government is pleased to make the following rules, namely:-

1. (1) These rules may be called the Destructive Insects and Pests Rules, 1966 (Plant Quarantine).
- (2) They shall come into force at once.
2. Definition-<sup>1</sup> [ "(1) In these rules" ] unless there is anything repugnant in the subject or context-
  - (a) "Act" means the Destructive Insects and Pests Act, 1914 (II of 1914);
  - (b) "American Cotton" means all cotton produced in any part of the western hemisphere (North, South and Central America and adjoining islands);
  - (c) "Bale" means any pressed package of cotton<sup>2</sup> [ "or cotton fabric, jute or jute products" ] of whatever size or density.

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Subs. *ibid.*, for " In these rules" by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

1. Inserted .

- <sup>1</sup> ["(cc) "Carrier" means any ship or container, boat, train, aircraft or road transport carrying plant and plant products".]
- (d) "Cotton" includes ginned cotton and droppings, strippings, fly and other waste products of a cotton mill other than yarn waste, but does not include cotton seed or unginned cotton;
- <sup>2</sup> ["(e) " Department" means the Plant Protection Wing of the Department of Agricultural Extension under the Ministry of Agriculture;]
- <sup>3</sup> ["(ee) " Deputy Director (Quarantine)" means the Deputy Director in charge of the Plant Quarantine Section of the Department"]
- (f) " Director" means the Director of the Department ;
- (g) " Disease" means any pathological or abnormal condition of a plant caused by insects, mites, nematodes, protozoa, fungi, <sup>4</sup> [ " bacteria, virus, viroids, mollusca and mycoplasma"] recognizable by the presence of symptoms or of the organism inciting it;
- (h) " Disinfestation or disinfection" means any scientific treatment applied for the purpose of destroying or reducing any infection or infestation that may occur on, in or amongst <sup>5</sup> [ "plant products"]

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Sub. Ibid. for " Department" means the Department of Locust Warning and Plant Quarantine, under the Ministry of Agriculture & Works (Agriculture Division)".

<sup>3</sup> Inserted.

<sup>4</sup> Inserted.

<sup>5</sup> Subs. for the words " Plant material".

<sup>6</sup> Published in the Gazette of Pakistan, January 27, 1967

- (i) "Exporter" includes any person who, whether as owner, consignor, agent or broker, is in possession of, or in any way entitled to, the custody or control of the <sup>1</sup> ["plant and plant product"]
- (j) "Forms" means a Form annexed to these rules;
- (k) "Importer" includes any person who, whether as owner, consignee, agent or broker, is in possession of, or in any way entitled to, the custody or control of the <sup>1</sup> ["plant and plant products"]
- (l) <sup>2</sup> ["Phytosanitary certificate"] means a certificate of plant health granted by the appropriate officer or authority in the country of origin;
- (m) "Plant pest" means any living animal or plant in any stage of its development known, suspected or liable to be harmful to the existence or growth of economic plants or to <sup>1</sup> ["plant products"] whether by direct <sup>3</sup> ["infestation or infection"] or attack or by causing or spreading diseases in economic plants and known to <sup>4</sup> ["infest or infect"] land or water thereby preventing or obstructing its possible agricultural uses.
- (n) <sup>1</sup> ["Plant or Plant products"] means all species of plants or parts thereof, whether living or dead, including stems, branches, tubers, bulbs, corms, stocks, bud wood, cuttings, layers, slips, suckers, roots, leaves, flowers, fruits, seeds, seedlings and any other products of plant origin, <sup>5</sup> ["Whether processed or not, which is likely to harbour and carry plant pests"]];

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<sup>1</sup> Subs. for the words "plant material" by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for the words "Official certificate"

<sup>3</sup> Subs. for the words "infestation".

<sup>4</sup> Subs. for the words "infest".

<sup>5</sup> Subs. for the words " which has not been processed, such as bark, husk and peelings".

- <sup>1</sup> [(nn) "Plant Quarantine" means the effort to prevent entry, establishment or spread of a foreign pest in the country through legal restriction on the movement of "plant and plant products," ]
- (o) " Plant Quarantine Officer" means any person authorized in writing by the Director to act on his behalf.
- <sup>2</sup> [(p) " Post entry quarantine" means the process to detect the presence and development of any pest associated with imported plant and plant products during growth period under controlled ecological condition;"
- (q) " Prescribed port or point of entry" means the routes authorized by the Director for entry or exit of plant and plant products, such as, Chittagong Seaport, Mongla Seaport, Shah Amanat International Airport, Chittagang, Hazrat Shahjalal International Airport, Dhaka, Sylhet Osmani Airport, Darsana Railway Station, Benapole land border checkpost and such other land, sea or air routes as may be declared by the Director from time to time, for the said purpose;
- (r) " Transit" means arrival in Bangladesh of plant or plant products from one foreign country destined for transportation to another, whether transhipped from one carrier to another whatever be the duration of the temporary stay of the consignment in Bangladesh;
- (s) "Weed" means any species of plant , known suspected or liable to be harmful to crops, plantations, individual plants of economic value, plant products, cultivable land or water system, whether by its mere presence or through its biological activity;"]
- <sup>3</sup> [(t) \* \* \* \* \* ]
- (2) All provisions referring to plant or <sup>4</sup> [" plant products"] shall apply also to all packing material used in packing or wrapping such plant or <sup>4</sup> [ " plant products"];

<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for sub-rule (p), (q),(r) , (s).

<sup>3</sup> Omitted

<sup>4</sup> Subs for the words " plant material".

## IMPORT

### 3. IMPORT OF PLANT OR <sup>1</sup> [ "PLANT PRODUCTS" ]

No person shall import any plant or <sup>1</sup>[ "plant products" ] which may be a source or medium of infection or infestation by diseases and plant pests destructive to agriculture or medium for the introduction of noxious weeds, except under a valid import permit obtained prior to such importation in

<sup>2</sup>[ "Form 1A" ] issued by the Director or the <sup>3</sup> [ " Deputy Director (Quarantine)" ] and except through the prescribed ports or points of entry.

#### [ 4. PLANT PRODUCTS FOR WHICH SPECIAL PERMIT IS REQUIRED.

- (1) Notwithstanding anything contained in rule 3, plants and plant products likely to carry any new pest or disease may be imported for research or propagation purpose in limited quantities on special consideration by a permit issued by the Director in Form 1A;
- (2) Importation of plants and plant products under this rule shall be made only through Chittagong Port, Port of Mongla, Hazrat Shahjalal International Airport, Dhaka, Shah Amanat International Airport, Chittagong or Benapole Land border checkpost and shall be subject to such condition as may be specified in the permit with regard to such importation and post entry quarantine," ]

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<sup>1</sup> Subs. for ' plant material' by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং ।

<sup>2</sup> Subs. for Form-1

<sup>3</sup> Subs. for ' Quarantine Entomologist'.

<sup>4</sup> Subs. for rule '4'

## 5. APPLICATION FOR PERMIT TO IMPORT PLANT OR <sup>1</sup>["PLANT PRODUCTS"]

- <sup>2</sup> [(1) For the purpose of import of any plant or plant products the importer shall, prior to entering into any contract with supplier and opening of letter of Credit submit an application in 'Form' to the Director or Deputy Director (Quarantine) for an import permit"]
- (2) All such applications shall be signed by the person who intends to import the plant or <sup>1</sup> ["plant products"] or his duly authorized agent and shall specify:
- (a) the kind and quantity of plant or <sup>1</sup> ["plant products"]
  - (b) the country and locality of origin
  - (c) destination
  - (d) the name and address of the consigner and the consignee;
  - (e) means of transport;
  - (f) the prescribed port or point of entry;
  - (g) purpose for which the plant or <sup>1</sup> ["plant products"] is proposed to be imported e.g. consumption, propagation or processing.

## 6. NOTICE OF ARRIVAL BY THE IMPORTER

The importer shall inform the Director or the Plant Quarantine Officer of the probable date of arrival of the plant or <sup>1</sup> ["plant products"] at the prescribed port or point of entry and shall on arrival of the plant or <sup>1</sup> ["plant products"] notify to the Director the number of the permit, name of ship or vessel, date of arrival, country of origin and locality where grown, and the character and quantity of the plant or <sup>1</sup> ["plant products"]

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<sup>1</sup> Subs. for the word "plant material" by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for sub-rule (1)

7. EFUSAL & REVOCATION OF PERMITS:—

A permit to import plant <sup>1</sup>[ "plant products"] may be revoked if, in the opinion of the Director or the <sup>2</sup>["Deputy Director ( Quarantine)"], the importer has wilfully contravened any provision of these rules or there is reason to believe that the plant or <sup>1</sup>["plant product"] will be imported in violation of the provisions of these rules.

8. <sup>3</sup>[" PHYTOSANITARY CERTIFICATE FOR IMPORTABLE PLANT AND PLANT PRODUCTS".]

<sup>4</sup>(1) All plants and plant products shall be accompanied by a phytosanitary Certificate from the country of origin"].

<sup>5</sup> [(2) \* \* \* \* \* ]

<sup>6</sup>(3) Persons who import any plant or plant products shall submit the Phytosanitary certificate of the country of origin to the Plant Quarantine Officer for his perusal and record but this will not preclude inspection by the Plant Quarantine Officer, if such inspection is deemed necessary"];]

<sup>7</sup>(4) \* \* \* \* \* ]

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<sup>1</sup> Subs. for 'Plant material' by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for ' Quarantine Entomologist'.

<sup>3</sup> Subs. ibid for 'Foreign certificate for inspection'

<sup>4</sup> Subs. for sub-rule (1)

<sup>5</sup> Omitted

<sup>6</sup> Subs. for sub-rule (3)

<sup>7</sup> Omitted.

- 1 ["(5) Any consignment arriving at any prescribed port or point of entry accompanied by a valid Phytosanitary certificate, fulfilling plant quarantine requirements of Bangladesh in respect of specific commodity but without import permit may be released at the Director's discretion after post- entry quarantine examination and issuance of a special order in Form III.
- (6) Plants and plant products imported under a valid import permit from the Director but without Phytosanitary certificate shall either be released at the Director's discretion after necessary fumigation or treatment, or returned to the Shipper or confiscated and destroyed at the expenses of the consignee.
- (7) Small consignments of plants and plant products, namely cut flower, flower bouquet, small quantities of fruits, fresh or dried, and vegetable carried by passengers as accompanied baggage for personal consumption, accompanied or unaccompanied with Phytosanitary certificate and import permit, shall, after realization of prescribed fees and treatment charges, where treatment is necessary, be released, if, on examination by plant Quarantine Officer on duty, they appear to be substantially free from injurious pests and diseases.
- (8) Consignments arriving without necessary additional declaration, where such declaration is required in the Phytosanitary certificate from the competent authority of the country of origin and without Import Permit from the Director or Deputy Director (Quarantine) Shall be confiscated and destroyed after making an order in form II"]

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<sup>1</sup> Subs. ibid for sub-rule (5) , (6) and (7) by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।



<sup>1</sup>[ "9. FREEDOM OF PALNT AND PLANT PRODUCTS FROM SAND, SOIL OR EARTH-

All imported plants and plant products shall be free from sand, soil, sawdust or earth and plant roots, rhizomes and tubers shall be washed thoroughly and repacked in such sand, soil saw dust or other planting media as shall be certified as additional declaration in the phytosanitary certificate by the duly authorized officer of plant Quarantine Service of the exporting country to have been sterilized and rendered safe or disinfected.

10. PACKING MATERIAL- Packing material, for example, hay, straw, chaff, wooden plank or pit employed in the importation of nursery stock and other plants, including any material of plant or plant origin or any commodities other than plant origin, shall not be used for packing purposes unless they are rendered free from pests and diseases by appropriate treatment and certified accordingly in the phytosanitary certificate by the authorized officer of plant Quarantine service of the country of origin as to their safety for such use.

11. PLANTS AND PLANT PRODUCTS IMPORTED BY POST—

(1) Import of plants and plant products through post parcel shall be made in accordance with the provisions of rule 3 and sub-rule (1) and (3) of rule .

(2) On arrival of plants and plant products at the foreign post office the postal authority shall inform and hand over such parcel to the Director or Plant Quarantine Officer concerned who shall conduct necessary examination, render appropriate treatments, if required, and issue a release order in Form-III after realizing necessary fees.

(3) No such parcel shall be released by the postal authority without a release order from the Director or plant Quarantine Officer, as the case may be , Plants and plant products imported through parcel in violation of these rules shall be handled in accordance with rule 8 and decision for disposal thereof shall be intimated to the foreign post office and the consignee."];

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<sup>1</sup> Subs. for Rule (9), (10) and (11) by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

## 12. IMPORTATION OF INSECTS AND OTHER ANIMALS, PESTS, PLANT

### DISEASES AND CULTURES FOR SCIENTIFIC AND ALLIED PURPOSES:

- (1) No person shall import from any country any harmful living insects, animals, birds, fungi, Fungus culture <sup>1</sup>[" bacterial culture, viral culture, mycoplasma culture"],obnoxiousweed plants or their propagating material except in accordance with the following provisions, namely:-

Any living stage of the numerous small invertebrate animals, elongated invertebrates lacking appendages, commonly referred to as worms, for example, nematodes; any form of protozoa, any form of fungi such as rusts, smuts and molds, any form of bacteria, any form of viruses, or any form of similar or allied organisms which may directly or indirectly affect, injure or cause disease in plants, unless-

- (a) the proposed importation is to be used for scientific educational, commercial, or industrial purposes only;
- (b) an application is submitted to the Director stating the names and addresses of the consignor and consignee, the scientific name of pests or diseases, the institution or place of origin, quantity, number of containers, the purpose of the importation and the name and address of the person by whom or the institution where the material will be used;

<sup>2</sup>["(c) The importation is routed only through Chittagong Seaport or Hazrat Shahjalal International Airport, Dhaka or such other port as may be decided by the Director;"]

- (d) the forwarding label issued with the permit designating the route through which the importation is permitted has been forwarded by the importer to the shipper and <sup>3</sup>[" affixed on the body"] of each consignment; and

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs.

<sup>3</sup> Subs. for the words " attached to the outside"

- (e) Every importation authorized under this sub-rule is subject to inspection at the prescribed port or point of entry and may be held for further examination and refused entry or destroyed if, in the opinion of the plant Quarantine Officer, such importation is found to include insects or other organisms not specifically covered by the permit.
- (2) No person shall import exotic beneficial insects, birds, animals both vertebrate and invertebrate (Mollusca, Crustacea, Myriopoda Insecta) for scientific, educational, industrial or medicinal purposes except under, and in accordance with the terms of, and authority from the Director.
- (3) No person shall import useful exotic plant species including useful micro-organisms and their propagating material unless he has obtained the prior permission of the Director and the articles imported are covered by a <sup>1</sup>["Phytosanitary certificate"]

13. JURISDICTION AND AUTHORITY OF <sup>2</sup>["PLANT QUARANTINE OFFICER"]

(1) Where on inspection, any imported plant or <sup>3</sup>[" plant products"] is found to be infested or infected with any plant pests or diseases the plant or <sup>3</sup>[" plants products"] and containers there of shall be destroyed in the presence of the plant Quarantine Officer or returned to the shipper after treatment, at the discretion of the Director, and where any carrier is found to be infested with any pests or is suspected to be so infested, it shall be treated to the extent and in the manner deemed necessary by the Plant Quarantine Officer. When any such action is necessary due notice shall be given to the owner or his agent and any risks associated with such treatment shall be the responsibility of the owner.

(2) No person shall obstruct an Officer of the Department in the due discharge of his duties; and no person shall refuse to permit the making of any examination required under these rules or refuse to carry out the instructions of an Officer relative to the effective control of any insect pests and diseases.

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<sup>1</sup> Subs. for the words 'Official certificate' by notification এস আর ও ২৭৪-আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for the word ' Quarantine Officer'

<sup>3</sup> Subs. for the word ' plant material'.

## IMPORT RESTRICTIONS OR PROHIBITIONS

### 14. POTATO : (*Solanum tuberosum*)

(1) Potatoes shall not be imported into <sup>1</sup>[" Bangladesh "] by any means from any country, where the three serious pests, namely, Black wart (*Synchytrium endobioticum*), Golden Nematode (<sup>2</sup>["*Globodera*"] *rostochiensis*), Colorado potato beetle (*Leptinotarsa decemlineata*), have either been prevalent or reported to have occurred unless they are accompanied by <sup>3</sup> [" Phytosanitary certificate"] from the country of origin declaring that the crop from which the consignment is derived was not grown in the vicinity of unhealthy potato crops and was inspected by a duly authorised official of phytopathological service of the country of origin and found free from all injurious insects pests and diseases and that <sup>4</sup> ["no case of occurrence of the insect"] and diseases mentioned above was recorded within <sup>5</sup> [" 5 kilometers"] radius of the place where the potato crop was grown during the past twelve months.

(2) In order to guard against the importation of the pests and diseases mentioned in sub-rule. (1) the Director shall take the following precautions, namely:-

(a) as far as possible , import <sup>6</sup>["\* \* \* \* "] of seed potatoes resistant to wart disease shall be permitted;

(b) the importation of seed potatoes shall be permitted from those countries where the aforesaid pests and diseases are not present;

<sup>7</sup>["(c) permit import of seed potatoes certified by phytopathological service of the exporting country to have been produced in areas within the country free from all pests and diseases specially mentioned in sub-rule (1)"]

(d) seed consignments should be free from shoots, leaves, roots and soil sticking to tubers;

(e) import of potato seeds should be restricted only to certified seed free from virus diseases except virus x, and

(f) import of shoots, roots, leaves and green parts of potato shall not be imported ;

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<sup>1</sup> Subs. for the words 'Pakistan' by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for 'Heterodera'

<sup>3</sup> Subs. For 'Official certificate'

<sup>4</sup> Subs. for 'no case of the insect pest'

<sup>5</sup> Subs. for '2 kilometers'

<sup>6</sup> Omitted the word 'only'

<sup>7</sup> Subs.

15. RUBBER: (*Hevea brasiliensis*)

- (1) Any plant of the genus *Hevea* shall not be imported into <sup>1</sup>["Bangladesh"] , unless:-
- (a) The importation is made for scientific purposes:
- (b) written permission has been granted for each consignment of plants by <sup>2</sup>["Director"] and importation is in accordance with such special conditions as may be imposed by the Director
- <sup>3</sup>["\* \* \*"] in granting such permission;
- (c) the plant has been disinfected and freed of any original soil in the country of origin and is free from pests and diseases, and consignment of plants is accompanied or covered by a<sup>4</sup>["Phytosanitary Certificate"] specifying clearly that the above requirements have been fulfilled ; and each consignment is addressed to the Director or any person authorized by him
- (2) The importation into <sup>1</sup>["Bangladesh"] at any plant of the genus *Hevea* capable of further growth or propagation ( excluding seed) is prohibited from the American tropics or from any other country in which South American leaf blight <sup>5</sup>["*Microcyclus ulei*"] is present, unless, in addition to the requirements of sub-rule (1), such plant has been grown for an adequate period at a <sup>6</sup>["Post entry quarantine "] for *Hevea* at a place approved by the Director and situated outside the American tropics and any other country in which south American leaf blight <sup>5</sup>["*Microcyclus ulei*"] is present, and each consignment of such plants is accompanied or covered by a <sup>4</sup>["Phytosanitary certificate"] to the effect that the above requirements have been fulfilled, and signed by the Officer-in-charge for such quarantine station.

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<sup>1</sup> Subs. for 'Pakistan' by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for 'Department'

<sup>3</sup> Omitted the words ' or the Quarantine Entomologist'

<sup>4</sup> Subs. for the words 'Official Certificate.'

<sup>5</sup> Subs. for '*Dothidella ulei*'

<sup>6</sup> Subs. for 'Plant Quarantine Station'

- (3) The importation into <sup>1</sup>[" Bangladesh "] of any such seed of any plant of the genus *Hevea* is prohibited from the American tropics or from any other country in which South American leaf blight <sup>2</sup>[" *Microcyclus ulei*"] is present unless, in addition to the requirements of sub-rule (1), such seed, having been examined and again disinfected at a place approved by the Director and situated outside the American tropics and any other country in which South American leaf blight <sup>2</sup>["*Microcyclus ulei*"] is present, has been repacked with new packing materials in new containers, and unless each consignment of such seed is accompanied or covered by a <sup>3</sup>[" Phytosanitary certificate"] to the effect that the above requirements have been fulfilled and signed by the officer-in-charge of these operations.
- (4) The importation in <sup>1</sup>["Bangladesh"] of any plant or <sup>4</sup>["plant product"] of the genus *Hevea* not capable of further growth or propagation (such as fresh or dried herbarium specimens is prohibited, unless, in addition to the requirements of clause (a),(b) and (d) of sub-rule(1) the Director is satisfied that such plant or <sup>4</sup>["plant products"] is required for a legitimate special purpose and that such plant or <sup>4</sup>["plant product"] has been sterilized in the country of origin by a method satisfactory to the Director.
- (5) The importation into <sup>1</sup>[" Bangladesh"] of any plant or <sup>4</sup>["plant product"] other than the genus *Hevea* capable of further growth or propagation and originating in the American tropics or in any other country in which South American leaf blight <sup>3</sup>["*Microcyclus ulei*"] is present , is prohibited unless written permission has been granted for each consignment of such plant or <sup>4</sup>["plant products"] by the Director and the importation is in accordance with such special conditions as may be imposed by the Director in granting such permission.

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<sup>1</sup> Subs. for ' Pakistan' by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for '*Dothidella ulei*'

<sup>3</sup> Subs. for 'Official Certificate.'

<sup>4</sup> Subs. for ' Plant material'.

- <sup>1</sup>[(6) The importer shall ensure that any plant of the genus *Hevea* imported for further growth or propagation is grown under controlled conditions and supervision of plant quarantine officer for such period as will ensure that it is free from all pests and diseases before large scale plantation.
- (7) All budwood and other propagating materials of the genus *Hevea* shall be treated with such fungicide as may be specified by the Director before shipment".]
- (8) All the imported propagating materials not used for budding and the packing material imported with it shall be destroyed by burning.
- <sup>2</sup>[(9) The importation of any plants or plant products, seed budwood, budded stump of the genus *Hevea* from a country where *Phytophthora botryosa* is known to occur is prohibited unless, in addition to the fulfillment of the requirements under sub-rule (1), the accompanying Phytosanitary certificate declares that the propagating materials have been collected from areas or plantations or nurseries which had been regularly inspected by duly authorized officials of the Phytopathological service of the country and were found free from *Phytophthora botryosa*."]

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<sup>1</sup> Subs. for sub-rule (6) & (7) by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Inserted

16. SUGARCANE: (*Saccharum officinarum*)

<sup>1</sup>[" Importation of sugarcane or sugarcane setts and sugarcane seed is prohibited from areas mentioned below where the following diseases are known to occur, namely:-

Diseases	Areas where the diseases are known to occur
(a) Sugarcane mosaic virus	Java, Argentina, Puerto Rico, Cuba Louisiana (U.S.A.)
(b) Sugarcane Fiji disease	Queensland, New Guinea, Philippines, Jamaica, Madagascar.
(c) Pine apple disease ( <i>Ceratocystis paradoxa</i> )	Java, West Indies, Hawaii, France
(d) Sereh disease	West Java, India, Australia, Formosa, Hawaii, West Indies.
(e) Ratoon virus	Queensland, Hawaii, Philippines, India, South Africa, Rhodesia, Mexico, Cuba, Puerto Rico, Brazil, Peru, Taiwan, Mauritius, Louisiana, Florida, Colombia.
(f) Grassy shoot virus	India, Taiwan, Thailand.
(g) Gummosis ( <i>Xanthomonas vasculorum</i> )	Brazil, Mauritius, Australia, Barbados, Madagascar, South Africa, Java, Borneo, New Guinea, British Honduras.

Provided that such importation in small quantities may be allowed by the Director subject to the following conditions, namely"]

(i) that the importation is made for scientific purpose;

(ii) that the imported planting material is grown at a <sup>2</sup> [\* \* \* ] post entry quarantine station for an adequate period before release for large scale planting; and

<sup>3</sup>[" (iii) that the phytosanitary certificate shall bear an additional declaration to the effect that the planting material was inspected in the field and was found free from aforesaid diseases

(iv) that the sugarcane setts shall be subject to such disinfection treatment as may be prescribed by the Director before shipment."]

<sup>1</sup> Subs. by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Omitted the word 'recognised'

<sup>3</sup> Subs. for clause (iii)



1[ " 17. TOBACCO: (*Nicotiana tabacum*)

Unmanufactured tobacco, raw or cured, shall not be imported into Bangladesh unless the accompanying Phytosanitary Certificate bears an additional declaration that the tobacco consignment is free from tobacco moth, *Ephesia elutella* and that the pest does not exist in the country of origin.

Seeds shall be accompanied by the usual phytosanitary certificate which shall declare that the seeds have been treated with appropriate fungicide specified by the Director before shipment. The import of tobacco seedlings is strictly prohibited"]

18. CITRUS PLANTS: ( *Citrus sp.*)

Citrus plants and cuttings shall not be imported into

<sup>2</sup>[" Bangladesh"] unless, in addition to the general requirements under rules 3 to 6, the following conditions are fulfilled:-

(i) the importation is made for scientific purposes;

(ii) the imported plants or cuttings are grown at a <sup>3</sup> [\* \* \*] post entry quarantine station for a period adequate to ensure their freedom from virus diseases; and

(iii) The usual <sup>4</sup> [ " Phytosanitary certificate"] bears an additional declaration to the effect that the plants are free from *Malsecco* caused by *Deuterophoma tracheiphila* and that the disease does not exist in the country in which they are grown.

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<sup>1</sup> Subs. by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>2</sup> Subs. for the word "Pakistan"

<sup>3</sup> Omitted the word " recognised"

<sup>4</sup> Subs. for the words "Official certificate"

<sup>1</sup> 19. COFFEE (*Coffea arabica*)

The import of coffee propagating material is restricted to coffee seeds only, limited to small quantities not exceeding one kilogram in one consignment for scientific purpose. The import of coffee seeds or beans may be made from countries where coffee rust (*Hemileia vastatrix*) and coffee borer (*Stephanoderes hampai*) do not exist and the seeds are accompanied by a phytosanitary certificate . The import of coffee seeds from Central and South American and the Carribean is prohibited due to the presence of American Leaf spot caused by *Mycena citricolor* (*Omphalia flavida*);

Provided that the provisions of this rule shall not apply to roasted and ground coffee.

20. BANANA (*Musa sapientum*)

Import of vegetable planting material of banana from Central and South America and the Carribean and from South India is strictly prohibited due to the presence of Moko disease (*Pseudomonas solanacearum*) in it.

Banana vegetable planting material may be imported from other countries in small quantities for scientific purpose only under valid phytosanitary certificate stating that the planting material is free from root nematode (*Radophilus similis*) and black leaf streak (*Mycosphaerella fijiensis* ). While importing, the outer corm tissues shall be removed until clean tissues are exposed. This planting material shall be treated in hot water at 55<sup>0</sup> C for 20 minutes before its mandatory growth in post-entry quarantine.

Import of large quantities of planting material shall not be allowed<sup>1</sup>

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<sup>1</sup> Subs. for Rule (19), (20) by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup> [ " 21. COCONUT (*Cocos nucifera*)

(1) Importation of coconut plant or plant products is prohibited from areas mentioned below where the following diseases or other diseases of obscure origin are known to occur, namely:-

Diseases	Areas where the diseases are known to occur
(a) Red Ring ( <i>Rhadinaphelenchus cocophilus</i> )	Caribbean area (Central and South America).
(b) Lethal Yellowing	Jamaica, Haiti, Florida.
(c) Kaincope	Ghana, Togoland.
(d) Cadang Cadang	Philippines.
(e) Bronze Leaf Wilt	Guayana, West Indies
(f) Root Wilt	South India
(g) Guam Coconut	Guam
(h) Coconut Wilt	Malaysia
(i) Leaf Scorch	Sri Lanka
(j) Tatipaka	Andhra Pradesh, India.

(2) Importation of coconut plant or plant products from other countries may be made subject to the following conditions, namely:-

<sup>1</sup> importation of coconut shall, under permit, be made only in small quantities not exceeding 100 nuts per consignment, restricted to unsprouted nuts from which the perianth has been removed.

The seed nuts shall be accompanied by a phytosanitary certificate from the authority concerned in the country of origin, stating that the seeds come from trees showing no sign of any diseases mentioned above.

Upon arrival, the seeds shall be fumigated or treated by any other method considered appropriate by the Director to remove the risk of introducing insects.

The imported seed nuts shall be planted in individual containers in post entry quarantine for a period of two years. Any disease detected during post entry quarantine in the seedling shall be burnt together with containers and planting media."

<sup>1</sup> Subs. by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[<sup>22</sup> GROUNDNUT (*Arachis hypogaea*)

Importation of groundnut seed from western hemisphere Africa, Australia, USSR, and China and such other groundnut growing countries of Asia as may be specified by the Director, from time to time, is prohibited to prevent the introduction of groundnut rust caused by *Puccinia arachidis*. Importation of decorticated seeds may be allowed under permit, from countries the importation of groundnut seeds from which is not prohibited if the decorticated seeds are accompanied by a Phytosanitary Certificate stating that the seeds had been collected from areas where the groundnut rust (*Puccinia arachidis*), scab (*Sphaceloma arachidis*) and groundnut leaf mosaic virus did not exist.

23. MAIZE (*Zea mays*)-

(1) Importation of maize seeds from North, Central and South America as well as Continental Europe, USSR and China is prohibited due to the presence of Bacterial wilt, Bacterial Leaf blight or Stewart's disease caused by *Erwinia stewartii*. Seed material from countries other than those mentioned above may be allowed if accompanied by a phytosanitary certificate stating that the crop was not infected with Downy Mildew caused by any of the following strains of pathogen:—

- (i) *Sclerospora philippensis*;
- (ii) *Sclerospora sacchari*;
- (iii) *Sclerospora maydis*;
- (iv) *Sclerophthora rayssiae* var *zeae*

(2) Each consignment of maize seeds shall be subject to inspection, fumigation, treatment and post entry quarantine before release.

(3) Import of maize plant and seedlings is prohibited.

24. Tea (*Camellia sinensis*)-

The importation of tea vegetative materials is prohibited from any country or area where the phloem necrosis virus disease exists. Tea seeds may be imported only under permit and shall be accompanied by a Phytosanitary certificate stating that the seeds have been collected from areas where phloem necrosis virus is not known to occur.]

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<sup>1</sup> Subs. by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[25. *ALLIUM* Spp

Seeds of - *Allium* spp. that is Onion (*Allium cepae*), Shallot, Leek ( *A. ampelopreasum* var *perrum*), Gay chive (*A. schoenoprasum*) and Garlic ( *A. sativum*) may be imported if accompanied by phytosanitary certificate stating that the seeds are free from onion smut caused by *Urocystis cepulae* and stem nematode (*Ditylenchus dipsaci*).

(2) The plant and bulbs of onion, garlic , shallot, leek and gay chive shall not imported unless they are certified by the competent authority in the country of origin to be free from leaf tip die back (*Mycosphaerella schoenoprasii*) and stem nematode ( *Ditylenchus dipsaci*)

26. COCOA ( *Theobroma cacao*) and *Theobroma* sp.

Cocoa and other *Theobroma* sp. (including seed in the unmanufactured state) may be imported in small quantities for research and propagation by Government controlled institutions only from countries other than Africa, West Indies and Sri Lanka. The consignment shall bear a declaration as to the origin of the plants and be accompanied by a phytosanitary certificate stating that they were inspected and found free from pod rot (*Monilia roleri*), mealy pod (*Trachysphaera fructigena*) and Witches broom (*Crinipellis perniciosus*) ( *formerly known as Marasmius perniciosus*) and that swollen shoot and other virus diseases do not occur in the country of origin. Plants are subject to inspection and fumigation are the prescribed point of entry and to post entry quarantine .

27. SOIL AND SOIL ROOTED PLANTS.

The importation of soil or soil rooted plants or any other unsterilized rooting media, such as, compost, humus or forest litter capable of carrying pathogens is prohibited. Plant roots shall be free from soil, thoroughly washed and packed in sphagnum, moss, vermiculite, sawdust or similar inert material before export.

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<sup>1</sup> Subs. by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[ 28: COTTON ( *Gossypium spp*)

(1) **Cotton seed-** Cotton seed shall not be imported from western hemisphere and Africa except for experimental purposes by appropriate authority under a valid permit from the Director. The seeds shall be accompanied by a phytosanitary certificate and shall not be imported in quantities exceeding 500 grams in weight in any one consignment and shall be examined and fumigated. The accompanying phytosanitary certificate shall , in addition, declare that the seed and its container have been treated in such a way as to destroy all insect life.

(2) **Raw cotton-**

- (a) Unginned cotton shall not be imported.
- (b) No cotton shall be allowed to be imported except under a permit from the Director nor shall it be so imported unless it fulfils the following conditions :—
  - (i) On or before the departure of a ship carrying a consignment of raw cotton for Chittagong Port or Port of Mongla from the port from where the cotton is consigned, the consignee or shipper shall ascertain the probable date of arrival of the ship at Chittagong Port or Port of Mongla and number of bales contained in the consignment and shall furnish this information to the Director not less than 21 days before the arrival of the ship at Chittagong Port or Port of Mongla;
  - (ii) No vessel carrying American cotton or any other cotton shall enter into the territorial water of Bangladesh without any Anchorage Permit from the Director in Form No. IV for which an application shall be made to the Director at least fourteen days before the expected date of arrival of the vessel;
  - (iii) In case of American cotton arriving at Chittagong Port or Port of Mongla the hatches of the ships shall be opened in presence of Plant Quarantine Officer for inspection and disinfection before discharging. The cotton shall thereafter be fumigated by Plant Quarantine Officer in a space within the port protected area provided by the port authority and approved by the Director;
  - (iv) No vessel shall discharge American cotton during a period of rain, mist or drizzle;]

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<sup>1</sup> Subs. for rule 28 by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

- <sup>1</sup>[" (v) Cotton other than American cotton, which is imported in a vessel carrying any bale or bales of American cotton shall be deemed to have been in contact therewith and shall be treated as American cotton and shall be subjected to the restrictions and conditions specified in these rules;
- (vi) Any raw cotton other than American cotton imported without valid import permit from the Director and Phytosanitary certificate from the country of origin or with valid import permit from the Director but without phytosanitary certificate from the country of origin shall be subjected to fumigation before release ;
- (3) Samples of American cotton imported by parcel post or as ship or air parcel, not exceeding 10 kilogram per parcel in weight shall be handed over to Plant Quarantine Officer by the postal authority for examination and fumigation before release.
- (4) Transit movement or transshipment of American cotton is permitted if shipments are accompanied by a phytosanitary certificate and are so packed that insect cannot enter or escape. For the purpose of transshipment, if a part or whole of the consignment requires discharge within the port site or barges, the consignment shall be subjected to restrictions and conditions specified in these rules.
- (5) Cotton fabrics carried in the same vessel with American cotton shall be subjected to disinfection and fumigation as specified in these rules before release."]

<sup>2</sup>"28A PEARL MILLETS (*Pennisetum americanum*).

The Phytosanitary certificate shall declare that the seeds were collected from an area where the following diseases were not known to occur:—

- (i) Downy mildew (*Sclerospora graminicola*)
- (ii) Rust (*Puccinia substriatia*)
- (iii) Ergot (*Claviceps fusiformis*)

Each consignment of seed shall be subject to inspection fumigation and treatment and post-entry quarantine before release.]

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<sup>1</sup> Subs. for Rule '28' clause (v) and (vi) and sub-rule (3),(4)&(5) by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ইং।

<sup>2</sup> Inserted

<sup>1</sup> [ " 28B. Rice (*Oryza sativa*)-

Importation of rice seed from Mexico, USA, British Honduras, Cuba, Costa Rica, Guatemala, Panama, El-Salvador, Colombia, Surinam and Venezuela is prohibited.

Small quantities of rice seed shall be allowed to be imported exclusively for scientific purpose only subject to treatment and observation for one growing season in post-entry quarantine. Such seed sample shall carry phytosanitary certificate stating that the Hoza Blanka disease or the occurrence of that disease had not been noticed in the fields from where the seeds were collected.

Importation of rice in bulk quantities for consumption shall be made in the same manner and in accordance with the provision of rules 5 and 8.

28C. SORGHUM (*Sorghum vulgare*)-

Small quantity of sorghum seed may be imported under a phytosanitary certificate stating that they were collected from fields which had been regularly inspected during growing season and were found to be free from infection of bacterial blight caused by *Pseudomonas andropogonis* and bacterial streak caused by *Xanthomonas holcicola*. The seeds shall be subjected to inspection, fumigation and treatment and post entry quarantine before release.

28D. WHEAT (*Triticum* spp.)-

Importation of wheat seed in bulk from countries where the following diseases or any other disease of obscure origin are known to occur is prohibited, namely:-

Diseases	Countries where the disease are known to occur
(i) Powdery mildew, <i>Erysiphe graminis</i>	USA, Canada, Europe, Australia and India.
(ii) Yellow ear rot, <i>Anguina tritici</i> <i>Corynebacterium tritici</i>	Egypt, India, Australia and China.
(iii) Septoria Leaf Blotch: <i>Septoria tritici</i> Leaf blight: <i>Alternaria triticina</i>	USA, USSR, UK, China, Australia, Pakistan and India. India
(iv) Molya disease: <i>Heterodera avenae</i> Canary grass: <i>Phalaris minor</i>	India India"]

<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।



<sup>1</sup> Provided that importation of wheat seed from such countries may be allowed for seed purposes under import permit granted by the Director, subject to the fulfillment of the following conditions, namely:—

- (a) the field where the crop is grown and from which the seeds are collected shall be regularly inspected by Plant Quarantine Officer of Bangladesh in collaboration with phytopathological service and seed certification agency of the supplying country throughout the entire growing period till harvest of the crop. Seeds shall be procured only from the fields where no incidence of above diseases has been observed;
- (b) screening cleaning, grading and other relevant tests of the seeds like moisture content and viability shall be conducted in presence of Plant Quarantine Officer of Bangladesh and shall be certified by National Seed Certification Agency and also by plant quarantine service of the country of origin stating that the seeds are free from all injurious pests and diseases including the above;
- (c) the seeds, if in the opinion of Plant Quarantine Officer need to be fumigated or disinfected, shall be fumigated or disinfected in the presence of Plant Quarantine Officer before shipment.
- (d) before loading, the ship's holds shall be thoroughly cleaned and fumigated ,if required , in presence of Plant Quarantine Officer who shall , after loading, finally seal the hatches. The ship carrying seed consignment shall not be allowed to carry any other merchandise which, in the opinion of Plant Quarantine Officer, might harbour storage pest ;
- (e) all travelling expenses of Plant Quarantine Officers, including the expenditure during the period of their stay abroad, such as, food, board and medical expenses shall be arranged either by importer, shipper or financier.

28 E. *Crysanthemum* (*Crysanthemum* spp)-

Importation of plants, flowers, bulbs and vegetative materials of any *Crysanthemum* spp. into Bangladesh is absolutely prohibited."]

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[ " 28 F. ORCHID (Orchidaceae family)

(1) Any plant of Orchidaceae family may be imported in limited quantities as seed, seedlings or meristem culture grown in sterile media. This shall be free from soil and packed in certified sterile media duly accompanied by a phytosanitary certificate stating that the plants are free from the following diseases and the phytosanitary certificate shall in addition declare that the mother plants from which the tissue has been obtained were indexed for the following virus diseases and that these diseases were not present in the nursery:-

- (i) Bacterial rot (*Erwinia cyripedii*) ;
- (ii) Cymbidium mosaic virus ;
- (iii) Cattely flower break virus.

(2) The orchid plants shall be subjected to post entry quarantine observation before release.

28 G. ORNAMENTAL PLANTS.-

Vegetative and propagative materials of ornamental plants may be imported in small quantities, free from soil and packed in sterile media, duly accompanied by a phytosanitary certificate. The consignment shall be subjected to post entry quarantine before release.

28 H. SUNFLOWER (*Helianthus annuus*)-

(1) The phytosanitary certificate accompanying the sunflower seeds shall declare that the seeds are free from Downy mildew caused by *Plasmopara halstedii* and mosaic virus disease, The Phytosanitary certificate shall further state that the seeds were collected from fields where no incidence of Downy mildew and Mosaic virus was recorded during the last growing season.

The consignment shall be subjected to post entry quarantine before release .

28 I. FOREST TREE SEEDS-

(1) Seeds of forest trees may be imported in limited quantities for the purpose of research or propagation by Forest Research Authorities accompanied by a phytosanitary certificate stating that the seeds were free from insect pest and diseases. The seeds shall be free from extraneous materials and shall be fumigated or treated with appropriate fungicide before shipment.

(2) The consignment shall be subjected to post entry quarantine observation." ]

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং ।

<sup>1</sup>[28 J. FORESTRY PRODUCT-

(1) The importation of the forestry products, namely, logs posts, poles, railway ties, cardwood, slabwood lumber (with bark) and christmas trees shall be made under a valid import permit from the Director. The consignment shall be accompanied by a phytosanitary certificate which shall, in addition, declare that the forestry products are free from Gypsy moth (*Lymantria dispar*).

(2) For pine (*Pinus* sp.) Larch (*larix* sp), Spruce (*Picea* sp.) and Douglas fir (*Pseudotsuga* sp.) with twig and branches, the phytosanitary certificate shall, in addition to the declaration under sub-rule (1), state that the trees were free from Scleroderris canker disease (*Gremmeniella abietina*).

(3) For Oak tree (*Quercis* sp.), The consignment shall be kiln dried and free from bark and the accompanying phytosanitary certificate shall, in addition to the declaration under sub-rule (I), state that the area or areas from where the oak tree was harvested were free from oak wilt diseases (*Ceratocystis fagacearum*).

28 K. FRUITS; Fresh Fruits-

(1) Fresh fruits, namely-apple (*Malus sylvestris*), pear (*Pyrus* sp), Peach (*Prunus persica*), oranges (*Citrus* sp), Grapesw (*Vitis* sp.) mangoes (*Mangifera indica*) and banana (*Musa* sp.) shall not be imported unless, in addition to the compliance with the provisions of rules 5 and 8, the fruits are certified to have been fumigated by plant quarantine service of the country of origin to eliminate fruit flies and scale insects.

(2) Dry fruits, namely-raisins (*Vities* sp.) almond (*Prunus amygdalus*), date (*Phoenix* sp.), apricot (*Prunus armeniaca*), monacca (*Vities* sp.) alobokhara and pesta (*Pista vera*), shall be imported in accordance with the provisions of rules 5 & 8.

28 L. MANGO PLANTS AND SEEDS (*Mangifera indica*)-

Importation of mango plants and seeds in sterile media is allowed. The phytosanitary certificate accompanying the consignment shall declare that the following pest and disease are not present in the nursery:—

(i) Woody gall; (ii) Scaly bugs.

28 M. GRASS SEED-

(1) Importation of grass seeds and grass vegetative materials (in case of hybrid cultivars) is strictly prohibited except under special circumstances and under a valid permit issued in the Director, in small quantities. The seeds and vegetative materials shall be accompanied by a phytosanitary certificate stating that the seeds and vegetative materials are free from diseases of *Clavicepss* sp. *Helminthosporium* sp. *Fusarium* sp. And *Erwinia rathayi*.

(2) The seeds shall be properly fumigated with appropriate fumigant as specified by the Director before shipment.]

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>28 N. LUCERN (*Medicago sativa*)-

Importation of Lucern seed is prohibited from Brazil, Chile, Mexico, USSR or any other country where Bacterial Wilt (*Corynebacterium michigenense*), Verticillium Wilt (*Verticillium alboatrum*) and Alfalfa mosaic virus was noticed during the last cycles of vegetation. The consignment shall be accompanied by a phytosanitary certificate stating that the seeds are free from stem nematode (*Ditylenchus dipsaci*).

28 O. OIL PALM (*Elaeis guineensis*)-

(1) Seeds including germinated seeds may be allowed to be imported under a permit from the Director and the consignment shall be accompanied by a phytosanitary certificate stating that the seeds were collected from areas where the following diseases or other diseases of obscure origin are not known to occur:-

- (i) Lethal Yellowing;
- (ii) Kaincope;
- (iii) Cadang Cadang;
- (iv) Bronze Leaf wilt;
- (v) Coconut Wilt.

28 P. SOYBEAN (*Glycine max*).

(1) Soybean seeds shall be allowed to be imported and the consignment thereof shall be accompanied by a phytosanitary certificate declaring that the seeds are free from the following pests and diseases:—

- (i) Soybean mosaic virus;
- (ii) Tobacco ring spot virus;
- (iii) Soybean Cyst Nematode (*Globodera glycine*).

(1) Soybean seeds shall be subjected to post entry quarantine before release .

28 Q. CHILLI (*Capsicum annum*)-

The Chilli seeds shall be accompanied by a phytosanitary certificate stating that the seeds have been collected from strand free from Chilli mosaic virus and anthracnose (*Colletotrichum tematium*).

28 R. PEPPER (*Piper Sp.*)

The importation of pepper plant and vegetative materials is prohibited. Only seeds of pepper may be imported , if they are accompanied by a phytosanitary certificate .The seeds shall be subjected to post-entry quarantine before release".

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[28 S. OTHER SPICES.-

All dry spices for consumption namely—

Cinnamon (*Cinnamomum cassia*, *C. zaylanicum* and other *Cinnamomum* sp.), Cumin (*Cuminum cyminum*), Coriander (*Coriandrum sativum*), Cardamom (*Elettaria cardomomum*), Chilli (*Capsicum* sp.) and Turmeric may be imported under a permit form the Director and in accordance with the provision of rules 5 and 8.

28 T. VEGETABLE SEEDS.-

Importation of vegetable seeds is restricted to variety or hybrids only which have been recommended by National Seed Board or any other competent authority. Importation of such seeds shall be made crop wise in limited quantities subject to the fulfillment of condition outlined below and shall be subjected to inspection, fumigation and treatment and post-entry quarantine before release:—

(1) BEET (*Beta vulgaris*)-

The seeds shall be accompanied by a phytosanitary certificate stating that the seeds are free from Root rot caused by *Phoma beta* and Beet rust (*Uromyces betae*)

(2) CABBAGE AND CAULIFLOWER (*Brassica oleraceae*)

Seeds shall be accompanied by a phytosanitary certificate stating that the seeds are free from Black leg disease, caused by *Phoma lingam*. The Phytosanitary certificate shall also declare that the seeds are free from *Alternaria circinaus* and *A. herculae*.

(3) CUCUMBER (*Cucumis sativa*)-

The seeds shall be accompanied by a phytosanitary certificate stating that the seeds are free from Black stem rot caused by *Mycosphaerella melonis* and Cucumber Mosaic virus .

(4) LETTUCE (*Lettuce sativa*)

Seeds shall be accompanied by a phytosanitary certificate stating that the seeds are free from Lettuce Mosaic virus.

(5) PEA (*Pisum sativum*)-

The seeds shall be accompanied by a phytosanitary certificate stating that the seeds are free from Bacterial blight (*Pseudomonas syringae*) and that the seeds were taken from crop grown in an area where Bacterial blight has not been known to occur during the last growing period"].

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>["(6) TOMATO (*Lycopersicon esculentum*).

The seeds shall be accompanied by a phytosanitary certificate stating that the seeds are free from the following diseases:—

- (i) Tomato canker caused by *Deplodina lycopersici*;
- (ii) Bacterial canker caused by *Corynebacterium michiganense*.

The phytosanitary certificate shall, in addition, declare that the seeds were taken from plants which were not attacked with Tomato bunchy top or potato spindle tuber viroid and no occurrence of this viroid was noticed in the vicinity of area where they were grown.

28 U. SWEET POTATO (*Ipomoea batatas*)-

Importation of vegetative planting material (including root) of sweet potato is strictly prohibited, but seeds of such material in small quantities may be allowed for scientific purpose if accompanied by a phytosanitary certificate stating that the seeds were collected from fields where stem rot wilt (*Fusarium oxysporum*) root rot (*Plenodomus destruens*) or white rust (*Gleosporium ipomoeae*) did not occur and the growing crop was found to be free from the following diseases:—

- (i) Sweet potato dwarf;
- (ii) Sweet potato internal cork;
- (iii) Sweet potato feathery mottle;
- (iv) Sweet potato Russet crack.

28 V. OTHER PLANT PRODUCTS: BETEL NUTS (*Areca catechu*).

(1) Betelnut (whole or split) may be allowed to be imported under an import permit from the Director and in accordance with the provisions of rules 5&8.

(2) Any other plant or plant products not falling in the purview of prohibition or restrictions under these rules shall be guided by the procedures laid down in rules 3,4,5,6 and 8.]

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[ " 28 W. SILK WORM EGGS (*Bombyx mori*)-

Silk worm eggs shall be allowed to be imported for scientific and industrial purpose under permit from the Director, subject to fulfillment of the following conditions:—

- (a) phytosanitary certificate accompanying the eggs shall state that the eggs were collected from healthy stock and free from pebrine disease and also free from Muscardine spores (*Botrytis bassiana*);
- (b) the specimen shall be properly packed and labelled .

28 X. FOOD GRAIN.-

(1) Importation of food grain in bulk, namely, rice, wheat pulses, dry chillies and oil seeds by Government, local authorities or private entrepreneurs against barter deal, grant or purchase shall be made under a permit from the Director and as per conditions laid down therein:

Provided that the importer or shipping agency shall notify the arrival of the carrier to the Director and, in case of ship, shall obtain anchorage permit from the Director in Form-iii A.

(2) The Discharge of such commodities shall be subject to the clearance by the Plant Quarantine Officer after necessary examination, fumigation and treatment, if necessary , at the cost of the consignee.

28 Y. Notwithstanding anything contained in these rules relating to importation, the Director may at any time prohibit or restrict the importation of any plant and plant products which , in his opinion, may be source of infection or infestation to plants and may, in the case of an emergency, waive, alter or modify any condition relating to such importation."

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

<sup>1</sup>[ "29. INSPECTION AND CERTIFICATE OF PLANTS AND PLANT PRODUCTS FOR EXPORT.-

(1) Every person who intends to export plants and plant products shall submit an application in Form-IVA to the Director or Plant Quarantine Officer concerned for inspection of plants or plant products before shipment thereof. The application shall be made at least a day before the shipment in case of perishable goods and fifteen days in case of non-perishable goods so as to allow proper inspection and treatment (if required) and certification.

(2) If the plant or plant product is found, upon inspection to be free from injurious insect and plant diseases, a phytosanitary certificate in Form V shall be issued by the Director or Plant Quarantine Officer, as the case may be, to the exporter to accompany the shipment.

(3) No phytosanitary certificate shall be granted for any plant or plant product which has been taken from or mixed with other plants or plant products which are diseased or infested.

(4) No Phytosanitary certificate shall be granted for any plant or plant product, intended for shipment to a country in which its entrance is absolutely prohibited.

(5) For the purpose of inspection, fumigation or destruction of plant or plant product, the required conveyance and other related expenses shall be provided or borne by the exporter.

(6) All risks or damages of any kind associated with , or resulting from fumigation or other treatment shall devolve in the exporter."

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<sup>1</sup> Subs. for Rule (29), (30), & (31) by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।



32. The list of officer authorized to inspect and grant the 1 [“ Phytosanitary Certificate”] is at Form V1.

2 [“32 A. INSPECTION OF SHIP'S CONTAINER.-

(1) The shipping agent of a ship carrying plants or plant products shall supply the shipping manifest to the Plant Quarantine Officer at least fourteen days before the arrival of the ship. On arrival of the ship, containers loaded with cargoes of plant origin which are likely to carry or harbour pests, shall be examined by the Plant Quarantine Officer who shall render treatment, if necessary, to the containers to ensure complete annihilation of all pests and to stop their spread inside the country. All expenses pertaining to such treatment shall be borne by the shipping agent concerned at such rate as may be fixed by the Director.

(2) The port authority of Chittagong port and the port of Mongla shall notify to the Plant Quarantine Officer the arrival of ships carrying passengers and cargoes of plant origin and the Plant Quarantine Officer shall accompany the berthing team as a member of the Berthing Committee and shall, on the basis of the shipping manifest, examine the plants and plant products accompanying the passengers and cargoes of plant origin and shall adopt such measures as may be deemed appropriate to stop spread or dissemination of pests from the ships.

(3) The Plant Quarantine Officer shall also inspect the pantry and store room of food materials and shall keep the store sealed till such times as the ship is ready for sail. During the period of stay of the ship at the port, necessary food provision shall be made available for consumption of the crew in a separate well protected store room so that no pest can escape.

(4) No container with dunnage or loaded with plant or plant product shall be allowed to move outside the protected area of the port without a written permission of Plant Quarantine Officer in Form-VII.

(5) No person, agency, firm, organization or institution other than the Plant Quarantine Officer of the Department shall make such inspection and render such treatment. Any such inspection made or treatment done and any certificate issued to that effect except by the Plant Quarantine Officer shall be illegal and shall be liable to punishment specified in section 5(2) of the Act.

---

1 Subs. for the words “Official certificate” by notification

2. Inserted.

1[ “32.  
B.  
Validity  
of phyto-  
sanitary  
certifi-  
cate.-

(1) The plant and plant product for which a phytosanitary certificate has been issued shall be shipped within fifteen days from the date of inspection in case of non-perishable goods and twenty four hours in case of perishable goods, failing which the phytosanitary certificate shall be treated as not valid. In such case the authority issuing the phytosanitary certificate shall not be held responsible for any objection raised or if the phytosanitary certificate is dishonored by the importing country . In case the plant or plant product is shipped after the expiry of the period specified and re-examination shall be done by the concerned Plant Quarantine Officer after physically examining the plant or Plant product lying abroad. All expenses for travel of the Plant Quarantine Officer to the place of inspection abroad and back shall be borne by the exporter .

(2) If the plant or plant product in respect of which a phytosanitary certificate has been issued has not been shipped within the period specified, a phytosanitary certificate by Plant Quarantine Officer shall be required. A fresh application from the exporter for the issuance of the new phytosanitary certificate shall be necessary and the plant Quarantine Officer concerned shall, after inspection of the plant or plant product and realization of necessary fee, issue such certificate.

“32.C REISSUANCE OF PHYTOSANITARY CERTIFICATE IN CASE OF LOSS OR DAMAGE.-

Phytosanitary certificate once issued is lost or damaged, the exporter shall make an affidavit in the court of Magistrate of the first class to that effect stating clearly the circumstances under which it has been lost or damaged and shall apply to the concerned Plant Quarantine Officer, after paying a fine of one hundred taka in the Government. Treasury under the code no -1- 4331-0000-2043 for reissuance of a phytosanitary certificate after cancelling the phytosanitary certificate lost or damaged. An application for re-issuance of a Phytosanitary certificate under this rule shall be made within the validity period of the previous certificate and before shipment of the plants or plant products.

1 Inserted by notification

33. 1[“ **PLANT PRODUTS**”] **IN TRANSIT:**

(1) The provisions of these rules shall also apply to plants or plant products under transit through Bangladesh by land, air or sea and the plant or plant product in transit shall not be removed from the carrier except with the permission of the Director; and, in case of any plant or plant product the entry of which into Bangladesh is prohibited or restricted, the Director may order the detention, treatment or destruction of such plant or plant product in transit or its return to its sender by such means as he may approve.

(2) The shipments and consignments must however, be accompanied by Phytosanitary certificate issued by the Plant Quarantine authority from the country of origin and shall be so packed that there are no chances of any insect pests and diseases escaping from the packages or the containers.

5[“ MISCELLANEOUS”]

5[“34. **PAYMENT OF FEES AND PLANT QUARANTINE CHARGES:-**

Importers and exporters of plant and plant products shall pay to the Government such charges for inspection, examination and treatment of plants and plant products and such fees for the issuance of certificates and permits under these rules as the Director may, with the approval of the Government, determine from time to time”]

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1 Subs. for ‘Plant material’ by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

2 Subs. for sub-rule (1)

3 Subs. for ‘Official certificate’

4 Subs. for proper officer’

5 Inserted

<sup>1</sup>[ " 35. MEASURES IN CASE OF APPEARANCE OF EXOTIC PESTS.-

Whenever any exotic pest appears on accidental entry, in any crop field, the owner or the person in actual possession or management or control of the crop field shall immediately report it to the Director or the nearest Plant Quarantine Officer. The Director shall . on receipt of such information, adopt the following measures:—

- (a) Cordon the area where the exotic pest has erupted to stop movement of any plant and plant product from the affected area to neighbouring localities or crop fields;
- (b) adopt appropriate chemical control measure including destruction of the infested or infected crop by burning it, if, in the opinion of the Director, such action is of utmost necessity for complete eradication of the pest and for stopping its further spread within the country, at the expenses of the owner of the crop field;
- (c) the crop field so affected shall not be used for cultivation of the same variety of crop or crops of allied group for such period as may be specified by the Director; and the left over stock of planting material shall not be used for sowing and shall be confiscated and destroyed by the Director at the expenses of the owner of the crop field;
- (d) No person as owner of the crop field or in actual possession or management or control of the crop field shall resist or obstruct the Director or his authorized representative in the execution of control or eradication or destruction process mentioned in clause (a),(b) or (c) nor shall be refuse to carryout such instructions pertaining to control and eradication of pest as may be issued by the Director from time to time.

36. PENALTY-

Whoever willfully contravenes any provision of these rules or forges, counterfeits, alters or defaces any permit or certificate issued under these rules shall be punishable with fine which may extend to one thousand taka";]

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<sup>1</sup> Inserted by notification এস আর ও ২৭৪- আইন/৮৯, তাং ৩০ শে জুলাই, ১৯৮৯ ইং।

FORM-1  
(See Rule 5)

To  
The Director,  
Plant Protection Wing,  
Deptt. of Agricultural Extension ,  
Khamarbari, Farmgate,  
Dhaka-1215

Subject: Application for Import Permit to import plant or plant products.

Sir,

I hereby apply for an Import Permit to import plant or plant products as required under rule 5 of the Destructive Insect and pest Rules, 1966 (Plant Quarantine).

Necessary particulars are given below:—

1. Name of the plants / plant product :
2. Quantity :
3. Name of the exporting country :
4. Country where grown :
5. Expected date of arrival :
6. Means of transportation : By air/sea/vessel/train/truck /postal/parcel.
7. Point of entry :
8. Purpose of import :
9. Name and detailed address of importer :

Signature

(Form 'IA')  
(See Rule 3 & 4 )  
Government of the People's Republic of Bangladesh  
Ministry of Agriculture  
Department of Agricultural Extension  
Plant Protection Wing  
(Plant Quarantine)

Your Reference:

No.....  
Khamarbari, Farmgate,  
Dhaka-1215.

IMPORT PERMIT

Special Import Permit.

Permission is hereby granted to.....to import.....  
grown in .....through.....

The importation will be regulated by the following conditions:-

- (1) The consignments is accompanied with Phytosanitary Certificate from the country of origin declaring the plant or plant products has been rendered free from injurious insects and pests by effective fumigation.
- (2) On arrival of the consignment it will be examined and fumigated by the technical staff of this Department stationed at .....and will only  
be released if they are found free from diseases or plant pests otherwise the same will be destroyed.
- (3) The permit is valid for three months from the date of its issue.
- (4) Additional conditions if any:

Director/ Deputy Director  
(Quarantine)

To -----  
-----

Copy to:

1. The collector of Customs, Custom House.....
2. The Quarantine Entomologist, Plant Quarantine Station,.....

(Form -II)  
(See Rule 8(8) )  
Government of the People's Republic of Bangladesh  
Ministry of Agriculture  
Department of Agricultural Extension  
Plant Protection Wing  
(Plant Quarantine)

No.....  
Khamarbari, Farmgate,  
Dhaka.

The Plant or Plant products mentioned below having been imported without the prior permission of the Director, Plant Protection Wing, Department of Agricultural Extension and unaccompanied with a valid Phytosanitary Certificate as required by the Destructive Insect and Pest Rules, 1966 is hereby order to be confiscated and destroyed.

Particulars of the plant or plant products

Consignee

The Collector of Customs/Joint  
Collector of Customs/Asstt. Collector  
of Customs / Supdt. of Customs.

Director / Deputy Director  
(Quarantine)

Copy for information to:-

(Form-III)  
(See Rule 8(5) )  
Government of the People's Republic of Bangladesh  
Ministry of Agriculture  
Department of Agricultural Extension  
Plant Protection Wing  
(Plant Quarantine)

No.....P.Q. Station.....

RELEASE ORDER

The plant and plant products mentioned below have been thoroughly examined, fumigated/ treated and found free from injurious insect, pest and diseases:

They are now considered fit for release to the consignee.

Particulars of plants and plant products.

Signature

Quarantine Entomologist

To  
The Collector / Joint Collector/ Deputy Collector/ Superintendent of Customs

.....  
.....

Copy to:-

1. Mr/Mrs. ....with reference to his /their application  
No.....dt.....
2. The Director, Plant Protection Wing, Department of Agricultural Extension,  
Khamarbari, Farmgate, Dhaka-1215 for information with reference to his Memo  
No.....date.....

Quarantine Entomologist



(Form -III A)

(See Rule 28X(1) )

Government of the People's Republic of Bangladesh  
Ministry of Agriculture  
Department of Agricultural Extension  
Plant Protection Wing  
(Plant Quarantine)

Your Reference

No.....  
Khamarbari, Farmgate,  
Dhaka.  
Dated.....

ANCHORAGE PERMIT

Permission is hereby granted to s.s.....expected  
on .....carrying.....from.....to anchor at  
Chittagong/Mongla Harbour subject to the condition that the vessel will not discharge its  
cargo till it is examined and if necessary, fumigated/ treated by the Plant Quarantine Officer,  
Chittagong / Mongla.

Director

To

M/s.....  
.....

Copy to:-

1. The Collector of Custom, Custom House, Chittagong.
2. The Collector of Customs and Excise, Khulna.
3. The Traffic Manager, Port of Mongla Authority, Khulna.
4. The Traffic Manager, Chittagong Port Trust, Chittagong.
5. The Quarantine Entomologist.....

(Form -IV)

See Rule 28(2)(b)(ii)

Government of the People's Republic of Bangladesh

Ministry of Agriculture

Department of Agricultural Extension

Plant Protection Wing

(Plant Quarantine)

Your Reference

No.....  
Khamarbari, Farmgate,  
Dhaka.  
Dated.....

ANCHORAGE PERMIT

Permission is hereby granted to the S. S.....  
expected on .....carrying.....raw cotton to anchor at  
Mongla/Chittagong Harbour. Necessary examination/ fumigation will be conducted by the  
Quarantine Entomologist Mongla/Chittagong on its arrival subject to the condition that no  
vessel shall discharge raw cotton during a period of rain, mist or drizzle.

Director

To

M/s.....  
.....  
.....

Copy to:-

1. The Collector of Custom, Custom House, Chittagong.
2. The Collector of Customs and Excise, Khulna.
3. The Traffic Manager, Port of Mongla Authority, Khulna.
4. The Traffic Manager, Chittagong Port Trust, Chittagong.
5. The Quarantine Entomologist.....

(Form -IVA)  
(See Rule 29)

To  
.....  
.....

Subject:- Application for Phytosanitary Certificate for exportable plants/plant products.

I/we hereby apply for Phytosanitary Certificate as required under Rule 29 of Destructive Insects and Pests Rules, 1966 (Plant Quarantine). Particulars of the consignment in respect of which the certificate is required are given below:-

1. Name and address of exporter
2. Name and address of consignee
3. Name of commodity
4. Quantity
5. Means of Export
6. Place of origin
7. Contract No. and date if any
8. Point of entry and name of the country to which to be exported.
9. Expected date of shipment
10. Whether fumigation/ treatment is needed
11. Distinguishing mark, if any

I/We hereby declare that the particulars given above are correct. The commodities are now lying for inspection in our godown at .....

Date.....

Signature of Applicant

(Form -V)

See Rule 29(2)

Government of the People's Republic of Bangladesh

Ministry of Agriculture

Department of Agricultural Extension

Plant Protection Wing

(Plant Quarantine)

PHYTOSANITARY CERTIFICATE

No.....

Place.....

.....  
To the Plant Protection Organization of ..... Date Inspection

.....  
Description of consignment

Name and address of Exporter : .....

Declared Name and address of consignee : .....

Number and description of packages :

Distinguishing Mark :

Place of origin :

Declared means of conveyance :

Declared point of entry :

Name of produce and quantity declared :

Botanical name of plant  
.....

This is to certify that the plants or plant products described above have been inspected according to appropriate procedure and are considered to be free from quarantine pests and practically free from other injurious pests and that they are considered to conform with the current Phytosanitary regulation of the importing country.

Disinfestation/ Disinfection

Date	Treatment
Chemical (active ingredient) :	
Duration of temperature :	
Concentration :	
Additional information :	
Additional declaration :	

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Name of authorized Officer  
Signature

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No liability shall be attached to the Ministry of Agriculture or the Department or to any of its Officer or representative with respect to this certificate.

Form -VI  
(See Rule 32)  
Government of the People's Republic of Bangladesh  
Ministry of Agriculture  
Department of Agricultural Extension  
Plant Protection Wing  
(Plant Quarantine)

List of Officers Authorized to inspect and grant the  
(Phytosanitary Certificate)

- (1) Director, Plant Protection Wing, Department of Agricultural Extension.
- (2) Deputy Director (Quarantine), Department of Agricultural Extension.
- (3) Quarantine Entomologist, Department of Agricultural Extension.

Form -VII  
(See Rule 32A(4))  
Government of the People's Republic of Bangladesh  
Ministry of Agriculture  
Department of Agricultural Extension  
Plant Protection Wing  
(Plant Quarantine)

No..... Plant Quarantine.....  
.....

**MOVEMENT ORDER**

Container(s) No.....  
..... Loaded with.....  
..... Originated from.....  
has/have been examined and treated/fumigated and is/are permitted to move outside the  
protected area of the Seaport/Airport/ land Route of .....

To  
The Collector/ Joint Collector/Deputy Collector/Superintendent of Customs.....  
.....  
No..... Dated.....

Copy to:

- (1) Mr.....with  
reference to his /their application No.....  
dated.....
- (2) Director, Plant Protection Wing, Department of Agricultural Extension for  
information.

Quarantine Entomologist

রাষ্ট্রপতির আদেশ ক্রমে

মঞ্জুরুল আলম

উপ-সচিব

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THE PESTICIDES ORDINANCE, 1971

[22<sup>nd</sup> January, 1971]

**ORDINANCE NO. II OF 1971**

AN

ORDINANCE

**to regulate the import, manufacture, formulation, sale, distribution and use of pesticides**

WHEREAS it is expedient to regulate the import, manufacture, formulation, sale, distribution and use of pesticides and for matters ancillary thereto;

1\* \* \* \* \*

Now, THEREFORE, in pursuance of the Proclamation of the 25<sup>th</sup> day of March, 1969, read with the Provisional Constitution Order, and in exercise of all powers enabling him in that behalf, the President is pleased to make and promulgate the following Ordinance:—

CHAPTER I

INTRODUCTORY

1.-(1) This Ordinance may be called the <sup>2\*</sup> Pesticides Ordinance, 1971.

(2) It extends to the Whole of <sup>3</sup>[Bangladesh]

(3) It shall come into force at once.

2. The provisions of this Ordinance shall be in addition to, and not in derogation of, the provisions of the Poisons Act, 1919, and any other law for the time being in force.

3. In this Ordinance, unless there is anything repugnant in the subject or context, the expression—

(a) “adulterated” when used with reference to a pesticide, means any pesticide the strength or purity of which falls below the professed standard or quality which is expressed on its label or under which it is sold or a pesticide any valuable ingredient of which has been wholly or partially extracted;

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<sup>1</sup>The second paragraph of the preamble was omitted by Act V of 1980, s.3.

<sup>2</sup>The word “Agricultural” was omitted by Ord. No. XXV of 1983, s.3.

<sup>3</sup>The word “Bangladesh” was substituted for the word “Pakistan”.

- (b) “advertise” means to make known by publication or distribution of any advertisement, circular or other notice;
- (c) “brand” means the trade name applied by an importer, manufacturer, formulator or vendor to the goods imported, manufactured or sold by him;
- (d) “Committee” means the <sup>1\*</sup> Pesticide Technical Advisory Committee constituted under this Ordinance;
- (e) “formulation” means the process by which a pesticide is converted, by mixing with other substances, into a form in which it is ready to be used;
- (f) “fungi” means all rusts, smuts, mildews, moulds, yeasts and similar forms of plant life prescribed in this behalf and includes bacteria affecting plant life;
- (g) “Government Analyst” means a Government Analyst appointed under this Ordinance;
- (h) “guarantee” means the statement indicating the strength, effectiveness and other qualities of a brand of a pesticide which an importer, manufacturer, formulator, vendor or person holding stock for sale of a brand of a pesticide is required to submit under the rules at the time of applying for the registration of the brand;
- (i) “Inspector” means an Inspector appointed under this Ordinance;
- (j) “ingredient” means any material used in making a pesticide;
- (k) “insect” means any of the small invertebrate animals commonly known as insects and includes such forms of animal life as may be prescribed;
- (l) “label” means the written, printed or graphic matter on, or attached to, a pesticide or the immediate container thereof, and the outside container or wrapper of the retail package, if any, of the pesticide;
- (m) “package” includes, every container;
- (n) “pesticide” means any substance or mixture of substances used or represented as a means for preventing, destroying, repelling, mitigating or controlling, directly or indirectly, any insect, fungus, bacterial organism, nematodes, virus, weed,

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<sup>1</sup>The word “Agricultural” was omitted by Ord. No. XXV of 1983, s.3.

Rodent, or other plant or animal pest; but does not include a substance which is a ‘drug’ within the meaning of the Drugs Act, 1940;

(o) “prescribed” means prescribed by rules made under this Ordinance;

(p) “registered” means registered under this Ordinance;

(q) “registration number” means a specific number assigned by the <sup>1</sup>[Government] to each registered brand of pesticide;

(r) “rules” means rules made under this Ordinance;

and

(s) “weed” means any plant which grows where not wanted.

**CHAPTER II**  
**IMPORT, MANUFACTURE, FORMULATION,**  
**<sup>2</sup>[REPACKING,] SALE, DISTRIBUTION**  
**AND USE OF PESTICIDES**

4. No person shall import, manufacture, formulate, <sup>3</sup>[repack,] sell, offer for sale, hold in stock for sale or in any to be manner advertise any brand of pesticide which has not been registered in the manner hereinafter provided. Pesticides to be registered

5.-(1) Any person intending to import, manufacture, formulate, <sup>3</sup>[repack,] sell, offer for sale, hold in stock for sale or advertise any brand of a pesticide may apply to the <sup>1</sup>[Government] for the registration of the brand under such name as he may indicate in the application. Application for registration of pesticides

(2) An application under sub-section (1) shall be in such form, be accompanied by such fee and contain such statements and information as may be prescribed.

(3) Where the person making an application under sub-section (1) is not domiciled in <sup>4</sup>[Bangladesh], the application shall, besides such person, be signed by his agent or representative in <sup>4</sup>[Bangladesh].

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<sup>1</sup>the word “Government” was substituted for the words “Central Government” by Act V of 1980, s. 2.

<sup>2</sup>The word and comma “REPACKING,” in the heading were inserted, *ibid.*, after the word and comma “FORMULATION,” s. 4.

<sup>3</sup>The word and comma “repack,” were inserted, *ibid.*, after the word and comma “formulate.”

<sup>4</sup>The word “Bangladesh” was substituted for the word “Pakistan” by Act V of 1980, s. 2(a).

(4) Upon the receipt of an application under sub-section (1), the <sup>1</sup>[Government] may register a brand of a pesticide by the name indicate in the application, if it is satisfied that—

(a) the brand is not such as would tend to deceive or mislead the purchaser with respect to the guarantee relating to the pesticide or its ingredients or the method of its preparation; or

(b) the guarantee relating to the pesticide or its ingredients is not the same as that of another registered brand or is not so similar thereto as to be likely to deceive; or

(c) it is effective for the purpose for which it is sold or represented to be effective; or

(d) it is not generally detrimental or injurious to vegetation, except weeds, or to human or animal health even when applied according to directions.

5. When it registers a brand of a pesticide on the application of any person, the <sup>1</sup>[Government] shall grant to him a certificate of registration in such form as may be prescribed.

6. The registration of a brand of pesticide shall be effective from the date of its registration until the thirtieth day of June of the third year following the year of registration. Period of which registration shall be effective.

7. If, at any time after the registration of the brand of a pesticide, the <sup>1</sup>[Government] is of opinion that the registration has been secured in violation of any of the provisions of this Ordinance or the rules or that the pesticide is ineffective against pests or hazardous to vegetation, other than weeds, or to human or animal life, the <sup>1</sup>[Government] may, after giving to the person on whose application it had been registered an opportunity of being heard, cancel the registration. Cancellation of registration

8.-(1) The <sup>1</sup>[Government] may, on the application of the importer, manufacturer, formulator, <sup>2</sup>[repacker] vendor or stock-holder of a registered brand of a pesticide in the guarantee of in gradients of which no change has taken place since the date of its registration, renew the registration of the brand for a further period of three years. renewal of registration

(2) An application under sub-section (1) shall be in such form and be accompanied by such fee as may be prescribed and shall be made before the expiration of the period for which the registration of the brand to which it relates is effective.

<sup>3</sup>[8A.-(1) Any person may, after obtaining a licence granted by the licensing authority, import, manufacture, formulate, repack, sell, offer for sale, hold in stock for sale, involve in pest control operation on commercial basis or advertise in any manner any brand of registered pesticide. Requirement of licence

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<sup>1</sup>The word "Government" was substituted for the words "Central Government" by Act V of 1980., s. 2.

<sup>2</sup>The word and comma "repacker," were inserted, *ibid.*, after the word and comma "formulator,".

<sup>3</sup>New section 8A was inserted, *ibid.*, after section 8.

(2) Any person intending to import, manufacture, formulate, repack, sell, offer for sale, hold in stock for sale, involve in pest control operation on commercial basis or advertise any brand of registered pesticide may apply for a licence to the licensing authority.

(3) An application under sub-section (2) shall be in such form, be accompanied by such fee and contain such statements and information as may be prescribed.

(4) A licence granted under this section shall be in such form and subject to such conditions as may be prescribed.

(5) A licence granted under this section shall, unless suspended or cancelled under sub-section (6) remain valid for a period of two years from the date of issue of the licence and may, on payment of such fees as may be prescribed, be renewed for a like term.

(6) The licensing authority shall have power to suspend or cancel the licence:

Provided that no licence shall be suspended or cancelled without giving the licence an opportunity of showing cause and of being heard in person.

(7) Any licence aggrieved by an order of the licensing authority under sub-section (6) may, within sixty days from the date of the order and on payment of such fee as may be prescribed prefer and appeal to the Government whose decision in the matter shall be final.

(8) In this section, the expression "licensing authority" shall mean such authority as may be prescribed.]

9. If any pesticide into <sup>1</sup>[Bangladesh] is found to be adulterated or incorrectly or misleadingly tagged, labelled or named, or if its sale in any way contravenes any of the provision of this Ordinance, the <sup>2</sup>[Government] may, by notification in the official Gazette, prohibit the further import of the pesticide in to <sup>1</sup>[Bangladesh].

Importation may be prohibited

10. No person shall sell or offer or expose for sale, advertise or hold in stock for sale any pesticide unless each package containing the pesticide, and every tag or label durably attached thereto, is branded or marked in printed characters in such form and in such manner as may be prescribed.

Labelling of packages

3[10A.-(1) The Government may, by notification in the official Gazette, fix –

Power to fix maximum price of pesticides, etc.

(a) the maximum price at which any pesticide specified in the notification may be sold;

<sup>1</sup>The word "Bangladesh" was substituted for the word "Pakistan" by Act V of 1980, s.2(a).

<sup>2</sup>The word "Government" was substituted, *ibid.*, for the word "Central Government".

<sup>3</sup>New section 10A was inserted, *ibid.*, after section 10.

(b) the maximum rate of commission that may be allowed to a wholesaler or retailer for distribution or sale of pesticide.

(2) The Government may, for the purpose of sub-section (1), require a licence to furnish such information as may be necessary.]

11. No person shall store or use any pesticide save in accordance with rules made under this Ordinance. Storages and use of pesticide

### CHAPTER III

#### THE<sup>1</sup>\* PESTICIDE TECHNICAL ADVISORY COMMITTEE, TEC.

12. – (1) As soon as may be after the commencement of this Ordinance the <sup>2</sup>[Government] shall constitute a committee, to be called the <sup>3</sup>\* Pesticide Technical Advisory Committee, to advise the <sup>2</sup>[Government] on technical matters arising out of the administration of this Ordinance and to perform any other functions assigned to it by or under this Ordinance. The pesticide technical Advisory Committee

(2) The Committee shall consist of a Chairman and such number of Vice-Chairman and other members, being officers of the <sup>4</sup>[Government and] persons representing trade and industry engaged in pesticide business, as the <sup>2</sup>[Government] may appoint;

<sup>5</sup>\* \* \* \* \*

(3) The names of the Chairman, the Vice-Chairman and the other members of the Committee shall be published in the official Gazette.

(4) The <sup>2</sup>[Government] shall appoint one of the member of the Committee, being an officer of <sup>6</sup>[the] Government, to be the Secretary of the Committee for the period for which he is such member.

(5) The non-official members of the Committee shall hold office for a term of three years and shall be eligible for reappointment.

(6) A member of the Committee may, at any time, resign his office by writing under his hand addressed to the Chairman; but the seat of such member shall not be deemed to have fallen vacant unless the resignation has been accepted by the Chairman with the previous approval of the <sup>1</sup>[Government]

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<sup>1</sup>The word "AGRICULTURE" in the heading was committed by ord, No XXV of 1983, s.4  
<sup>2</sup>The word "Government" was substituted for the words "Central Government" by Act v of 1980. s.2.  
<sup>3</sup>The word "Agriculture" in sub-section (1) of section 12 was omitted, by Ord. No. XXV of 1983, s.5.  
<sup>4</sup>The words "Government and" were substituted for the words "Central Government or a Provincial Government or" by Act V of 1980, s. 10(a)  
<sup>5</sup>The Proviso of section 10 was omitted, *ibid.*  
<sup>6</sup>The word "the" was substituted, *ibid.*, for the word "that"

(7) A person appointed to fill a vacancy created by the resignation or death of a member shall hold office for the residue of the term of his predecessor.

(8) The functions of the Committee may be exercised notwithstanding any vacancy in the membership thereof.

(9) The Committee shall have the power to regulate with the prior approval of the <sup>1</sup>[Government] the procedure for the conduct of its business.

(10) The Committee may appoint sub-committees consisting of specialists for the consideration of particular matters for such periods, not exceeding three years, as it may consider necessary.

13.-(1) As soon as may be after the commencement of this Ordinance, the <sup>1</sup>[Government] shall set up a Pesticide Laboratory suitably equipped to carry out the functions entrusted to it by or under this Ordinance. Pesticide Laboratory

(2) The functions of the Pesticide Laboratory and the mode of submission of samples for analysis or test to the Laboratory shall be such as may be prescribed.

(3) The Secrecy of the formulae of brands of Pesticides, samples of which are submitted to the Pesticide Laboratory for analysis or test, shall be duly safeguarded in the manner prescribed.

14. The <sup>1</sup>[Government] may, by notification in the official Gazette, appoint as many persons as it deems fit to be Government analysts for pesticides and, where it appoints more than one person to be Government Analysts, shall specify in the notification the local limits within which each one of them shall perform the functions of Government Analyst. Government Analysts.

15. The <sup>1</sup>[Government] may, by notification in the official Gazette, appoint from amongst the officers of the <sup>2</sup>[Government] employed for work relating to plant protection such number as it deems fit to be Inspectors within such local limits as may be specified in the notification. Inspectors

16. An Inspector may, within the local limits for which he is appointed, enter upon any premises where pesticides are kept or stored, whether in containers or bulk, by or on behalf of the owner, including premises belonging to a bailee, such as a railway, a shipping company or any other carrier, and may take samples therefrom for examination. No compensation shall be payable for a reasonable quantity taken as a sample. Powers of Inspectors

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<sup>1</sup>Subs. By Act V of 1980, s. 2(b), for "Central Government".

<sup>2</sup>The word "Government" was substituted for the words "Central Government or a Provincial Government", *ibid.*, s.2.



17.-(1) Where an Inspector takes a sample of a pesticide for the purpose in writing in the prescribed form to the person from whose possession he takes it and, in the presence of such person (unless he willfully absents himself), shall divide the sample into three portions and effectively seal and suitably mark the same and permit such person to add his own seal and mark to all or any of the portions so sealed and marked:

Provided that, where the pesticide is made up in containers of small volume, instead of dividing a sample as aforesaid, the Inspector may, and if the pesticide be such that it is likely to deteriorate or be otherwise damaged by exposure shall, take three of the said containers after suitably marking the same and, where necessary, sealing them.

(2) The Inspector shall restore one portion of a sample so divided or one container, as the case may be to the person from whom he takes it, and shall retain the remainder and dispose of the same as follows:—

- (i) he shall forthwith send one portion or container to the Government Analyst for test or analysis; and
- (ii) he shall send the second portion or container to the <sup>1</sup>[Government].

18.-(1) The Government Analyst to whom a sample of any pesticide has been forwarded by an Inspector under sub-section (2) of section 17 shall deliver to the Inspector, in triplicate in the prescribed form, a signed report of the result of the test of analysis conducted by him.

(2) The Inspector shall deliver one copy of the report received by him to the person from whose possession the sample was taken and shall send one copy to the <sup>1</sup>[Government].

(3) Any document purporting to be a report signed by the Government Analyst of an analysis conducted by him under this Chapter shall be conclusive evidence of the particulars stated therein unless the person to whom the report has been delivered under sub-section (2) disputes the correctness of the analysis conducted by the Government Analyst and within thirty days of the delivery of the report to him, places before the <sup>1</sup>[Government] evidence which in his opinion controverts the correctness of such analysis.

(4) Where the evidence placed before the <sup>1</sup>[Government] under sub-section (3) is such as would in its opinion justify a further investigation, it may cause a second part of the same sample to be analysed at the Pesticide Laboratory.

(5) After the sample forwarded to it by the <sup>1</sup>[Government] has been analysed by the Pesticide Laboratory, the Laboratory shall record the result of the analysis in a certificate of analysis and forwarded the certificate to the <sup>1</sup>[Government].

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<sup>1</sup>The word “Government” was substituted for the words “Central Government” by Act V of 1980, s.2.

(6) A certificate of analysis prepared by the Pesticide Laboratory shall be conclusive evidence of the facts stated therein.

19. The <sup>1</sup>[Government] may publish in such manner as it may deem fit the result of the test and analysis of a pesticide made by a Government Analyst or the Pesticide Laboratory under section 18 together with such other information relating thereto, if any, as it may consider necessary. Publication of results of the test and analysis

20.- (1) Any person who has purchased a pesticide may apply to a Government Analyst to conduct a test or analysis of the pesticide. Purchaser of pesticide may have tested or analysed

(2) An application under sub-section (1) shall be made in such form and manner and be accompanied by such fee as may be prescribed.

(3) The Government Analyst to whom an application is made in accordance with sub-section (2) shall conduct the test or analysis and issue to the applicant a report signed by him of the test or analysis.

#### **CHAPTER IV MISCELLANEOUS**

21. Any person who—

- (a) sells, offers or exposes for sale, holds in stock for sale or advertises a registered brand of a pesticide which is not of the nature, substance or quality which it is represented to be by the brand or mark on the package containing it or, as the case may be, on the tag or label attached thereto; or Offences and penalties.
- (b) falsely represents a pesticide in an advertisement; or
- (c) contravenes any of the provision of this Ordinance or the rules for the contravention of which no other penalty is provided in this Ordinance,

shall be punishable, for the first offence, with fine which may extend to one thousand <sup>2</sup>[Taka] and for every subsequent offence with fine which shall not be less than two thousand <sup>2</sup>[Taka] or more than three thousand <sup>2</sup>[Taka] and in default of payment of any such fine with imprisonment for a term which may extend to one year.

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<sup>1</sup>The word "Government" was substituted for the words "Central Government" by Act V of 1980, s.2.

<sup>2</sup>The word "Taka" was substituted for the word "rupees" by Act V of 1980.

22. Whoever gives false warranty to a dealer or purchaser in respect of a pesticide, that it compiles in all respects with the provisions of this Ordinance shall, unless he proves that when he gave the warranty he had good reason to believe the same to be true, be punishable with fine which may extend to one thousand <sup>1</sup>[Taka]. Manufacturer's warranty to dealers
23. Any person who— Unlawful use of registration number, lowering of pesticidal value or hindering the inspector from performing his duty.
- (a) unlawfully uses any registration number assigned or as if it had been assigned under this Ordinance, or
  - (b) willfully alters the composition of a pesticide by mixing any other substance therewith after the said pesticide has been placed on the market by the manufacturer, importer or vendor, or
  - (c) willfully obstructs, hinders, resists, or in any way opposes any Inspector in performing his duties under this Ordinance,
- shall be punishable with fine which shall not be less than two thousand and five hundred <sup>1</sup>[Taka] or more than five thousand <sup>1</sup>[Taka] or with imprisonment for a term which shall not be less than one year or more than two years.
- 24.-(1) If an Inspector has reason to believe that an offence punishable under this Ordinance or the rules made thereunder has been, is being or is about to be committed at any time or place, he may enter and search such place and seize any pesticide, article or thing to which the offence relates found therein. Entry and seizure
- (2) Any pesticide, article or thing seized under sub-section (1) shall be disposed of in accordance with the decision of the Court before which the offender is prosecuted for a contravention of any of the provisions of this Ordinance or the rules.
25. If any person is convicted of an offence punishable under this Ordinance committed by him in respect of any pesticide, article or thing, the Court convicting him may further direct that the pesticide, article or thing shall be forfeited to the <sup>2</sup>[Government]. Power of Court to order forfeiture
- 26.-(1) No Court inferior to that of a magistrate of the first class shall try an offence punishable under this Ordinance. Cognizances of offences, etc.
- (2) Notwithstanding anything contained in section 32 of the Code of Criminal Procedure, 1898, it shall be lawful for any Magistrate of the first class to pass any sentence authorized by this Ordinance even if such sentence exceeds his powers under the said section 32.

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<sup>1</sup>The word "Taka" was substituted for the word "rupees" by Act V of 1980.

<sup>2</sup>The word "Government" was substituted for the words "Central Government" by Act V of 1980, s. 2(a).

- Act of 1898
27. Any Magistrate of the first class or any bench or Power to try offences summarily  
Magistrates invested with the powers of a magistrate of the first class empowered for the time being to try in a summary way the offences specified in sub-section (1) of section 260 of the Code of Criminal Procedure, 1898, may, on application in this behalf being made by the prosecution, try in accordance with the provisions contained in sections 262 to 265 of that Code, any offence punishable under section 21.
28. No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done under this Ordinance or the rules. Indemnity
- 29.-(1) The <sup>1</sup>[Government] may, in consultation with the <sup>2</sup>\* Pesticide Technical Advisory Committee and after previous publication in the official Gazette, make rules for carrying the provisions of this Ordinance into effect. Power to make rules
- (2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—
- (a) the nomenclature of every form of plant and animal life that shall be deemed to be insects, fungi or other plant or animal pests;
  - (b) the form in which an application for the registration of a brand of a pesticide or for the renewal of registration shall be made, the information that shall be furnished therewith and the fee that shall accompany it;
  - (c) the procedure for the grant of certificates of registration of brands of pesticides and renewal of such registration and the form of such certificates;
  - (d) the language of the tags or label to be attached to the containers and packages containing pesticides and the character and location of the printing to be marked on such tags, labels and containers;
- <sup>3</sup>[(dd) the form in which an application for licence or for its renewal shall be made, the information that shall be furnished therewith and the fee that shall accompany it; and the fee for preferring an appeal against an order of suspension or cancellation of licence;]
- (e) the functions of the Pesticides Laboratory and the procedures to be followed by it in the performance of such functions, including—
    - (i) safeguarding of the secrecy of the formula of any brands of pesticides disclosed to it;

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<sup>1</sup>The word "Government" was substituted for the words "Central Government" by Act V of 1980, s. 2(a)

<sup>2</sup>The word "Agriculture" was omitted by Ord. No. XXV of 1983, s. 6(a).

<sup>3</sup>Clause (dd) was inserted after clause (d) by Act V of 1980, s.12.

- (ii) collection of samples of pesticides for test or analysis; and
- (iii) the form in which its reports of tests or analysis shall be written;
- (f) the methods of analysis to be followed, and the limits of variability to be allowed, by the Government Analyst as between the information marked on the container or on a label attached thereto or supplied to the purchaser when sold in bulk, and the results of the analysis;
- (g) the qualifications and duties of the Government Analysts;
- (h) the form in which an intimation of the purpose for which a sample is taken by an Inspector shall be given by him to the person from whose possession the sample is taken, the instruments to be employed, and the quantities to be taken, by an inspector while taking samples for test or analysis and the manner in which they should be preserved and sent to the Government Analyst and the <sup>1</sup>[Government];
- (i) the form in which an application shall be made by the purchaser of a pesticide to a Government Analyst for test or analysis of the pesticide, the manner in which a purchaser may send a pesticide for test or analysis to the Government Analyst, the information that shall be furnished with such application and the fee that shall accompany it;
- (j) the pesticides that are generally detrimental or injurious to vegetation, domestic animals or public health even when used according to directions;
- (k) the pesticides that are to be labelled “Poison” and their antidotes;
- (l) the requirements for the safe storage of pesticides;
- (m) the quantities of different brands of pesticides which a person may hold in stock at any one time and the premises in which, and the conditions subject to which, he may hold them in stock;
- (n) the precautions for the protection of workers against risk of poisoning by pesticides arising from their working—
  - (i) in connection with the use of such pesticides <sup>2</sup>; or

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<sup>1</sup>The word “Government” was substituted for the words “Central Government” by Act V of 1910, s.2(a).

<sup>2</sup>The words “in agriculture” were omitted by Ord. No. XXV of 1983, s. 6(b).

- (iii) on land on which such pesticides are being or have been used <sup>1</sup>;
- (o) the restrictions or conditions as to the purposes for which, the circumstances in which, or the methods or <sup>2</sup>[equipments for application] by which, a pesticide may be used;
- (p) the restrictions or conditions involving a general prevention or limitation of the use of any pesticide <sup>1</sup>;
- (q) the provision, and keeping available and in good order, of facilities for washing and cleaning and of other things needed for protecting persons, clothing, equipment and appliances from contamination with pesticides or for removing sources of contamination therefrom;
- (r) the observance of precautions against poisoning by pesticides including the use of things provided in pursuance of the rules, and abstentions from eating, drinking and smoking in circumstances involving risk of poisoning by pesticides;
- (s) intervals between, or limitations of, periods of exposure to risk of poisoning by pesticides;
- (t) the observance of special precautions in the case of persons who, by reason of their state of health, age, or other circumstances, are subject to particular risk of poisoning by pesticides or of injury therefrom, or imposing, in case of persons so subject, prohibitions or restrictions on employment of workers;
- (u) the measures for detecting and investigating cases in which poisoning by pesticides has occurred;
- (v) the provisions of effective facilities for prevention of poisoning by pesticides and first aid treatment; and
- (w) the provision of instruction and training in the use of things provided in pursuance of the rules and in the observance of precautions against poisoning by pesticides.

3\*                      \*                      \*                      \*                      \*                      \*

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<sup>1</sup>The words "in agriculture" were omitted by Ord. No. XXV of 1983, s. 6.

<sup>2</sup>The words "equipments for application" were substituted for the word "means" by Act V of 1980, s. 12(b).

<sup>3</sup>Section 30 was omitted by Act V of 1980, s. 13.

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
আইন, বিচার ও সংসদ বিষয়ক মন্ত্রণালয়  
বিজ্ঞপ্তি

তারিখ, ১০ কার্তিক, ১৪১৪ বঙ্গাব্দ/২৫ অক্টোবর, ২০০৭ খ্রিস্টাব্দ

নং ৩০ (মুঃপ্রঃ)।—গণপ্রজাতন্ত্রী বাংলাদেশের রাষ্ট্রপতি কর্তৃক ০৯ কার্তিক, ১৪১৪ বাৎ/ ২৪ অক্টোবর, ২০০৭ খ্রিঃ তারিখে প্রণীত নিম্নে উল্লিখিত অধ্যাদেশটি এতদ্বারা জনসাধারণের জ্ঞাতার্থে প্রকাশ করা হলো।

অধ্যাদেশ নং ৩০, ২০০৭

**The Pesticides Ordinance, 1971 (Ord. No. II of 1971) এর অধিকতর সংশোধনকল্পে প্রণীত  
অধ্যাদেশ**

যেহেতু নিম্নবর্ণিত উদ্দেশ্যসমূহ পূরণকল্পে The Pesticides Ordinance, 1971 (Ord. No. II of 1971) এর সংশোধন সমীচীন ও প্রয়োজনীয়;

এবং যেহেতু সংসদ ভাঙ্গিয়া যাওয়া অবস্থায় রহিয়াছে এবং রাষ্ট্রপতির নিকট ইহা সন্দেহজনকভাবে প্রতীয়মান হইয়াছে যে, আশু ব্যবস্থা গ্রহণের জন্য প্রয়োজনীয় পরিস্থিতি বিদ্যমান রহিয়াছে;

সেহেতু গণপ্রজাতন্ত্রী বাংলাদেশের সংবিধানের অনুচ্ছেদ ৯৩(১) এ প্রদত্ত-ক্ষমতাবলে রাষ্ট্রপতি নিম্নরূপ অধ্যাদেশ প্রণয়ন ও জারী করিলেন ঃ—

১। সংক্ষিপ্ত শিরোনাম।—এই অধ্যাদেশ The Pesticides (Amendment) Ordinance, 2007 নামে অবিহিত হইবে।

২। **Ordinance No. II of 1971** এর **section 8** এর সংশোধন।—The Pesticides Ordinance, 1971 (Ord. No. II of 1971), অতঃপর উক্ত Ordinance বলিয়া উল্লিখিত, এর section 8 এর sub-section (2) এর পর নিম্নরূপ নূতন sub-section (3) সংযোজিত হইবে, যথা ঃ—

“(3) An application for the renewal of registration shall be made at least thirty days before its expiry.”।

৩। **Ordinance No. II of 1971** এর **section 21** এর সংশোধন।—উক্ত Ordinance এর section 21 এর “one thousand” শব্দগুলির পরিবর্তে “twenty thousand”, “two thousand” শব্দগুলির পরিবর্তে “twenty thousand”, “three thousand” শব্দগুলির পরিবর্তে “fifty thousand” এবং “one year” শব্দগুলির পরিবর্তে “two years” শব্দগুলি প্রতিস্থাপিত হইবে।

৪। **Ordinance No. II of 1971** এর **section 22** এর সংশোধন।—উক্ত Ordinance এর section 22 এর “one thousand” শব্দগুলির পরিবর্তে “twenty thousand” শব্দগুলি প্রতিস্থাপিত হইবে।

৫। **Ordinance No. II of 1971** এর **section 23** এর সংশোধন।—উক্ত Ordinance এর section 23 এর—

(ক) clause (c) এর শেষে “or” শব্দটি সংযোজিত হইবে এবং উহার পর নিম্নরূপ নূতন clause (d) সন্নিবেশিত হইবে, যথা ঃ—

“(d) gives any false statement during registration (prior and after) will get no scope for further registration and.”; এবং

(খ) “two thousand and five hundred” শব্দগুলির পরিবর্তে “twenty five thousand” এবং “five thousand” শব্দগুলির পরিবর্তে \* শব্দগুলি প্রতিস্থাপিত হইবে।

তারিখ : ০৯-০৭-১৪১৪ বঙ্গাব্দ  
২৪-১০-২০০৭ খ্রিস্টাব্দ

প্রফেসর ড. ইয়াজউদ্দিন আহম্মেদ  
রাষ্ট্রপতি  
গণপ্রজাতন্ত্রী বাংলাদেশ।

কাজী হাবিবুল আউয়াল  
ভারপ্রাপ্ত সচিব।



বাংলাদেশ জাতীয় সংসদ

ঢাকা, ৬ই অক্টোবর ২০০৯/২১শে আশ্বিন, ১৪১৬

সংসদ কর্তৃক গৃহীত নিম্নলিখিত আইনটি ৬ই অক্টোবর, ২০০৯ (২১শে আশ্বিন, ১৪১৬) তারিখে রাষ্ট্রপতির সম্মতি লাভ করিয়াছে এবং এতদ্বারা এই আইনটি/আইনগুলি সর্বসাধারণের অবগতির জন্য প্রকাশ করা যাইতেছে :—

২০০৯ সনের ৫৭ নং আইন

**Pesticides Ordinance, 1971** এর অধিকতর সংশোধনকল্পে প্রণীত আইন

যেহেতু নিম্নবর্ণিত উদ্দেশ্যসমূহ পূরণকল্পে Pesticides Ordinance, 1971 (Ord. No.II of 1971) এর অধিকতর সংশোধন সমীচীন ও প্রয়োজনীয়;

সেহেতু এতদ্বারা নিম্নরূপ আইন করা হইল :—

১। সংক্ষিপ্ত শিরোনাম ।—এই আইন Pesticides (Amendment) Act, 2009 নামে অভিহিত হইবে।

২। **Ordinance No. II of 1971** এর **section 3** এর সংশোধন ।—Pesticides Ordinance, 1971 (Ordinance No.II of 1971), অতঃপর উক্ত Ordinance বলিয়া উল্লিখিত, এর **section 3** এর **clause (m)** এর পর নিম্নরূপ **clause (mm)** সন্নিবেশিত হইবে, যথা:—

“(mm) “Person” means importer, manufacturer, formulator, repacker, vendor or stock-holder, wholesaler and retailer of pesticides but does not include farmer or end user ;”।

৩। **Ordinance No. II of 1971** এর **section 8** এর সংশোধন ।—উক্ত Ordinance এর **section 8** এর **sub-section (2)** এর পর নিম্নরূপ দুইটি নূতন **sub-sections** যথাক্রমে (3) ও (4) সংযোজিত হইবে, যথা:—

“(3) An application for the renewal of registration shall be made at least thirty days before its expiry.

(4) The renewal of registration certificate will be issued within ninety days after receiving the application.”।

৪। **Ordinance No. II of 1971** এর **section 21** এর সংশোধন ।—উক্ত Ordinance এর **section 21** এ উল্লিখিত “one thousand”, শব্দগুলির পরিবর্তে “fifty thousand”, “two thousand”, শব্দগুলির পরিবর্তে “seventy five thousand”, “three thousand” শব্দগুলির পরিবর্তে “one lac” এবং “one year” শব্দগুলির পরিবর্তে “two years” শব্দগুলি প্রতিস্থাপিত হইবে।

৫। **Ordinance No. II of 1971** এর **section 22** এর সংশোধন ।—উক্ত Ordinance এর **section 22** এ উল্লিখিত “one thousand” শব্দগুলির পরিবর্তে “fifty thousand” শব্দগুলি প্রতিস্থাপিত হইবে।

৬। **Ordinance No. II of 1971** এর **section 23** এর সংশোধন।—উক্ত Ordinance এর section 23 এর—

(ক) clause (c) এর শেষে “or” শব্দটি সংযোজিত হইবে এবং উহার পর নিরূপ একটি নূতন clause (d) সন্নিবেশিত হইবে, যথাঃ—

“(d) gives any false statement during registration (prior or after) will get no scope for further registration, and” ; এবং

(খ) “two thousand and five hundred” শব্দগুলির পরিবর্তে “seventy five thousand” এবং “five thousand” শব্দগুলির পরিবর্তে “one lac” শব্দগুলি প্রতিস্থাপিত হইবে।

আশফাক হামিদ  
সচিব।

**GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH  
MINISTRY OF AGRICULTURE**

**Section II  
NOTIFICATION**

**Dhaka, the 16<sup>th</sup> November 1985**

**No. S.R.O. 479-L/85.**—In exercise of the powers conferred to it under section 29 of the Pesticides Ordinance, 1971 (II of 1971), the Government is, in consultation with the Pesticide Technical Advisory Committee, pleased to make the following rules, the same having been previously published as required by sub-section (1) of the said section 29, namely:—

**THE PESTICIDE RULES, 1985**

**CHAPTER I**

**PRELIMINARY**

1. **Short title.**—These rules may be called The Pesticide Rules, 1985.
2. **Definition.**—In these rules, unless there is anything repugnant in the subject or context,—
  - (a) “Advisory Committee” means the Pesticide Technical Advisory Committee constituted under section 12;
  - (b) “Antidote” means a substance intended to counteract the poisonous effects of pesticides;
  - (c) “Director” means the administrative head of the pesticide laboratory by whatever name called and includes any other officer as the Director may authorise in writing for the purposes of these rules;
  - (d) “Form” means a form appended to these rules;
  - (e) “Laboratory” means the pesticide laboratory set up under section 13;
  - (f) “Licensing authority” means the Director, Plant Protection Wing of the Department of Agricultural Extension and includes any person authorized by him in writing;
  - (g) “Ordinance” means the Pesticides Ordinance, 1971 (II of 1971);
  - (h) “Pest control operation” means operation to control pest in crops, hotels, ware-houses, godowns and in such other places;
  - (i) “Registration authority” means the Director of Plant Protection Wing of the Department of Agricultural Extension and includes any person authorized by him in writing;
  - (j) “Repacking” means repacking of pesticides from a bulk container into small container;

- (k) “Schedule” means a Schedule appended to these rules; and
- (l) “Section” means a section of the Ordinance.

## CHAPTER II

### REGISTRATION OF PESTICIDES

3. **Application for registration of pesticides.**—An application in triplicate for registration of a brand of pesticide under sub-section (1) of section 5 shall be made to the Registration Authority in Form 1.

4. **Registration of pesticide.**—(1) On receipt of an application for registration of a brand of pesticide, the Registration Authority shall send the application together with a sample of pesticide to the laboratory for test or analysis and to ascertain whether the sample is in accordance with the information provided along with the application.

(2) On receipt of the result of the test or analysis under sub-rule (1), the Registration Authority shall forward the same to the Advisory Committee to conduct, in direct association with the applicant for the registration of pesticide, such biological test and trial under field condition as may be required.

(3) On receipt of a report from the Advisory Committee under sub-rule (2), the Registration Authority, if he is of the opinion that the brand of pesticide conforms to the requirements of the Ordinance and these rules, give registration to the brand of pesticide in Form 2 on such conditions as may be specified in the certificate and assign to the certificate a registration number.

(4) A certificate of registration granted under sub-rule (3) shall apply only to the pesticide described in the application to which the certificate relates.

(5) Pesticides registered, as aforesaid, shall be published by the Registration Authority in the official Gazette within thirty days from the date of granting registration certificate.

5. **Rejection of application for registration.**—(1) If it appears to the Registration Authority that the result of the test or analysis under provisions of these rules do not corroborate with the information supplied by the applicant or the labels and containers intended to be used do not conform to the requirements in this behalf, he may reject the application for registration and shall inform the applicant of the reasons for the rejection and supply him full particulars of the tests.

(2) The rejection of an application for registration of an application for registration of a pesticide shall, however, not debar the applicant from making a fresh application for registration.

6. **Renewal of registration certificate.**—(1) An application in duplicate for renewal of registration shall be made in Form 3 to the Registration Authority before expiry of the date of its effectiveness.

(2) A certificate of renewal of registration shall be issued in Form 4.

7. **Fees.**—(1) A fee of two thousand taka shall be paid with each application for a certificate or renewal of a certificate of registration which shall, in no case, be refunded to the applicant.

(2) A fee of taka one hundred shall be paid for a duplicate copy of the registration certificate if the original one is defaced, destroyed or lost.

8. **Cancellation of the certificate of registration.**—Cancellation of the certificate of registration of a brand of pesticide shall be published in any leading daily newspaper and in the journal of the Agriculture Information Service.

9. **Discontinuation of manufacture or formulation etc.**—If the manufacture, formulation or repacking of a pesticide is discontinued, the manufacturer, formulator, repacker or his agent shall within three months from the date of such discontinuation, give notice of such discontinuation to the Registration Authority.

### CHAPTER III

10. **Conditions to be fulfilled after registration of pesticide for manufacture and formulation, etc.**—A person who intends to manufacture and formulate pesticides registered under these rules shall—

- (a) provide and maintain adequately qualified staff and suitable premises and plant for the proper manufacture, formulation, repacking or storage of pesticide in respect of which the certificate of registration has been granted;
- (b) maintain a laboratory for carrying out quality control tests of the pesticide;
- (c) keep records of the details of manufacture and formulation of each batch of the pesticide which is issued for sale or distribution;
- (d) allow any person authorized by the Government in this behalf to enter into any premises where the manufacture, formulation or packing of pesticide is being carried on;
- (e) allow to inspect the premises and the means employed for testing of pesticides;
- (f) from time to time, report to the Government any change in the expert staff responsible for manufacture, formulation or repacking of pesticides;
- (g) observe the conditions for the storage of pesticides as laid down in these rules;
- (h) provide such protective clothing, as may be required, to the workers and take all necessary precautions for their health as may be specified by these rules or by the Registration Authority; and
- (i) arrange medical check up of the workers as often as required or at least twice a year, and provide medical treatment free of cost.

## CHAPTER IV

11. **Import of pesticides.**—(1) No pesticide shall be imported into Bangladesh unless—

- (a) it has been registered and it complies strictly with the application for registration;
- (b) it is packed and labeled in conformity with these rules;
- (c) the importer has proper facilities for its storage.

(2) No pesticide shall be imported through a route other than the recognised custom frontier stations of Bangladesh.

(3) These rules shall not apply in case of pesticides imported for experimental or research purposes in reasonable quantity.

## CHAPTER V

### LICENCES

12. **Licence for manufacture/formulation, stock, repacking, sale, etc., of pesticides.**—(1) Application for grant of licence of pesticides for the purposes specified below shall be made to the licensing authority in the Form specified against each purpose:—

- |     |  |     |     |     |     |     |     |     |         |
|-----|--|-----|-----|-----|-----|-----|-----|-----|---------|
| (a) | import                                     | ... | ... | ... | ... | ... | ... | ... | Form 5  |
| (b) | manufacture or formulation                 |     |     |     |     |     |     |     | Form 6  |
| (c) | holding in stock for wholesale             |     |     |     |     |     |     |     | Form 7  |
| (d) | retail sale                                | ... | ... | ... | ... | ... | ... | ... | Form 8  |
| (e) | re-packing                                 | ... | ... | ... | ... | ... | ... | ... | Form 9  |
| (f) | pest control operation on commercial basis |     |     |     |     |     |     |     | Form 10 |
| (g) | advertisement                              | ... | ... | ... | ... | ... | ... | ... | Form 11 |

(2) Licences for the purposes mentioned in sub-rule (1) shall be made by the licensing authority in Form 12, Form 13, Form 14, Form 15, Form 16, Form 17, Form 18 respectively.

(3) An application for grant of licence and renewal thereof under this rule shall be accompanied by a fee specified below :

		Licence fee Taka	Renewal fee Taka
(a)	import	One hundred	One hundred
(b)	manufacture or formulation	Three Thousand	Five hundred
(c)	holding in stock for wholesale	Three hundred	One hundred
(d)	retail sale	Seventy-five	Twenty-five
(e)	repacking	Two hundred	Two hundred
(f)	pest control operation on commercial basis	Five hundred	Two hundred
(g)	advertisement	Two hundred	One hundred

(4) Licences issued under this rule shall be subject to the conditions specified on the face of the licence.

(5) If any pesticide is proposed to be manufactured, stocked, sold, formulated, repacked or operated on commercial basis at more than one place, separate application shall be made for each such place and separate licence shall be issued in respect of every such place.

13. **Refusal to grant licence.**—The licensing authority may, after giving reasonable opportunity of being heard to the applicant for a licence, refuse to grant or renew any licence under this chapter and on such refusal the fee paid shall be refunded to the applicant.

14. **Duplicate licence.**—A fee of Tk. 25 (twenty-five) shall be paid for duplicate copy of a licence issued under this chapter if the original one is defaced, damaged or lost.

15. **Duration of licences.**—(1) Any licence issued or renewed under this chapter shall, unless sooner suspended or cancelled, be in force for a period of two years from the date of issue or from the date of renewal, as the case may be.

(2) An application for the renewal of a licence shall be made before its expiry and if such application is made within 30 days of such expiry, a penalty of taka fifty shall accompany the application along with usual renewal fee.

(3) The licence shall continue to be in force until it is renewed accordance with these rules, suspended or revoked or, where an appeal preferred until the appeal is disposed of.

16. **Appeal.**—(1) An appeal against the decision for refusal to grant renew a licence or against/suspension or cancellation of a licence shall preferred to the Secretary, Ministry of Agriculture within sixty days from the decision or order.

(2) The appeal shall be in writing and shall set out concisely and under distinct heads of the grounds on which appeal is preferred.

(3) A fee of taka twenty shall be deposited under the Head of Account “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” and treasury chalan showing the deposit shall accompany the application for appeal.

17. **Conditions of Licence.**—(1) Subject to such conditions as are contained in the licence, a licence shall not be granted to any person under this chapter unless the licensing authority is satisfied that the premises in respect of which a licence is to be granted are adequate and equipped with proper storage accommodation for avoiding any hazard and for preserving the property pesticides in respect of which licence is granted.

(2) In granting a licence, the licensing authority shall have regard, among other things, to—

- (a) the number of licences granted in the locality during any year; and
- (b) the occupation, trade or business carried on by the applicant.

18. **Amending a licence.**—The licensing authority may, either on an application made by the licensee or if he is satisfied that the conditions under which a licensee has been granted under this chapter have been changed that it is so necessary to do, amend a licence after giving an opportunity of being heard to the person holding the licence.

19. **Transfer of licence.**—(1) The holder of a licence may, at any time before expiry of the licence apply for permission to transfer the licence to any other person.

(2) The application under sub-rule (1) shall be accompanied by a fee which shall be the half of the original licence fee.

(3) The licensing authority may, after such inquiry as he thinks fit, accord permission to transfer the licence and on such permission being given, an endorsement to that effect shall be made in the licence.

20. **Procedure on disability of licensee.**—(1) If any person in whose name a licence has been issued under this chapter dies or is incapable of carrying on the business for which licence is given, his legal representative interested in carrying on the business may apply in accordance with the provisions of these rules to the licensing authority for transfer of the licence in his name.

(2) If an application is made under sub-rule (1) for the transfer of licence, it shall be lawful for the applicant to carry on the business of the licence until it is refused by the licensing authority.

## CHAPTER VI

### ADVISORY COMMITTEE AND PESTICIDE LABORATORY

21. **Functions of the Advisory Committee.**—In addition to the functions assigned to it by the Ordinance, the Advisory Committee shall advise the Government on—

- (a) general policy relating to pesticides and pest management;
- (b) the indigenous manufacture and formulation of pesticides;
- (c) the large scale use of pesticides;
- (d) the classification of pesticides on the basis of their toxicity as well as their being suitable for aerial application;
- (e) such other matters as the Government may refer to it from time to time.

22. **Functions of the Laboratory.**—The functions of the laboratory shall be as follows—

- (a) to analyse such samples of pesticides as sent to it by any officer or authority authorized by the Government and submit certificate of analysis to the concerned authority;
- (b) to carry out such investigations as may be necessary for the purpose of ensuring the conditions of registration of pesticides;
- (c) to analyse samples of materials for residue analysis;
- (d) to determine the efficacy and toxicity of pesticides;
- (e) to carry out such other functions as may be entrusted to it by the Government after consultation with the Committee.



**23. Despatch of samples for test or analysis to the Laboratory.**—(1) Samples of pesticides shall be sent to the Laboratory by registered post or by special messenger in sealed packet together with a memorandum in Form 19 in an outer cover addressed to the Director.

(2) The sealed packet as well as the outer cover referred to in sub-rule (1), shall have distinguished mark or number.

(3) A copy of the memorandum and a specimen impression of the seal used to seal the packet shall be sent separately by registered post or by special messenger to the Director.

(4) On receipt of the packet, it shall be opened by the Director.

**24. Report of result of test or analysis.**—(1) After test or analysis, the report of the result of test or analysis together with full particulars of the test applied, shall be supplied to the sender in Form 20 within four weeks from the date of receipt of the samples.

(2) The report of the test or analysis shall be signed by the Director.

**25. Access to information.**—No person, other than officer of the laboratory authorized in writing by the Director, shall have access to the information deposited in the laboratory.

**26. Destruction of information.**—The formula deposited in the laboratory shall be destroyed by the Director if the application for registration is rejected or if the certificate of registration is cancelled.

**27. Disclosure of information.**—No person on the staff of the laboratory shall disclose to any person any information in relation to the composition the particular pesticide acquired in the course of his duties in the laboratory. Provided that the Director may with the previous approval of the Government, disclose any information so acquired to the extent necessary for the purpose of prosecution under the Ordinance.

**28. Method to be followed by Laboratory.**—The pesticide laboratory shall follow the following methods, in the order as they are given, for the formulation and residue analysis of pesticides, namely:—

- (a) methods of Association of Official Agricultural Chemists (AOAC) of United States of America;
- (b) methods of Collaborative International Pesticides Analytical Council (CIPAC);
- (c) methods of formulation panel of the Pesticide Analytical Committee (PAC) of the Ministry of Agriculture, Fisheries and Food, Government of the United Kingdom;

- (d) methods of WHO specification of pesticides;
- (e) methods published in the periodicals from time to time;
- (f) methods of Federal Drugs Administration (FDA) of the U.S.A.; and
- (g) methods given by the firm.

29. **Limit of variability to be allowed.**—The pesticide laboratory shall follow the limit of variability to be allowed in the analytical results, that is tolerance in the contents of active ingredients in pesticide consignments in the light of Appendix V to the “Manual on the use of FAO Specifications for Plant Protection Product.”

## **CHAPTER VII**

### **PACKAGING AND LABELLING**

30. **Prohibition of sale or distribution unless packed and labelled.**—No person shall stock or exhibit for sale or distribute any pesticide unless it is packed and labelled in accordance with the provisions of this Chapter.

31. **Packing of pesticides.**—Every package containing pesticides shall be of a type approved by the Director and a sample container in which the pesticide is proposed to be packed shall be supplied to the Director separately.

32. **Leaflet to be contained in a package.**—The manufacturer, formulator or distributor shall provide wholesale and retail dealers with leaflet of every pesticide which shall be affixed or attached to the package or repacking containing the following details, namely:—

- (a) the plant pests for which the pesticide is to be applied, the adequate direction including the manner in which the pesticide is to be used at the time of application;
- (b) particulars regarding chemicals harmful to human beings, animals and wild life;
- (c) warning and cautionary statements including the symptoms of poisoning, suitable and adequate safety measure and emergency first aid treatment, where necessary;
- (d) caution regarding storage;
- (e) instructions concerning the decontamination or safe disposal of used containers;
- (f) statement showing the antidote for the poison shall be included in the leaflet and the label;
- (g) if the pesticide is irritating to the skin, nose, throat or eyes, a statement shall be included to that effect.

33. **Manner of labeling.**—(1) The following particulars shall be either printed or written in indelible ink on the label of the innermost container of any pesticide and on the outermost covering in which the container is packed or repacked—

- (a) name of the manufacturer, formulator or repacker (if the manufacturer, formulator or repacker is not the person in whose name the pesticide is registered, the relationship between the person in whose name the pesticide has been registered and the person who manufactures, formulates or packs or repacks, distributes or sells shall be stated);
- (b) name of the pesticide (brand name or trade mark under which the pesticide is sold);
- (c) registration number of the pesticide;
- (d) net content of volume (the net content shall exclusive of wrapper or other materials);
- (e) batch number or lot number;
- (f) expiry date, i.e. up to the date the pesticide will retain its efficacy and safety;
- (g) Antidote statement.

(2) The label shall so affixed to the container that it cannot be ordinarily removed.

(3) The label shall contain in a prominent place and occupying not less than the one-sixteenth of the total area of the face of the label, and square set at an angle of 45° (diamond shape). The dimension of the said square shall depend on the size of the package on which the label is to be fixed. The said square shall be divided by horizontal lines into two equal parts. The upper part shall contain the symbol and signal word specified in sub-rule (4) and the lower part shall contain the colour specified in the sub-rule (5).

(4) The upper part of the square referred to in sub-rule (3) shall contain the following symbol and warning statement, namely :—

- (i) pesticide belonging to category I (highly toxic) contain a symbol of a skull and cross bones and the word “POISON” printed in red;
- (ii) the words “KEEP OUT OF THE REACH OF CHILDREN” shall appear on the label at suitable place outside the square;
- (iii) pesticides in category II (moderately toxic) shall bear the word “Poison” “DANGER” and the statement “KEEP OUT OF THE REACH OF CHILDREN” shall appear on the label at suitable place outside the square;
- (iv) pesticides in category III (slightly toxic) shall bear the word “Poison” “CAUTION” and the statement “KEEP OUT OF THE REACH OF CHILDREN” shall appear on the label at suitable place outside the square.

(5) The lower part of the square referred to in sub-rule (3) shall contain the colour specified in column 5. of the Table below depending on the classification of the pesticide specified in the corresponding entry in column (1):

**TABLE**

Classification of the pesticide	Median Lethal dose by the oral route (acute toxicity) LD 50 mg/kg of body weight of the test animal.	Median Lethal dose dermal route (dermal toxicity) LD 50 mg/kg of body weight of the test animal.	Median Lethal dose by inhalation (inhalation toxicity) LD 50 mg/kg litre of air.	Colour of identification band on the label.
1	2	3	4	5
1. Highly toxic	51-500	201-2000	0.2-2	Bright red
2. Moderately toxic	501-5000	2001-20000	2-20	Bright yellow
3. Slightly toxic	More than 5000	More than 20000	More than 20	Bright green

(6) The label, leaflets affixed or attached to the package or repacking containing pesticides shall be printed in Bengali.

(7) Labelling of pesticides must not bear any unwarranted claims for the safety, efficacy of the pesticide or its ingredients like “safe”, “non-injurious”, “non-poisonous”, etc.

**34. Prohibition against alteration in label.**—No person shall alter, obliterate or deface any inscription or mark made on wrapper of any pesticide: Provided that nothing in this rule shall apply to any alterations or mark made on the containers, label or wrapper of any pesticide at the instance direction or permission of the Director.

## **CHAPTER VIII**

### **GOVERNMENT ANALYST AND INSPECTOR**

**35. Qualification of Government Analyst.**—A person shall be eligible for appointment as a Government Analyst under the Ordinance only if he possesses the following qualifications, namely :—

- (a) Master degree in Agricultural Chemistry or Chemistry from a recognized University; and
- (b) At least five years' experience in pesticide formulation analysis in a reputed laboratory.

**36. Powers of Government Analyst.**—The Government Analyst shall have the power to call for such information or particulars or do anything as may be necessary for the proper examination of the samples sent to him.

**37. Duties of Government Analyst.**—(1) The Government Analyst shall analyse or cause to be analysed or test or cause to be tested such samples of pesticides as may be sent to him by the Inspector under the provisions of Ordinance and shall furnish reports or results of such tests or analysis.

(2) The Government Analyst shall, from time to time, forward to the Government reports giving the result of analytical work and investigation with a view to their publication at the discretion of the Government.

**38. Procedure on receipt of sample.**—(1) On receipt of a package from a Inspector containing a sample for test or analysis, the Government Analyst shall compare the seal on the packet with the specimen impression received separately and shall note the condition of the seals on the packet.

(2) In making the test or analysis of pesticide, the Government Analyst shall follow the method of examination of sample adopted or approved by the Standard Institution of the country. The sample should be analysed in such a way as to determine the pesticide-properties and whether the ingredients as stated on the label are present and whether the pesticides contain any adulterations. If necessary, laboratory or field tests shall be made to determine the effectiveness, laboratory or field tests shall be made to determine the effectiveness of the pesticides as contained in the label.

(3) After the test or analysis has been carried out under sub-rule (2), the Government Analyst shall forthwith supply to the Inspector a report in triplicate in Form 21 of the result of test or analysis.

**39. Report of results of test or analysis.**—An application from a purchaser for test or analysis of pesticide under section 20 shall be made in triplicate in Form 22 and the report of the test or analysis of the pesticide made shall be supplied to the applicant in Form 23.

**40. Fees payable for testing or analysis.**—(1) The fees payable for testing or analysing pesticides shall be those as specified in the Schedule 1.

(2) No fee shall be charged for routine test or rechecking of samples carried out at the instance of Inspector.

(3) Fee realized under this rule shall be deposited with the Director of Plant Protection under the Head of Account. “৪৫-কৃষি-প্রাণি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়।”

**41. Duties of Inspector.**—Subject to the provisions of section 16, an Inspector may, within the local limits of the area for which he is appointed,—

- (a) inspect any premises wherein any pesticides is being manufactured or formulated, repacked, the means employed for quality control and testing of pesticides and all record and registers relation thereto;
- (b) inspect any premises wherein any pesticide is being sold or stocked or exhibited for sale or wherefrom any pesticide is being distributed;
- (c) take samples of any pesticide which is being manufactured or formulated or being sold or stocked or exhibited for sale or is being distributed and forward them for test or analysis in accordance with these rules provided that a sample shall not exceed two pounds (one kilogram) in quantity;
- (d) enter and search, at all reasonable times, with such assistance, if any, as he considers necessary, any building, vessel or place in which he has reason to believe from personal knowledge or from information given by any person and taken down in writing that an offence under the ordinance or these rules has been or is being committed;

(e) seize such pesticide and all materials used in the manufacture thereof and all other articles including registers, cash memos, invoices, bills which he has reason to believe may furnish evidence of the commission of an offence punishable under the Ordinance or these rules.

42. **Prohibition of disclosure of information.**—Except for the purpose of official business or when required by a court of law, an Inspector shall not disclose to any person any information acquired by him in the performance of his official duties.

43. **Order of Inspector not to dispose of stock.**—An order by the Inspector requiring a person not to dispose of any stock in his possession shall be in Form 24.

44. **Seized pesticide.**—A report by an Inspector for the stock of any pesticide seized shall be in Form 25.

45. **Intimation for purpose of taking samples.**—Where an Inspector takes a sample of a pesticide for the purpose of test or analysis; he shall issue a receipt thereof in Form 26.

46. **Procedure for despatch of sample of pesticide to Government Analyst.**—(1) The portion of the sample of the container to be sent by Inspector to the Government Analyst for test or analysis under the Ordinance shall be sent by registered post or by hand in a sealed packed with a memorandum in Form 27 in an outer cover.

(2) A copy of the memorandum and specimen impression of the seal used to seal the packet shall be sent to the Government Analyst separately by registered post or by hand.

## CHAPTER IX

### TRANSPORT AND STORAGE OF PESTICIDE BY RAIL ROAD OR WATER

47. **Manner or packing and storage while in transit by rail.**—(1) Packages containing pesticides, offered for transport by rail, shall be packed in accordance with the conditions specified by the Railway Authority in Red Tariff.

(2) No pesticide shall be transported or stored in such a way as to come in direct contact with foodstuff or animal feeds.

(3) No foodstuff or animal feeds which got mixed up with pesticides as a result of damages to the package containing pesticides during transport or storage shall be released to the consignee unless it has been examined for possible contamination by competent authority as may be notified by the Government.

(4) If any pesticide is found to have leaked out in transport or storage, it shall be the responsibility of the transport agency or the storage owner to take such measures urgently to prevent Poisoning and pollution of soil or water, if any.

48. **Conditions for storage of pesticides.**—(1) The packages containing pesticides shall be stored in separate rooms or premises away from the rooms or premises used for storing other articles or shall be kept in separate room under lock and key depending upon the quantity and nature of the pesticides.

(2) The rooms or premises meant for storing pesticides shall be well built, dry, well lit and ventilated and of sufficient dimension.

**CHAPTER X**  
**PROVISIONS REGARDING FACILITIES DURING MANUFACTURE, ETC. OF**  
**PESTICIDES**

49. **Medical Examination.**—(1) The persons who will be engaged in the work of handling pesticides during its manufacture, formulation, repacking, transport, distribution or application, shall be medically examined before their employment and shall also be examined periodically while in service by a competent physician who is aware of the risks to which such persons will be exposed.

(2) Any person showing symptoms of poisoning shall be immediately examined and given proper treatment.

50. **First aid measures.**—In all cases of poisoning, first aid treatment shall be given before the physician is called. The guide for handling cases of pesticide poisoning shall be consulted for such first aid treatment in addition to any other books on the subject.

51. **Protective clothing.**—(1) Persons handling pesticide during its manufacture, formulation, repacking, transport, distribution or application shall be adequately protected with appropriate clothing and appliances.

(2) The protective clothing shall be used, whenever necessary, in conjunction with respiratory devices as laid down in these rules.

(3) The protective clothing's shall be made of materials which prevent or resist the penetration of any form of pesticide formulations. The materials shall also be washable so that the toxic elements may be removed after each use.

(4) A complete suit of protective clothing shall consist of the following dresses, namely:

- (a) protective outer garments, overalls, hood and hat;
- (b) rubber gloves or such other protective gloves extending half way up to the fore-arm, made of materials impermeable to liquids;
- (c) dust-proof goggles; and
- (d) boots.

52. **Respiratory Devices.**—For preventing of toxic dusts, vapours or gases the workers shall use any of the following types of respirators or gas-mask suitable for the purpose, namely :—

- (a) chemical-cartridge respirator;
- (b) supplied-air respirator;
- (c) demand flow type respirator; or
- (d) full face or half face gas mask with canister.

In no case shall the concentrates of pesticides in the air where the pesticides are mixed exceed the maximum permissible values.

**53. The manufacturer, etc., to keep sufficient quantities of antidotes and first aid medicines.**—The manufacturers and distributors of pesticides and persons who undertake to spray pesticides on commercial basis (hereafter in these rules referred to as “pest control operation”) shall keep sufficient stocks of such first aid tools, equipments, antidotes, injections and medicines, as may be required to prevent poisoning cases arising from inhalation, skin contamination, eye contamination and swallowing.

**54. Training of workers.**—The manufacturers, formulators, repackers and distributors of pesticides and operators shall arrange for suitable training of the workers in observing safety precautions and handling safety equipment provided to them.

**55. Age of workers.**—The manufacturers, formulators, repackers or distributors of pesticide shall not employ a worker of below 18 and over 60 years of age for working with pesticides.

**56. Disposal of used packages, condemned and surplus materials, etc.**—(1) It shall be the duty of manufacturers, formulators, repackers of pesticides and operators to dispose of packages, condemned or surplus materials and washing in a safe manner so as to prevent air, soil, water or other environmental pollution.

(2) The used package shall not be left outside to prevent their re-use.

(3) The packages shall be broken, burnt, incinerated and buried away from habitation and water ways.

## CHAPTER XI

### SAFETY PRECAUTIONS

**57. Standard precautions.**—The following precautions shall be observed while working with any kind of pesticide, namely:—

- (a) read the “label” carefully, especially the safety precautions before handling any pesticides;
- (b) do not eat, drink or smoke;
- (c) when opening the container or while transferring, overalls, respirators goggles as the case may be;
- (d) wash hands and exposed skin before drinking or smoking;
- (e) avoid breathing pesticides;
- (f) avoid contaminating clothing;
- (g) avoid spilling and splashing;
- (h) wash and flush off pesticides from skins and eyes immediately;
- (i) remove heavily contaminated clothing and footwear immediately;
- (j) wash thoroughly protective clothing, gloves, etc.



58. **Safety precautions for the health of worker.**—Every employer shall observe the following precautions against poisoning by pesticides, namely—

- (a) ensure that workers are thoroughly trained in the precautions to be observed and are being adequately supervised by qualified supervisors;
- (b) not to permit a worker on job unless he is using standard protective clothing or devices;
- (c) ensure that a worker does not eat, drink or smoke unless he has removed all his protective clothing and has washed his hands and face and has left the area of work;
- (d) ensure that the overall and boots are washed at least once in a week.

## CHAPTER XII

59. **Nomenclature of Plant and Animal life.**—The plant and animal life, the nomenclature of which are specified in schedule II, shall be deemed to be insects, fungi and other plant or pests etc.

60. **Pesticides to be labelled poison.**—The pesticides specified in schedule III shall be labeled “Poison”.

61. **Symptoms of poisoning, first aid and antidotes of pesticides.**—The symptom of poisoning from various pesticides, first aid that should be given and the antidotes of each such pesticides are set out in Schedule IV.

## SCHEDULE I

(see rule 40)

### Fees for Test or Analysis of Pesticides

	<b>Taka</b>
1. Test or analysis of physical and chemical properties	1,000.00 (One thousand)
2. Test or analysis of active ingredient	500.00 (five hundred)
3. Suspending /emulsion	50.00 (fifty)
4. Acidity or alkalinity	50.00 (fifty)
5. Sieve test	50.00 (fifty)
6. Storage stability test	600.00 (six hundred)
7. Flash point test	50.00 (fifty)
8. Cold storage test	50.00 (fifty)
9. Residue test or analysis of pesticides	2,000.00 (two thousand for each sample)

**FORM- 1**

**(SEE RULE-3)**

**APPLICATION FOR REGISTRATION OF PESTICIDES**

1.	Name and address of the applicant	:	
2.	Name of the pesticide (Brand Name / Trade name)	:	
3.	Name and address of the manufacturer/ formulator	:	
4.	Common Name / Descriptive name	:	
5.	Chemical Name (IUPAC nomenclature)	:	
6.	Structural formula	:	
7.	Empirical formula and molecular weight	:	
8.	Manufacturer's development code number(s)	:	
9.	<b>Active ingredient (certified percentage of active material)</b>	:	
	(a) Physical state	:	
	(b) Colour / Appearance	:	
	(c) Odour	:	
	(d) Refractive index	:	
	(e) Melting point	:	
	(f) Decomposition point	:	
	(g) Viscosity	:	
	(h) Boiling point	:	
	(i) <b>Vapour pressure</b> : Figures should be given at a stated temperature preferably in the range of (20°—25°C)	:	
	(j) Flash point	:	
	(k) Specific gravity / Density (for liquids only)	:	
	(l) Hydrolysis rates under stated relevant conditions	:	
	(m) Surface tension	:	
	(n) Stability	:	
	(o) Solubility	:	

	(p) Compatibility	:	
	(q) Photolysis	:	
	(r) Absorptions spectra, <i>e.g.</i> , ultraviolet, visible and infrared, etc.	:	
	(s) Any other relevant properties	:	
	(t) Acidity, Alkalinity/P <sup>H</sup> value	:	
10	<b>Technical grade material</b>		
	(a) <b>Source:</b> Name and address of manufacturer and address where manufactured	:	
	(b) Physical state	:	
	(c) Colour	:	
	(d) Odour	:	
	(e) Acidity/Alkalinity or P <sup>H</sup> value	:	
	(f) Specific gravity	:	
	(g) Viscosity	:	
	(h) Flash point	:	
	(i) Minimum and Maximum) active ingredient content in % w/w	:	
	(j) Identity and amount of isomers, impurities and other by-products together with information on their possible range expressed as % w/w	:	
	(k) Storage stability (Low and high temp. storage stability)	:	
11	<b>Formulated Product</b>		
	(1) Identity / Appearance (color)	:	
	(2) Odour	:	
	(3) Type of formulation	:	
	(4) Content of active ingredient(s)	:	
	(5) Content and nature (Identity if possible of other components included in the formulation, <i>e.g.</i> , technical grade, adjuvants and inert ingredient)	:	
	(6) Water content/Moisture	:	

(7) Specific Gravity	:	
(8) Viscosity	:	
(9) Low and high temp .storage stability (In respect to composition and physical properties related to use)	:	
(10) Impurities	:	
(11) Flammability a. <b>Liquid</b> : Flash Point b. <b>Solids</b> : A statement must be made as to weather the product in flammable	:	
(12) Acidity (as H <sub>2</sub> SO <sub>4</sub> )	:	
(13) Alkalinity (as NaOH)	:	
(14) P <sup>H</sup> value	:	
(15) Other properties may in certain cases need evaluation	:	
(16) Carrier materials	:	
(17) Wet ability (for dispersible powders)	:	
(18) Persistent foam (for formulation applied in water)	:	
(19) Suspensibility (For dispersible powders and suspension concentrates)	:	
(20) Particle size	:	
(21) Wet sieve test (For dispersible powder & suspension concentration)	:	
(22) Dry sieve test (For Granules, Dust)	:	
(23) Emulsion stability (For emulsifiable Concentration)	:	
(24) Bulk density	:	
(25) Corrosiveness (when necessary)	:	
(26) Flowability	:	
(27) In case of Tablet/Pellets a. Weight b. Thickness/Height c. Diameter d. Colour Appearance e. Percentage of active ingredients and other related standard specification	:	

	(28) Known incompatibilities with other products	:	
	(29) Application with dosage rate	:	
12	Rate of release of active ingredient	:	
13	<b>Efficacy :</b> Primary evaluation data using, harmonized method and reported in a systematically presented complete dossier	:	
14	<b>Toxicology data :</b>		
	(a) Acute Oral toxicity and Dermal toxicity	:	
	(b) Acute Percentaneous toxicity	:	
	(c) Acute Inhalation	:	
	(d) Acute Other routes, e.g., in traperitoneal	:	
	(e) Skin irritation	:	
	(f) Eye irritation	:	
	(g) Short term Oral administration	:	
	(h) Short term Sensitizing effects	:	
	(i) Toxic effects of metabolizes, breakdown products or impurities	:	
	(j) Metabolic-studies	:	
	(k) Long-term toxicity, including carcinogenicity	:	
	(l) Neurotoxicity	:	
	(m) Reproduction studies	:	
	(n) Embryotoxicity, including teratogenicity	:	
	(o) Mutagenicity	:	
	(p) Potentiality	:	
	(q) Direct observations, e.g., clinical cases	:	
	(r) Health records, both from industry and agriculture	:	
	(s) Treatment of poisoning	:	
	(t) First aid measure	:	
	(u) Supplementary treatment	:	
	(v) Waiting period (Last application to harvesting)	:	

15	<b>Residue studies :</b>		
	(a) Primary physical, chemical and biological data	:	
	(b) Identification of residue-design of analytical method	:	
	(c) Reliable residue data from supervised trials.	:	
	(d) Estimation of maximum residue level at harvest	:	
	(e) Data on further disappearance on storage, transport etc.	:	
	(f) Estimation of residue level in commodity on sale	:	
	(g) Data on disappearance on food preparation, cooking or processing.	:	
	(h) Prediction of potential consumer intake, actual intake studies.	:	
	(i) Assessment of actual consumer intake	:	
	(j) Persistence of the product	:	
16	<b>Prediction of Environment effect :</b>		
	(a) Fate and mobility studies of toxicant	:	
	(b) Method of application of pesticide	:	
	(c) Time of application	:	
	(d) Rate of application	:	
	(e) Scale of use (number of application etc.)	:	
	(f) Climate and geographical locality	:	
	(g) Volatility of product	:	
	(h) Water solubility	:	
	(i) Octanol / water partition coefficient	:	
	(j) Absorption	:	
	(k) Desorption	:	
	(l) Degradation	:	
	(m) Persistence	:	
	(n) Effects on birds	:	
	(o) Effects on fish	:	

	(p) Effects on fish food species	:	
	(q) Effects on honey bees	:	
	(r) Degradation product in soil	:	
	(s) Possibilities of accumulation, with stable lipophilic compounds.	:	
	(t) Effects on local aquatic species	:	
	(u) Effects on soil organism	:	
	(v) Disposal of used, condemned and surplus pesticides and pesticides containers.	:	
	(w) Proposal for labeling and directions for use	:	
17	<b>Packaging</b>		
	(a) State weight (or for liquids, volumes) and the sizes of package in which the products is to be marked and for each size, the type of package, for instance i.e. 1 kg in cans with screw plug and 50 kg in iron drums. (Please note that the product must be sold in package size and type notified to the plant Protection Wing Dept. of Agric. Extension and for which the label is approved.)	:	
	(b) Classification during transport	:	
18	<b>Method of analysis</b>		
	(a) Methods to determine the active ingredients of the product (the accuracy of the method of determination should be stand)	:	
	(b) Methods to determine the amount of isomers, impurities and other by-product.	:	
19	<b>Labeled samples for analysis :</b>		
	(a) Analytical reference standard 2—5g.	:	
	(b) Technical grade material 0.5—1.0 kg	:	
	(c) Formulated product 5 kg/lit. for each formulation.	:	

20. **Registration Fee** : Taka 2000 (taka two thousand) to be deposited in Treasury Challan payable under Head of Account “৪৫-কৃষি প্রাপ্তি- অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়”।

I do hereby apply for registration of the pesticides particulars of which are given above and hereby certify that these particulars are to the best of my knowledge true and correct.

Date.....

.....

Signature of applicant

## NOTES

### **Direction of completion and submission of application. (In Triplicate)**

1. The application must be accompanied by:
  - (a) General literature of the product including toxicological and efficacy data.
  - (b) Standard specification of technical product and formulation of the product.
  - (c) Standard of ingredients (active and inert materials to be enclosed separately in a sealed and confidential cover).
2. Certified true copy of the contract / agreement made between the manufacturer / Principal and the local agent authenticated by the competent agency of the country for import and marketing the product in Bangladesh.
3. (a) In case of renewal of an existing registration, the previous certificate of registration; and  
(b) A suitable sample of the pesticide sufficient for test and analysis (Physical and Chemical properties).
4. Treasury challan of Taka two thousand evidencing payment shall be deposited under the receipt head: “৪৫-কৃষি শ্রাণ্ডি- অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়”।
5. Submission of application in a sealed covers and marked, “Confidential”.



**FORM-2**

[see rule 4(3)]

**Certificate of Registration of Pesticide**

Certified that the Pesticide has been registered in the name of undertaking whose Particulars are specified below:

1. Name of the undertaking :
2. Address :
3. Registration No. :
4. Name of the Pesticide (Common name, brand name or trade name, descriptive name of the pesticide, details thereof regarding its composition, etc.) :
5. Name and address of the manufacturer :

DHAKA:

The.....201....

Signature of the Registration Authority.  
Seal

Conditions:

**FORM—3**

**[see rule 6(1)]**

**(To be rendered in duplicate)**

**Application for renewal of a certificate of Registration of Pesticides.**

1. Full name of the applicant :
2. Address :
3. Common, descriptive, chemical, brand or trade name :
4. Previous Registration No. :
5. Change, if any made since the original registration. :

I do hereby apply for the renewal of a certificate of registration in terms of section 8 of the Pesticide Ordinance, 1971 (II of 1971) and for which the particulars are given above and I do hereby inform that no change has been made since the original registration except as indicated above.

Date:

FORM—4

[see rule 6(2)]

(In duplicate)

Certificate of Renewal of Registration of Pesticide

Name of the undertaking

.....

I do hereby:

(a) Certify that the brand of Pesticide (name of Pesticide) referred to in application  
No.....dated.....has been renewed for registration  
No .....and

(b) Certify that the following change(s) from the original registration have been accepted.

No .....

DHAKA;

The.....201.....

Signature of the Registration Authority.  
(Seal)

**FORM—5**  
**[see rule 12(1)]**

(In duplicate)

**Application for licence or renewal of licence to import Pesticides.**

To  
The Licensing Authority  
.....

1. Full name and address of the applicant/ undertaking :
2. Name of the brand of Pesticide(s) and ingredients of pesticides :
3. Descriptive name of the pesticide(s) :
4. Name and address of the manufacturer :
5. Purpose of import :
6. Use of pesticide in agriculture/storage/public health/veterinary of any other field
7. Quantities of pesticide(s) to be imported
8. Previous licence to be enclosed in the case of renewal
9. Profession of the applicant
10. Licence fee of Taka .....credited to

the Government under head of account “৪৫-কৃষি শ্রাণ্ডি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়”। (Challan No .....dated.....)

I/We..... of.....hereby apply for the grant of a licence to import pesticide mentioned above and to be stored on the premises situated at.....

Date:

Signature of the Applicant

**Note :** For experimental or research purposes, import licence shall not be required.

**FORM—6**

[see rule 12(1)]

(In duplicate)

**Application for the grant or renewal of licence for manufacturer or formulation of Pesticide.**

To  
The Licensing Authority

1. I/We.....of.....hereby apply for the grant of a licence to manufacture/formulate on the premises situated at .....the undermentioned pesticide(s) ..... Name of the pesticide(s) (each pesticide to be separately specified).

2. The names, qualifications and experience of the expert staff actually connected with the manufacture/formulation and testing of the specified products in the manufacturing/formulation premises .....

3. I/We enclose—

(a) A certified true copy of a letter from the manufacturing concern whose manufacturing capacity is intended to be utilized by me/us.

(b) A certified true copy of a letter from the manufacturing concern that they agree to lend the services of their expert staff, equipment and premises for the manufacture/formulation of each pesticide required by me/us and that they will analyse every batch of finished product and maintain the registers of the materials, finished products and reports of the analysis separately in this behalf or inspection by the authorised agency.

(c) Specimens of labels, cartons of the products proposed to be manufactured/ formulated.

4. Previous licence to be enclosed in the case of renewal of licence.

5. A fee of Tk.....has been credited to the Government under the head of account “৪৫-কৃষি প্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়”। (Challan No ..... dated.....).

Date:

Signature.

Date:

(1) In the case of application for manufacture’s licence, the word formulation shall be deleted and vice versa.

(2) If there is any change in the details of manufacturer/formulation including of condition of licence subject to which the licence is required to be renewed, the same be indicated here.

**FORM—7**

[see rule 12(1)]

(In duplicate)

**Application for the grant or renewal of licence to hold in stock for wholesale.**

To  
The Licensing Authority,

1. Full name and address of the applicant :
2. Is the applicant a new comer? :
3. If yes, the name of the Principals, if any, whom he represents. :
4. If the applicant has been— :
  - (i) In the trade, give full particulars of the names of pesticides handled in the period and the places at which the trade was carried on (and the Principals whom he represented) and
  - (ii) Give the quantities handled during the past two calendar years:
    - (a)
    - (b)
5. Situation of the premises where the pesticides will be stored for sale, distribution, etc. :
6. Names of the pesticide for which the applicant desires to carry on business.
7. Quantities of each brand of pesticide to be stocked for sale or distribution.
8. Previous Licence to be enclosed in the case of renewal.
9. I/We have deposited the licence fee of Tk.....under the head of account “৪৫-কৃষি প্রাঙ্গি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়”। (Challan No ..... dated.....)
10. **Declarations:**
  - (a) I/We declare that the information given above is true to my/our knowledge and belief and no part there of is false.
  - (b) I/We carefully have read the terms and conditions of the licence and agree to abide by them.

Date :

Signature of the applicant.

**NOTE :** The application shall be accompanied by certificates issued by the Principal(s) whom the applicant represents.

**FORM—8**

[see rule 12(1)]

(In duplicate)

**Application for grant or renewal of retail licence for pesticide.**

To  
The Licensing Authority.

1. Full name and address of the applicant :
2. Source or sources from which pesticide will be obtained. :
3. Quantities of pesticide (s) to be stocked for sale. :
4. Situations of the dealer's premises where the pesticide will be (a) stored and (b) sold. :
5. The name(s) of the pesticide(s) in which applicant desires to carry on the business. :
6. Previous licence to be enclosed in the case of renewal of licence. :
7. Licence fee of Taka ..... is credited to the Government under head of account "৪৫-কৃষি প্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়"। (Challan No ..... dated.....)

**8. Declarations:**

- (a) I declare that the information given above is true to my knowledge and belief and no part thereof is false.
- (b) I carefully have read the terms and conditions of the licence and agree to abide by them

Place.....

Date.....

Signature of the Applicant.

**FORM—9**

[see rule 12(1)]

(In duplicate)

**Application for a licence or renewal of licence for repacking of pesticides.**

To  
The Licensing Authority.

1. I/We..... hereby apply for a licence or renewal of licence for re-packing pesticides situated at .....
2. Name(s) of the brand of pesticides(s) to be re-packed with the name(s) of the manufacturer/formulators, etc. :
3. Quantities to be repacked in a year :
4. Name(s), qualification and technical experience of the expert staff to be employed for the direction and supervision of repacking:  
(1).....  
(2).....
5. A fee of Taka .....is credited to the Government under the head of account “৪৫-কৃষি শ্রাণ্ডি-অনিষ্টকারী পোকা-মাকড়, রোগ-বলাই ব্যবস্থাপনা ও বিবিধ খাতে আয়”। (Challan No ..... dated.....)
6. Full name of the applicant in block letters with address. :
7. Previous licence to be enclosed in the case of renewal. :

Signature of the applicant.

**NOTE :** The application to be accompanied by a sketch plan of the premises.



**FORM—10**  
**[see rule 12(1)]**

(In duplicate)

**Application for grant of Pest Control Operation Licence on Commercial basis or  
renewal thereof.**

To  
The Licensing Authority.

1. Full name and address of the applicant (in block letters) :
  2. Is the applicant a new comer? :
  3. If the applicant has been in the trade, give full particulars of pesticides handled and pest control operation undertaken. :
  4. Quantities of Pesticides handled during the last two calendar years for pest control operation to be specified. :
  5. Situation of the Premises where the implements will be housed and pesticides stored. :
  6. Name to the place(s), crops and infested places in which applicant desires to carry on business. :
  7. Pesticide stockist licence, if any. :
  8. Previous licence to be enclosed in the case of renewal of licence. :
  9. Names, qualifications and experience of persons (trained in pest control operation) to be employed for direction and supervision. :
10. Licence fee of Taka 500 has been credited to the Government under the head of account “কৃষি প্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা বিবিধ খাতে আয়”। in treasury challan No.....-1-4331-0000-2043, dated.....

**11. Declaration:**

- (a) I/We declare that the information given above is true to my/our knowledge and belief and no part thereof is false.
- (b) I/We carefully have read the terms and conditions of licences and agree to abide by them.

Date: .....

Signature of the applicant (s)

**Note:** Application to be accompanied by a sketch plan of premises.



**FORM 12**  
**[see rule 12(2)]**

(In duplicate)

**Licence to Import pesticide (s).**

M/S ..... is hereby granted  
licence to import the following brand of pesticide (s) :—

- (a) Brand name of pesticide(s) with registration No. :
- (b) Descriptive name of pesticides :
- (c) Name of Ingredients of pesticide :
- 2. Name of the manufacturer :
- 3. Quantities to be imported :
- 4. The licence shall be in force for a period of two years from the date of issue.

Licence No.....

Date.....

Licensing Authority.  
(Seal)

**Conditions**

- 1. The licence shall be displayed in a prominent place of the office premises.
- 2. The licensee shall comply with the provision of the Pesticide Ordinance, 1971 and the rules made thereunder for the time being in force, provided that the condition shall not apply to import any pesticide for experimental or research purposes.
- 3. Renewal.

**FORM 13**

[see rule 12(2)]

**Licence for manufacture/formulation of pesticides.**

Licence No .....,  
date.....

M/s .....of.....is  
hereby granted licence to manufacture/formulate the pesticides on the premises situated at  
..... under the direction  
of the following expert staff:

- (a) Expert staff (names) : Qualification
- (b) Names of pesticide(s) :

- 2. The licence shall be in force for a period of two years from the date of issue.
- 3. The licence is subject to the conditions stated below and to such conditions as are specified in the rules for the time being in force under the Pesticide Ordinance, 1971.

Date :

Signature

Licensing Authority

(Seal)

**Conditions**

- 1. This shall be kept on the approved premises and shall be produced for inspection at the request of an authorised officer under the Pesticide Ordinance, 1971 and rules thereunder.
- 2. Any change in the expert staff named in the licence shall forthwith be reported to the licensing authority.
- 3. If the licensee wants to undertake during the currency of the licence to manufacture/ formulate for sale additional pesticide, he should apply to the licensing authority with the licence.
- 4. Renewal.

**FORM 14**

[see rule 12(2)]

**Licence to hold in stock for wholesale of pesticides.**

Licence No.....,  
date.....

Mr/M/s..... is hereby granted licence to hold in stock for wholesale of pesticides on the premises situated at ..... subject to the conditions specified below and to the provisions of the Pesticide Ordinance, 1971 and the rules made thereunder.

2. Licence shall be in force for a period of two years from the date of issue.
3. Categories of pesticides to be hold in stock.
4. Total quantity of pesticides to be stocked.

Date:

Licensing Authority

(Seal).

**Conditions**

1. The licence shall be displayed in a prominent place in the part of the premises open to the public.
2. The licence shall comply with the provisions of the Pesticide Ordinance, 1971 and the rules made thereunder for the time being in force.
3. No sale of pesticide shall be made to a person not holding a retail licence to sell pesticide, provided that this condition shall not apply to the sale of any pesticide to an officer or authority purchasing on behalf of Government.
4. The licence shall not be allowed to take wholesale commission for sale of pesticide exceeding the rate fixed by the Government.
5. Renewal.

**FORM 15**

[see rule 12(2)]

**Licence for retail sale of pesticide**

M/s..... is hereby granted licence to sell pesticide(s) by retail sale on the premises situated at ..... subject to the conditions specified below and to the provision of the Pesticide Ordinance, 1971 (No. 11 of 1971) and the rules made thereunder.

2. Licence shall be in force for a period of two years from the date of issue.

3. Pesticides to be sold :

Licence No.....

Date.....

Licensing Authority

(Seal).

**Conditions**

1. The licence shall be displayed in a prominent place in any part of the premises open to the public.
2. The licensee shall comply with the provisions of the Pesticide Ordinance, 1971 and the rules made thereunder.
3. The licensee shall not be allowed to take commission for retail sale of pesticides exceeding the rate fixed by the Government.
4. Renewal.

**FORM 16**

[see rule 12(2)]

**Licence to repack pesticides.**

M/s ..... is hereby granted licence for re-packing pesticide(s) at the premises situated at ..... under the direction and supervision of the following expert staff:

(a) Name ..... Qualification  
.....

(b) Name ..... Qualification  
.....

2. The licence authorises the licensee for re-packing the brand of pesticide(s) mentioned in the application as stated below.
3. The licence shall be in force for a period of two years from the date of issue.
4. Type of re-packing(s).
5. Quantity to be re-packed in a year:

Licence No .....

Date .....

Licensing Authority

(Seal)

**Conditions**

1. The licence shall be displayed in a prominent place in the part of the premises open to the public.
2. The licensee shall comply with the provisions of the Pesticide Ordinance, 1971 and the rules made thereunder.
3. Renewal.

**FORM 19**

**(see rule 23)**

**Memorandum to Director, Pesticide Laboratory.**

To  
The Director, Pesticide Laboratory, Dhaka

I (full name of Inspector) ..... do hereby  
certify that accompanying is a sample of pesticide taken by me on  
..... at ..... (specify full address)  
from stock in charge of .....(state name and address of  
Importers/stockist/manufacturer/formulator/repacker/seller).....  
..... in presence of .....  
..... (state names and address of witness).

The following further particulars are given in connection with the samples:

1. Name of the brand of Pesticide.
2. Descriptive name of Pesticide.
3. Marks or number on samples.
4. Information given on container from which sample was taken.
5. Approximate quantity of pesticide represented by the sample.
6. Other particulars.

Signature of Witness  
Place  
Date

Signature of Inspector  
(Seal)

**Note:** A copy of the memorandum shall be handed over or forwarded to the owner of the pesticide or to his agent. A copy shall be retained by the Inspector.



**FORM 20**

**[(see rule 24 (1))]**

**Report of Test or Analysis by Pesticide Laboratory.**

It is certified:

- (1) that on ..... the sample of .....  
was received from ..... in the  
Pesticide Laboratory, Dhaka for test and/or analysis,
- (2) that the sample was labelled, sealed and marked .....,  
and
- (3) that the sample was tested and/or analysed and found that (Specify details of the  
results of test/or analysis).

Date:

Signature of Director,  
Pesticide Laboratory,  
Dhaka.

**FORM 21**

**[(see rule 38 (3))]**

(In triplicate)

**Report of results of analysis of test of sample of pesticide by Government Analyst**

I (full name) ....., a duly appointed Government Analyst in terms of section 14 of Pesticide Ordinance, 1971, do hereby make oath and state.....

1. that on ..... received a sample of ..... from (full name of Inspector) ..... for analysis and/or test,
2. that the sample was labelled, sealed and marked .....,
3. that I have analysed and/or tested the sample and found that (specify the details of results of analysis and/or test with protocols of test applied).

Date:

Signature of Government Analyst  
(Official seal).

**FORM 22**

**(see rule 39)**

(In triplicate)

**Application for the testing of a pesticide by the purchaser**

1. Name of the applicant :
2. Address of the applicant :
3. Name of pesticide or brand :
4. Name of the manufacturer/ formulator/ dealer/  
vendor :
5. Registration No :
6. Requirement of test :
7. Purpose of purchase :

**Specification Limit.**

- (i)
- (ii)
- (iii)

I do hereby apply for the testing in terms of section 20 of the Pesticide Ordinance, 1971 of the pesticide, the particulars of which are given above. A fee of Taka ..... is being submitted herewith as per Schedule I.

Date:

Signature of applicant.

**FORM 23**

**(see rule 39)**

**Report of the test or analysis for purchaser.**

1. Name of persons from whom sample received :
2. Date of receipt :
3. Name of pesticide or brand :
4. Percentage of active ingredient :
5. Opinion of the Government Analyst :
6. The sample referred to above is/is not of  
standard quality as specified :

Date:

Signature of the Government Analyst

(Official seal).

**FORM 24**

**(see rule 43)**

**Order not to dispose of any stock.**

Whereas I have reason to believe that the stock of.....  
Pesticide(s) in your Possession, detailed below, is being distributed, sold, used or disposed  
of in contraventions of the provisions of section .....  
the Pesticide Ordinance, 1971 and the Pesticide Rules, 1985 thereunder.

I hereby require you under section 24(1) of the said Ordinance not to dispose of the said  
stock.

Is of stock of pesticide:

- 1.
- 2.
- 3.
- 4.

Date:

Inspector  
(Official seal).

**FORM 25**

**(see rule 44)**

**Receipt for stock of pesticides seized.**

The stock of pesticides detailed below has this day been seized by me under the provision of section 24(1) of the Pesticide Ordinance, 1971 from the premises of .....  
..... situated at .....  
.....

Details of pesticide(s) seized giving full inventory of the materials with quantities of each:

- 1.
- 2.
- 3.
- 4.
- 5.

Date:

Signature of Inspector.

(Official seal).

**FORM 26**

**(see rule 45)**

To  
I have this day (date ..... and time.....) taken from  
the premises of ..... situated at  
..... samples of the pesticides as specified below  
for the purpose of test or analysis.

Details of sample taken.

Date :

Signature of Inspector  
(Seal)

**FORM 27**

**(see rule 46)**

Memorandum to Government Analyst.

To  
The Government Analyst,

The portion of sample of the container described below is sent herewith for test or analysis under the rule 46 of the Pesticide Ordinance, 1971.

The portion of sample of the container has been marked by me with the following mark:

Details of portion of sample of the contain with the name of Pesticide which it imports to contain.

Signature of Inspector

(Official seal)



কৃষি মন্ত্রণালয়

সেকশন ৬

প্রজ্ঞাপন

তারিখ, ১৪ শ্রাবণ ১৪১৭/২৯ জুলাই ২০১০ খ্রিস্টাব্দ

নং এস, আর, ও ২৮২-আইন/২০১০—যেহেতু সরকার The Pesticides Ordinance, 1971 (II of 1971) এর Section 29 (1)-এ প্রদত্ত ক্ষমতাবলে সরকার কর্তৃক Pesticides Technical Advisory Committee এর সাথে পরামর্শক্রমে THE PESTICIDE RULES, 1985 নিম্নরূপভাবে সংশোধনের প্রস্তাব করিয়া প্রস্তাবিত সংশোধনীর ফলে প্রভাবিত বা ক্ষতিগ্রস্ত হইতে পারেন এমন সকল ব্যক্তিদের অবগতি এবং তাহাদের নিকট হইতে আপত্তি বা পরামর্শ আহ্বান করিয়া প্রস্তাবিত সংশোধনী গেজেটে প্রকাশের তারিখ হইতে ৩০ (ত্রিশ) দিনের সময়সীমা উল্লেখ উক্ত 29 (1) এর বিধান অনুযায়ী বাংলাদেশ গেজেটের অতিরিক্ত সংখ্যা ২৬ বৈশাখ, ১৪১৭ বঙ্গাব্দ মোতাবেক ৯ মে ২০১০ খ্রিস্টাব্দ তারিখে প্রাক-প্রকাশ করিয়াছিল; এবং

যেহেতু, জারীকৃত প্রজ্ঞাপনের প্রেক্ষিতে কাহারও নিকট হইতে কোন আপত্তি বা পরামর্শ পাওয়া যায় নাই;

সেহেতু The Pesticides Ordinance, 1971 (Ordinance No. II of 1971) এর Section 29 (1)-এ প্রদত্ত ক্ষমতাবলে সরকার Pesticides Technical Advisory Committee এর সাথে পরামর্শক্রমে The Pesticide Rules, 1985 এর নিম্নরূপ সংশোধন করিল, যথাঃ—

উপরিউক্ত Rules এর—

(১) Rules 2 এর clause (1) এর প্রাস্তস্থিত (.) ফুল স্টপের পরিবর্তে (;) সেমিকোলন প্রতিস্থাপিত হইবে এবং অতঃপর নিম্নরূপ নতুন clause (m), (n), (o), (p), (q), (r), এবং (s) সংযোজিত হইবে, যথাঃ—

**m. “Active ingredient:”** means the biologically active part of the pesticide present in a formulation.

**n “Agricultural pesticide :”** means the pesticides which are intended for use against agricultural pests.

**o “Biopesticide:”** According the FAO, “Biopesticides” are naturally occurring substances or their synthetic analogues that are distinguished from conventional chemical pesticides by their unique modes of action, low use volume, and target species specificity.

**p “Government:”** means Secretary, Ministry of Agriculture or any government official as may be authorized and duly notified by the Secretary, Ministry of Agriculture for the purpose of these rules.

**q “Inert ingredient:”** means an ingredient in a formulated pesticide product which will not prevent, Destroy, repel or mitigate any pest and is intentionally included in

the product. This includes ingredient such as solvents, emulsifiers, wetting agents, carriers, diluents, conditioning agents etc.

**r “Manufacturer:”** means a corporation or other entity in the public or private sector or any individual engaged in the business or function (whether directly or through an agent or through an entity controlled by or under contract with it) of manufacturing a pesticide active ingredient or preparing its formulation or product.

**s “Public health pesticide:”** means the pesticides which are intended for use against public health concern.

**t “Person”** means importer, manufacturer, formulator, repacker, vendor or stockholder, wholesaler and retailer of Pesticides but does not include farmer or enduser.

৩. **Rule 3** এর পরিবর্তে নিম্নরূপ **rule 3** প্রতিস্থাপিত হইবে, যথা ঃ—

“3. **Application for registration of pesticides,**—(1) An application in triplicate for registration of a brand of pesticide under sub-section (1) of section 5 of the Ordinance shall be made to the Registration Authority in Form- I. a. for Conventional Chemical pesticides, Form-1b for Biochemical pesticides and Form-1c for Microbial pesticides.

(2) Where the person, making application under sub-section (1) of section 5 of the Pesticides Ordinance, 1971 (II of 1971), is not domiciled in Bangladesh the application shall, besides such person, be signed by his agent or representative in Bangladesh”.

8. **Rule 4** এর—

(ক) sub-rule (2), (3) ও (4) এর পরিবর্তে নিম্নরূপ sub-rule (2) (3) (4) ও (5) প্রতিস্থাপিত হইবেঃ

“ (2) On receipt of the result of the test or analysis under sub-rule (1) the Registration Authority shall submit the result to the sub-committee for approval. After approval of sub-committee the registration authority shall send the sample of the pesticide to the respective specialized institutes/organization authorized by the Advisory Committee to conduct biological test and trial for both the new molecule and Me-too product under field condition as may be required. Both for Me-too Product & New Molecule, 2 (two) different locations and 2(two) crop season trials are required. After field trial, report should be made available within 1(one) month. The respective specialized institutes/ organization shall conduct such biological and field efficacy tests following standard Bio-efficacy Test Protocols either available with the respective specialized institutes/organization or prescribed by the Advisory Committee.

(3) The specialized institute/organization will send the test result to the Registration Authority. On receipt of the test result, the Registration Authority will send the result to the next meeting of the sub-Committee of the Advisory Committee.

(4) The Sub-Committee will examine the test result with the list of protocols and shall send its recommendations to the Registration Authority within 15(fifteen) days on receipt of the result.

(5) On receipt of the recommendation of the Sub-committee of Advisory committee under sub-rule (4) the Registration Authority will forward the recommendation of the sub-Committee to the advisory committee. If advisory committee approved and recommend that the brand of pesticide conforms to the requirement of the ordinance and rules then the registration authority give registration to the brand of pesticide in Form-2 in such condition as may be specified in the registration certificate.”

(খ) **Sub-rule (5)** এর পরে নিম্নরূপ নূতন **sub-rules (6) (7) (8) ও (9)** সংযোজিত হইবে, যথা ঃ—

“(6) A certificate of registration granted under sub-rule (5) shall apply only to the pesticide described in the application to which the certificate relates.

(7) The registration authority shall issue the registration certificate within 15(fifteen) working days of Advisory Committee approval.

(8) Pesticides registered as aforesaid shall be published by the Registration Authority in the official Gazette within 30(thirty) days from the date of granting registration certificate.

(9) The registration of a brand of pesticide shall be effective from the date of its registration until the thirtieth day of June of the third year following the year of registration.”

৫। **Rule 6** এর পরিবর্তে নিম্নরূপ rule 6 প্রতিস্থাপিত হইবে, যথা ঃ—

“(1) An application in duplicate for renewal of registration shall be made in Form-3 to the Registration authority at least 30 (thirty) days before its expiry.

(2) The registration of a pesticide shall be deemed to have been cancelled if not applied under sub-rule (1).

(3) A certificate of renewal of registration shall be issued in Form 4 within 90(ninety) days after receiving the application.

(4) On receipt of application with fee the Registration authority can approve by himself the changes in address and country of origin of a registered brand of a pesticide.

(5) In case of change of country of origin, the sample of the product should be tested and should comply with the original product.”

৬। **Rule 7** এর **sub-rule (1)** এর পরিবর্তে নিম্নরূপ sub-rule(1) ও (2) প্রতিস্থাপিত হইবে, যথা ঃ—

“(1) A fee of TK. 20,000.00 (Taka Twenty thousand) shall be paid with each application for a Registration Certificate and a fee of TK. 5,000.00 (Taka five thousand) for renewal of certificate of registration, which shall, in no case, be refunded to the applicant.

(2) A fee of TK. 2000.00 (Taka two thousand) shall be paid for a duplicate copy of the registration certificate if the original one is defaced, destroyed or lost.”

৭। **Rule 8** এ “service” শব্দের পর “and in the official Gazette” শব্দসমূহ সংযোজিত হইবে।

৮। **Rule 9** এ “**Authority**” শব্দের পর “and the registration authority will cancel the registration” শব্দসমূহ সংযোজিত হইবে।

৯। **Rule 11** এর sub-rule (3) পরে নিম্নরূপ sub-rule (4) সংযোজিত হইবে, যথাঃ—

“(4) **Pesticide shall be importable only from the manufacturer/formulator as mentioned in the Registration Certificate.**”

১০। **Rule 12** “ এর

(ক) sub-rule (2) এ “ Form 12,” এর পর “ Form 12 (a)” শব্দগুলি, সংখ্যা ও কমা সন্নিবেশিত হইবে;

(খ) sub-rule (3) এর পরিবর্তে নিম্নরূপ sub-rule (3) প্রতিস্থাপিত হইবে, যথা ঃ—

“(3) An application for grant of licence and renewal thereof under this rule will be accompanied by a fee specified below :

	<u>Licence fee Taka</u>	<u>Renewal fee Taka</u>
(a) import	Two thousand	One thousand
(b) manufacture or formulation	Five thousand	One thousand
(c) holding in stock for wholesale	One thousand	Five thousand
(d) retail sale	Three thousand	Two thousand
(e) repacking	Two thousand	One thousand
(f) pest control operation on commercial	Two thousand	Five thousand
(g) Advertisement	One thousand	Five thousand

(গ) **Sub-rule (5)** এর পরে নিম্নরূপ **sub-rule (6)** সংযোজিত হইবে, যথা ঃ—

“(6) Environmental certificate is required from Department of Environment for Pesticide repacker, Formulation factory or manufacturer following Environmental conservation Act 1995 and Environmental Conservation Rules 1997.”

১১। **Rule 14** এর পরিবর্তে নিম্নরূপ rule 14 প্রতিস্থাপিত হইবে, যথা ঃ—“14 A fee of TK 100 (one hundred) shall be paid for duplicate copy of a licence issued under this chapter if the original one is defaced, damaged or lost.

১২। **Rule 15** এর sub-rule (2) এর পরিবর্তে নিম্নরূপ sub-rule (2) প্রতিস্থাপিত হইবে, যথা ঃ—

“(2) An application in duplicate for renewal of license shall be made to the Registration authority within 30 (thirty) days of such expiry of the date of its effectiveness and if the application is not made so, a penalty of TK. 300.00 (three hundred) for each month up to 3(three) months from the date of expiry, shall accompany the application along with usual renewal fee. The license of a pesticide shall be deemed to, have been cancelled if the renewal is not applied for within 90 (ninety) days from the date of expiry.”

১৩। **Sub-rule (3)** এ “45- কৃষি প্রাপ্তি- অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।

১৪। **Rule 19** এর **sub-rule (3)** এর পরিবর্তে নিম্নরূপ sub-rule (3) প্রতিস্থাপিত হইবে, যথা ঃ—

“(3) The licensing authority may after such inspection finds all terms and conditions paid down under Rule 17 and/ or which is applicable or fulfilled by the person to whom the license is proposed to be transferred, accord permission to transfer the license and on such permission being given, an endorsement to the that effect shall be made in the license.”

১৫। **Rule 21** এর—

(ক) Clause (e) তে “pesticides” শব্দটির পরিবর্তে “Agricultural and Public Health pesticides” শব্দসমূহ; এবং

(খ) Clause (d) তে “as well as they are being suitable for aerial application” শব্দসমূহের পরিবর্তে “based on formulation as well as they are being suitable for ground and aerial application” শব্দসমূহ প্রতিস্থাপিত হইবে।

১৬। **Rule 28** এর clause (d) তে “WHO” শব্দের পরে and “FAO” শব্দগুলি সংযোজিত হইবে।

১৭। **Rule 32** এর—

(ক) “leaflet” শব্দের পরে “of every pesticide which shall be affixed” or attached to the package or repacking” শব্দগুলি বিলুপ্তি হইবে ; এবং

(খ) clause (d) “storage” শব্দটির পরে “shall be exclusive” শব্দগুলি সন্নিবেশিত হইবে।

১৮। **Rule 33** এর sub-rule (4) এ—

- (ক) Clause (i) এ “category 1 (highly toxic)” শব্দগুলির পরিবর্তে “ 1a and 1b (extremely and highly hazardous)” শব্দসমূহ প্রতিস্থাপিত হইবে ;
- (খ) Clause (iii) এ “ (moderately toxic) shall bear the word “Poison” “DANGER” and the statement “ KEEP OUT OF THE REACH OF CHILDREN” shall appear on the label at suitable place outside the square” শব্দগুলির পরিবর্তে “(moderately hazardous) shall bear the word “Poison” “DANGER” printed in bright yellow; and” শব্দসমূহ ও কমা প্রতিস্থাপিত হইবে; এবং the statement “keep out of the reach of children” shall appear on the label at suitable out side the square.
- (গ) Clause (iv) এর পরিবর্তে নিম্নোক্ত clause (iv) প্রতিস্থাপিত হবে, যথাঃ—  
“(iv) pesticides in category III (slightly hazardous) shall bear the word “Poison” “ CAUTION” and the word “CAUTION” printed in bright green and the statement “KEEP OUT OF THE REACH OF CHILDREN” shall appear on the label at suitable place outside the square.”
- (ঘ) Sub-rule (5) এ TABLE এর পরিবর্তে নিম্নরূপ TABLE প্রতিস্থাপিত হইবে, যথা ঃ—

“ TABLE”

Class		LD 50 for the rat (mg/kg body weight) based on formulations				Color of identification band on the label
		Oral		Dermal		
		Solid	Liquids	Solids	Liquids	
1a	Extremely hazardous	5 or less	20 or less	10 or less	40 or less	Red
1b	Highly hazardous	5-50	20-200	10-100	40-400	Red
II	Moderately hazardous	50-500	200-2000	100-1000	400-4000	Bright yellow
III	Slightly hazardous	Over 500	Over 2000	Over 1000	Over 4000	Bright green

The terms “Solids” and “Liquids” refer to the physical state of the active ingredient being classified.”

১৯। **Rule 38** এর sub-rule (2) এ “country” শব্দের পরে “ and FAO, WHO, ISO, CIPAC specification” শব্দসমূহ ও কমা সংযোজিত হইবে।

২০। **Rule 40** এর sub-rule (3) এ ৪৫-কৃষিপ্রাপ্তি অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয় শব্দসমূহের পরিবর্তে “1-4331-0000-2043” সংখ্যা ও চিহ্নসমূহ প্রতিস্থাপিত হইবে।

২১। **Rule 41** এর clause (c) এ “shall not exceed two pounds (one kilogram)” শব্দসমূহের পরিবর্তে “ shall be maximum 125ml for liquid, 500gms for granules and powder” শব্দসমূহ প্রতিস্থাপিত হইবে।

২২। **Rule 58** এর clause (d) এর পর নিম্নরূপ clause (e) নূতন সংযোজিত হইবে, যথাঃ—

“(e) ensure periodic (monthly blood cholinesterase test for the workers and removing the worker from the plant, whose blood cholinesterase level has been depressed below WHO limits.”

২৩। **Rule 59** এর পরিবর্তে নিম্নরূপ **rule 59** প্রতিস্থাপিত হইবে, যথা ঃ—

“A List of the plant and animal life, the nomenclature of which are specified in Schedule II shall be maintained at PPW and shall be updated from time to time by the Director, PPW as per approval of the Advisory Committee.”

২৪। **Rule 60** এর পরিবর্তে নিম্নরূপ **rule 60** প্রতিস্থাপিত হইবে, যথা ঃ—

“60(1) The pesticides which get registration shall be specified in Schedule III and shall be labeled “Poison” as per the provision of rule 33.

(2) Director, PPW shall update the list from time to time.”

২৫। Form-1, এর ১৪ নং কলামে বর্ণিত “Toxicological data” শব্দটির পরিবর্তে “Toxicological data of Technical Grade Active Ingredient (TGAI) and Formulated Product (FP)” শব্দসমূহ প্রতিস্থাপিত হইবে।

২৬। বর্তমান Form-1, Form-1 (a) for Chemical pesticides দ্বারা প্রতিস্থাপিত হইবে।

Form 1(a) এর পরে Form 1 (b) for Biochemical Pesticides এবং Form 1 (c) for Microbial Pesticides নতুনভাবে সংযোজিত হইবে।

## FORM 1 (a): For Chemical Pesticides

(See rule 3)

### APPLICATION FOR REGISTRATION OF CHEMICAL PESTICIDES

1. Name and address of the applicant :
2. Name of the pesticide :
3. Name and address of the manufacturer :
4. Common Name/Descriptive Name :
5. Chemical Name (IUPAC nomenclature) :
6. Structural formula :
7. Empirical formula and molecular weight :
8. Manufacturer's development code number(s) :
9. Active ingredient (certified percentage of active material) :
  - (a) Physical state :
  - (b) Colour/Appearance :
  - (c) Odour :
  - (d) Refractive index :
  - (e) Melting point :
  - (f) Decomposition point :
  - (g) Viscosity :
  - (h) Boiling point :
  - (i) Vapour pressure (Figures should be given at a stated temperature preferably is the range of (20-25°C). :
  - (j) Flash point :
  - (k) Specific gravity/Density (for liquids only) :
  - (l) Hydrolysis rate under stated relevant conditions :



- (m) Surface tension :
- (n) Stability :
- (o) Solubility :
- (p) Compatibility :
- (q) Photolysis :
- (r) Absorption spectra, e.g. ultra-violet and infra red, :
- (s) Any other relevant properties :
- (t) Acidity/Alkalinity/pH value :

**10. Technical grade material :**

- (a) **Source** : name and address of manufacturer and address where manufactured :
- (b) Physical state :
- (c) Colour :
- (e) Acidity/Alkalinity/P<sup>H</sup> value :
- (f) Specific gravity :
- (g) Viscosity :
- (h) Flash Point :
- (i) Minimum (and maximum) active ingredient content in % w/w :
- (j) Identity and amount of isomers, impurities and other by products together with information on their possible range expressed as % W/W :
- (k) Storage stability (Low and High temperature storage stability). :

**11. Formulated product**

- (1) Identity/appearance (colour) :
- (2) Odour :
- (3) Type of formulation :
- (4) Contents of active ingredient (s) :

- (5) Content and nature (identity, if possible, of other components included in the formulation, e.g., technical grade, adjuvants and inert ingredient). :
- (6) Water content/Moisture (above relevant) :
- (7) Specific gravity :
- (8) Viscosity :
- (9) Low & High temperature storage stability ( in respect to composition and physical properties related to use. :
- (10) Impurities :
- (11) **Flammability** :
  - (a) **Liquids** : Flash point :
  - (b) **Solids** : A statement must be made as to whether the product is flammable Non solid :
- (12) Acidity :
- (13) Alkalinity :
- (14) pH Value :
- (15) Other properties may in certain cases need evaluation :
- (16) Carrier materials :
- (17) Wettability (for dispersible powders) :
- (18) Persistent foam (for formulation applied in water) :
- (19) Suspensibility (for dispersible powders and suspension concentrates) :
- (20) Particle size :
- (21) Wet sieve test (for dispersible powders and suspension concentrates) :
- (22) Dry sieve test (for granules, dusts) :
- (23) Emulsion Stability ( for emulsifiable concentrate ) :
- (24) Bulk density : :
- (25) Corrosiveness (when necessary) :
- (26) Flow ability :

- (27) **In case tablet/pellets :** :
- (a) Weight :
- (b) Thickness/height :
- (c) Diameter :
- (d) Colour/Appearance :
- (e) Percentage of active ingredients and other related standard specifications :
- (28) Known incompatibility with other products, e.g., pesticides, fertilizers :
- (29) Application with dosage rate :
- 12. Rate of release of active ingredient (granules, dust, etc.) :**
- 13. Efficacy :**  
Primary evaluation data using harmonized method and reported in a systematically presented complete dossier
- 14. Toxicological data of Technical Grade Active Ingredient (TGAI ) and Formulated Product (FP)" :**
- (a) Acute Oral toxicity and Dermal toxicity :
- (b) Acute percentaneous toxicity :
- (c) Acute inhalation toxicity :
- (d) Acute other routes e.g., intraperitoneal :
- (e) Skin irritation :
- (f) Eye irritation :
- (g) Short-term oral administration :
- (h) Short-term sensitizing effects :
- (i) Toxic effects of metabolites :
- (j) Metabolic studies :
- (k) Long-term toxicity including carcinogenicity :
- (l) Neurotoxicity :
- (m) Reproduction studies :
- (n) Embryotoxicity, including teratogenicity. :

- (o) Mutagenicity :
- (p) Potentiation :
- (q) Direct observations, e.g., clinical cases :
- (r) Health records, both from industry and agriculture. :
- (s) Treatment of poisoning :
- (t) First aid measure :
- (u) Supplementary treatment :
- (j) Waiting period (last application to harvesting) :

**15. Residue studies :**

- (a) Primary physical, chemical and biological data. :
- (b) Identification of residue design of analytical method :
- (c) Reliable residue data from supervised trials :
- (d) Estimations of maximum residue :
- (e) Data on further disappearance on storage, transport, etc. :
- (f) Estimation of residue level in commodity on sale :
- (g) Data on disappearance on food preparation cooking or processing :
- (h) Prediction of potential consumer intake, actual intake studies. :
- (i) Assessment of actual consumer intake :
- (j) Persistence of the product :

**16. Prediction of Environment effects :**

- (a) Fate and mobility studies of toxicant :
- (b) Method of application of pesticide :
- (c) Time of application :
- (d) Rate of application :
- (e) Scale of use (number of application (etc.) :
- (f) Climatic and geographical locality :

- (g) Volatility of product :
- (h) Water solubility :
- (i) Octanol water partition coefficient :
- (j) Absorption :
- (k) Desorption :
- (l) Degradation :
- (m) Persistence :
- (n) Effect on birds :
- (o) Effect on fish :
- (p) Effect on fish food species :
- (q) Effect on honey bee :
- (r) Degradation product in soil :
- (s) Possibilities of accumulation with stable lipophilic compound :
- (t) Effect on local aquatic species :
- (u) Effect on soil organism :
- (v) Disposal of used, condemned and surplus pesticides and pesticides containers. :
- (w) Proposal for labelling and direction for use as per pesticide rule 1985. :

**17. Packaging :**

- (a) State weight (or for liquid volume) and the sizes of package in which the products are to be marketed and for each size, the type of package, for instance i.e. 1 kg in cans with screw plug and 50 kg in iron drums. (please note that the product must be sold only in the package size and type notified to the Plant Protection Wing, Department of Agricultural Extension and for which the label is approved. :
- (b) Classification during transport :

**18. Method of analysis :**

- (a) Methods to determine the active ingredients of the product (the accuracy of the method of determination should be stated both instrumental and chemical) :
- (b) Methods to determine the amount of isomers, impurities and other by products :

**19. Labelled samples for analysis :**

- (a) Analytical reference standard 2—5 g :
- (b) Technical grade material 0.5—1.0 Kg :
- (c) Formulated product 1 kg/lit for each formulation :

**20. Registration fee :**

Taka ..... (Taka ..... thousand) deposited in Treasury Challan No. dated (original Treasury Challan enclosed) under Head of Account " 1-4331-0000-2043"

I do hereby apply for registration of the pesticide, particulars of which are given above, and hereby certify that these particulars are, to the best of my knowledge, true and correct.

**Explanation :** In this Form. "Active ingredient" means an ingredient capable in itself of preventing, destroying, repelling or mitigating insects, fungi, bacteria, nematodes viruses, rodents, weeds or other pests when used in the same manner and for the same purpose and those for which it is intended but is not antagonistic to the activity of any other active ingredient in the same formulation.

Date.....

.....  
Signature of applicant

**Notes**

**Directions for completion and submission of application. (in triplicate)**

**1. The application must be accompanied by :**

- a. General literature of the product including toxicological and efficacy data.
- b. Standard specification of technical product and formulation of the product.
- c. Statement of ingredients (active and inert materials to be enclosed separately in a sealed and confidential cover).
- d. Composition of formulation in details with percentage.

2. Certified true copy of the contract/agreement made between the manufacturer and the local agent authenticated by the competent agency of the country for import and marketing the product in Bangladesh.
3. (a) In case of renewal of an existing registration, the previous certificate of registration and  
 (b) A suitable sample of the pesticide sufficient for test and analysis (physical and chemical properties).
4. Treasury challan of Taka ..... thousand evidencing payment in the head of account: “1-4331-0000-2043” shall be submitted.
5. Submission of application in a sealed cover marked “Confidential”.

**FORM 1 (b): For Biochemical Pesticide**

(See rule 3)

**APPLICATION FOR REGISTRATION OF BIOCHEMICAL PESTICIDES<sup>1</sup>**

1. Name and address of the applicant :
  2. Name of the pesticide :
  3. Name and address of the manufacturer :
  4. Common Name/Descriptive Name :
  5. Active Ingredient
- I. Chemistry and other relevant particulars :**
- a. Type (Pheromone/Allomone/Kairomone/Synomone/Hormone/NPR/IGR/Botanical)<sup>2</sup> :
  - b. Natural or Synthetic
  - c. Identity of Natural Source :
  - d. Chemical Abstract Name :
  - e. IUPAC nomenclature :
  - f. Structural formula :
  - g. Empirical formula and molecular weight :
  - h. Manufacturer's development code number(s) :
  - i. Manufacturing Process (Attach details) :
  - j. Certified percentage (Purity %) (Attach detailed method of purity identification by GC/SP techniques) :

- k. **Physical and Chemical properties :**
- (i). Colour/Appearance :
  - (ii) Odour :
  - (iii) Refractive index :
  - (iv) Melting point :
  - (v) Decomposition point :
  - (vi) Viscosity :
  - (vii) Boiling point :
  - (viii) Vapour pressure (Figures should be given at a stated temperature preferably in the range of (20—25°C). :
  - (ix) Flash point :
  - (x) Specific gravity/Density (for liquids only) :
  - (xi) Hydrolysis rate :
  - (xii) Surface tension :
  - (xiii) Stability :
  - (xiv) Storage condition with range of temperature :
  - (xv) Solubility :
  - (xvi) Compatibility (Required only in case its use in combination with other pesticides or agrochemicals is recommended) :
  - (xvii) Photolysis :
  - (xviii) Absorption spectra, e.g., ultra-violet and infra red, etc. :
  - (xix) Any other relevant properties :
  - (xx) Acidity/Alkalinity/p<sup>H</sup> value :

**II. Biological Properties :**

- (a) Mode of action :
- (b) Degree of specificity :
- (c) Target pest (s) :
- (d) Target crop (s) :
- Dosage rate (g/acre/year of a,i.) :

**6. Technical grade material :**

- (a) **Source :** name and address of manufacturer and address where manufactured :
- (b) Physical and chemical properties :
  - (i) Colour :
  - (ii) Acidity/Alkalinity/p<sup>H</sup> value :
  - (iii) Specific gravity :
  - (iv) Viscosity :



- (v) Flash Point :
- (vi) Minimum (and maximum) active ingredient content in g/Kg or g/L :
- (vii) Identity and amount of isomers, impurities and other by products together with information on their possible range expressed in g/Kg or g/L :
- (viii) Description of starting materials, production process and potential impurities :
- (ix) Storage stability (Low and High temperature storage stability) :

**7. Formulated product:** :

- (1) Type of formulation :
- (2) Contents of active ingredient (s) g/Kg or g/L :
- (3) Content and nature (identity if possible) of other components included in the formulation, e.g. technical grade, adjuvants and inert ingredient) in g/Kg or g/L :
- (4) Physical and chemical properties :
  - (i) Identity/appearance (colour) :
  - (ii) Odour :
  - (iii) Water content/Moisture (above relevant) :
  - (iv) Specific gravity :
  - (v) Viscosity :
  - (vi) Low & High temperature storage stability (in respect to composition and physical properties related to use. :
  - (vii) Impurities :
  - (viii) Flammability :
- (a) **Liquids** : Flash point
- (b) **Solids** : A statement must be made as to whether the product is flammable
- (ix) Acidity :
- (x) Alkalinity :
- (xi) pH Value :
- (xii) Other properties may, in certain cases, need evaluation :
- (xiii) Carrier materials :

- (xiv) Wettability (for dispersible powders) :
- (xv) Persistent foam (for formulation applied in water) :
- (xvi) Suspensibility (for dispersible powders and suspension concentrates) :
- (xvii) Particle size (for dispersible powders) :
- (xviii) Wet sieve test (for dispersible powders and suspension concentrates) :
- (xix) Dry sieve test (for granules, dusts) :
- (xx) Emulsion Stability (for emulsifiable concentrate ) :
- (xxi) Bulk density :
- (xxii) Corrosiveness (when necessary) :
- (xxiii) Flowability (for dust) :
- (xxiv) Following information for special formulations (tablet/pellets/microcapsule/ lures/traps) (must comply with standard specification–Annexure 1) :
  - (a) Type
  - (b) Percentage of active ingredients and other related standard specifications
  - (c) Weight :
  - (d) Thickness/height :
  - (e) Diameter/size :
  - (f) Appearance/shape :
  - (g) release rate :
- (xxv) Known incompatibility with other products, e. g., pesticides, fertilizers :

**8. Toxicology Data of Technical Grade Active Ingredient (TGA) and Formulated product (FP) :**

- (a) Acute oral toxicity in rats and mice Oral toxicity and Dermal toxicity :
- (b) Acute dermal toxicity :
- (c) Acute inhalation toxicity :
- (d) Skin irritation :
- (e) Irritation to mucous membrane :

- (f) Eye irritation :
  - (g) Short-term (90 days) oral feeding effect only for TGAI (1 species)<sup>3,4</sup> :
  - (h) Short-term (90 days) dermal toxicity for TGAI only (1 species)<sup>3,4</sup> :
  - (i) Metabolic studies in animals<sup>3,4</sup> :
  - (j) Cellular immune response/Immunotoxicity<sup>3</sup> :
  - (k) Reproduction studies<sup>3,4</sup> only for TGAI :
  - (l) Embryotoxicity, including teratogenicity<sup>3</sup> only for TGAI. :
  - (m) Mutagenicity<sup>3</sup> only for TGAI :
  - (n) Long-term toxicity including carcinogenicity<sup>4</sup> :
  - (p) Potentiation :
  - (q) Direct observations, e.g. clinical cases :
  - (r) Health records, both from industry and agriculture. :
  - (s) Treatment of poisoning :
  - (t) First aid measure :
  - (u) Supplementary treatment :
  - (v) Waiting period (last application to harvesting) for FP :
- 9. Rate of release of active ingredient :**
- 10. Bio-Efficacy of FP**
- I. Laboratory Test**
- (a) Effectiveness of Lure/dispenser manufactured from the TGAI (Effectiveness of Lure/ dispenser manufactured from the TGAI should be tested by using Wind Tunnel and should demonstrate at least 50% efficacy) :
- II. Field test**
- (a) The data on bio-efficacy based on two seasons field trials conducted following proper design and standard method under local agroclimatic conditions under the supervision of recognized national organization and presented in the form of authentic/published report. :

### III. Application

- (a) Purpose of application :
- (b) Target pest (s) :
- (c) Target crop (s) :
- (d) Time of application :
- (e) Method of application :
- (f) Rate of application (g/acre/year) :
- (g) Limitation (s) of use :

#### 11. Residue studies<sup>5</sup> :

- (a) Chemical identity of residues :
- (b) Nature of residues in plants, commodity and livestock :
- (c) Reliable residue data from supervised trials :
- (d) Estimations of maximum residue :
- (e) Proposed Maximum Residue Limit (If expected concentration greatly exceed levels from naturally occurring substance) :
- (f) Estimation of residue level in commodity on sale :
- (g) Data on disappearance on food preparation cooking or processing :
- (h) Prediction of potential consumer intake, actual intake studies. :
- (i) Assessment of actual consumer intake :
- (j) Persistence of the product :

#### 12. Prediction of Environmental effects :

- (a) Concentration of naturally occurring substance :
- (b) Rate of use (gm/acre/year) :
- (c) Desorption :
- (d) Degradation :
- (e) Persistence :
- (f) Effect on birds :
- (g) Effect on fish :

- (h) Effect on fish food species :
- (i) Effect on honey bee :
- (j) Degradation product in soil :
- (k) Possibilities of accumulation with stable lipophilic compound :
- (l) Effect on local aquatic species :
- (m) Effect on soil organism :
- (n) Disposal of used, condemned and surplus pesticides and pesticides containers. :
- (o) Proposal for labelling and direction for use as per pesticide rule 1985 :

**13. Packaging :**

- (a) State weight (or for liquid volume) and the sizes of package in which the products are to be marketed and for each size, the type of package, for instance i.e. 1 kg in cans with screw plug and 50 kg in iron drums. (Please note that the product must be sold only in the package size and type notified to the Plant Protection Wing, Department of Agricultural Extension and for which the label is approved. :
- (b) Classification during transport :

**14. Method of analysis :**

- (a) Methods to determine the active ingredient of the TG and FP (the accuracy of the method of determination should be stated) both instrumental and chemical :
- (b) Methods to determine the amount of isomers, impurities and other by products :

**15. Labelled samples for analysis :**

- (a) Analytical reference standard: 10—50g :
- (b) Technical grade material : 50—200g :
- (c) Formulated product 200—500g for each formulation :

**16. Registration fee :**

Taka -----) deposited in Treasury :  
Challan No. dated (original Treasury Challan enclosed)  
under Head of Account " 1- 4331-0000-2043.

<sup>1</sup> *Biochemical pesticides are naturally-occurring substances or chemical synthesized by man, which must be structurally identical to a naturally occurring chemical and that must exhibit mode of action other than direct toxicity in the target pest (for example, growth regulation, mating disruption, attraction). For a synthetic chemical to be identical in chemical structure to a naturally occurring chemical, the molecular structure of the major component of the synthetic chemical must be the same as the molecular structure of the naturally occurring analog. (For details see Enclosure I).*

<sup>2</sup> ***Pheromones** are substances emitted by individuals of one species, which modify the behaviour of others within the same species. **Allomones** are chemicals emitted by one species, which modify the behaviour of a different species, to the benefit of the emitting species. **Kairomones** are chemicals emitted by one species, which modify the behaviour of a different species to the benefit of the receptor species. **Synomones** are chemicals emitted by one species, which modify the behaviour of a different species to the benefit of both the species. **Hormones** are biochemical agents that are synthesized in one part of an organism and translocated to another where they have controlling, behavioural or regulating effects. **Natural plant regulators (NPR)** are chemicals produced by plants that have inhibitory, stimulatory, or other modifying effects on the same or other species of plants. Some of these are termed "plant hormones" or "phytohormones". **Insect growth regulators (IGR)** are chemicals that have toxic, inhibitory, stimulatory, or other modifying effects on the insect growth cycle. Botanical will include only Azadirachtin based formulation.  
(For details see Enclosure I)*

<sup>3</sup> *Pheromones used in solid matrix, dispenses and having low annual use rates (less than 150 gms/acre/year) can be waived of these data.*

<sup>4</sup> *Naturally occurring short-chained lepidopteran pheromones having low annual use rates (less than 150 gms/acre/year) can be waived of these data.*

<sup>5</sup> *All information are not mandatory; whatever data are available from published source will be acceptable.*

I do hereby apply for registration of the pesticide, particulars of which are given above, and hereby certify that these particulars are, to the best of my knowledge, true and correct.

**Explanation** – In this Form. "Active ingredient" means an ingredient capable in itself of preventing, destroying, repelling or mitigating insects, fungi, bacteria, nematodes viruses, rodents, weeds or other pests when used in the same manner and for the same purpose and those for which it is intended but is not antagonistic to the activity of any other active ingredient in the same formulation.

Date.....

.....

Signature of applicant

## Notes

### Directions for completion and submission of application. (in triplicate)

1. **The application must be accompanied by** : General literature of the product including toxicological and efficacy data. Standard specification of technical product and formulation of the product. Statement of ingredients (active and inert materials to be enclosed separately in a sealed and confidential cover). Composition of formulation in details with percentage.
2. Certified true copy of the contract/agreement made between the manufacturer and the local agent authenticated by the competent agency of the country for import and marketing the product in Bangladesh.
3. (a) In case of renewal of an existing registration, the previous certificate of registration; and  
(b) A suitable sample of the pesticide sufficient for test and analysis (physical and chemical properties).
4. Treasury challan of Taka ..... thousand evidencing payment in the head of account: "1-4333-0000-2043" shall be submitted.
5. Submission of application in a sealed cover marked "Confidential".

## FORM 1 (c): For Microbial Pesticides

(See rule 3)

### APPLICATION FOR REGISTRATION OF MICROBIAL PESTICIDES<sup>1</sup>

1. Name and address of the applicant :
2. Name of the pesticide :
3. Name and address of the manufacturer :
4. Common Name :
5. Technical Grade Active Agent :
- I. Systematics and other relevant particulars.* :
  - a. Type (Bacteria/Virus/Fungus/Protozoa) :
  - b. Systematic/Scientific name :
    - (i) Genus (if applicable) :
    - (ii) Species (if applicable) : :
    - (iii) Serotype (if applicable) :
    - (iv) Strain (if applicable) :
  - c. Natural occurrence/Source and Origin :
  - d. Manufacturer's development code number(s) :
  - e. Manufacturing Process (The cultures are multiplied by liquid solid fermentation. Information pertaining to user of entire mycelial mats with spores separated should be provided<sup>2</sup>) :
  - f. Specifications (Must comply with the recommended standard available from PPW for each type of pesticide) :
    - (i) Form/Appearance :
    - (ii) Moisture content :
    - (iii) pH :
    - (iv) Particle size :
    - (v) Suspensibility :
    - (vi) Miscibility :



- g. Composition :

  - (i) Delta Endotoxin content<sup>3</sup> :
  - (ii) Beta Exotoxin content<sup>3</sup> :
  - (iii) Viable spore count<sup>3</sup> :
  - (iv) Adjuvants
  - (v) Human pathogens/pathogenic contaminants :  
(Attach culture method)
  - (vi) Other microbial contaminants (not more than :  
10/gm)
  - (vii) Other unintentional ingredients, their nature :  
and identity, and quantity

- h. Test procedures and criteria used for identification, :  
morphology, biochemistry, serology/immunology<sup>3</sup>

  - (1) Morphology description, particle size, heat :  
resistant spore count<sup>3</sup>
  - (2). Immunology assays (Elisa/Dot Blot assay test)<sup>3</sup> :  
(Appendix VI)
  - (3). Routine test:<sup>3</sup> (Appendix I & IV) :

    - (i) Level of toxin by Housefly Bioassay method :  
relevant conditions
    - (ii) Potency of product by Bioassay method :

  - (4). Test methods/analysis :

    - (i) Bioassay method<sup>3</sup> (Appendix I, II & IV) :

      - LC<sub>50</sub> on target larvae and potency against :  
a reference using artificial diet or leaf disc  
method or in water for mosquito
      - Housefly Bioassay method for Beta :  
exotoxin (for Bt) and chemical contaminants

    - (ii) Dual culture for antagonistic fungi/bacteria :
    - (iii) Pathogenicity test on insect in case of :  
tomopathogenic fungi
    - (iv) Qualitative analysis<sup>2</sup>

      - (a) CFU on selective medium :
      - (b) Test for gram negative bacterial :  
contaminants
      - (c) Test for moisture content :

- (v) Test procedure/Method of analysis<sup>4</sup> :
- (a) An appropriate test procedure and criteria used for identification by Restriction Enzymes analysis test :
- (b) Method of analysis (standard counting method attached as Appendix VII should be followed) :
- (c) Biological assays (Bioassay tests by Diet Surface Contamination method against second instar host insect should be generated for determining the LC<sub>50</sub> of the formulation as against standards) (Appendix VIII). :
- (5). Viable Spore counts<sup>3</sup> (Appendix V) :
- (6). Toxin content by dot blot/Elisa assay<sup>3</sup> (Appendix VI) :
- (7). Technique for separation and purification of crystals<sup>3</sup> (Appendix III) :
- i. Shelf life claim :
- (a) Data on storage stability as per shelf lime claims; and additional two months data for six months claim, three months additional data for one year's claim at two different locations at ambient temperature along with meteorological data.<sup>2, 4</sup> :

**II. Toxicology Data<sup>3</sup> :**

- a. Single exposure studies :
- (i) Oral toxicity/Pathogenicity/Infectivity :
- (ii) Dermal toxicity/Pathogenicity/Infectivity :
- (iii) Inhalation toxicity/Pathogenicity/Infectivity :
- (iv) Primary Skin irritation :
- (v) Irritation to mucous membrane :
- (vi) Eye irritation :
- (vii) Allergy/sensitization/immuno-suppression :

### III. Bio-efficacy<sup>3</sup>

Laboratory test: LC<sub>50</sub> values for each insect species under laboratory condition generated at least at two recognized national organization :

### 6. Formulated Product (FP) :

#### I. *Systematics and other relevant particulars* :

a. Type (Bacteria/Virus/Fungus/Protozoa) :

b. Systematic/Scientific name :

(i) Genus (if applicable) :

(ii) Species (if applicable) : :

(iii) Serotype (if applicable) :

(iv) Strain (if applicable) :

c. Natural occurrence :

d. Manufacturer's development code number(s) :

e. Manufacturing Process (The cultures are multiplied by liquid solid fermentation. Information pertaining to user of entire mycelial mats with spores separated should be provided<sup>2</sup>) :

f. Specifications (Must comply with the recommended standard available from PPW for each type of pesticide) :

(i) Form/Appearance :

(ii) Moisture content :

(iii) pH :

(iv) Particle size :

(v) Suspensibility :

(vi) Miscibility :

g. Composition :

(i) Delta Endotoxin content<sup>3</sup> :

(ii) Beta Exotoxin content<sup>3</sup> :

(iii) Viable spore count<sup>3</sup> :

- (iv) Adjuvants :
  - (v) Human pathogens/pathogenic contaminants :  
(Attach culture method)
  - (vi) Other microbial contaminants (not more than :  
10/gm)
  - (vii) Other unintentional ingredients, their nature and :  
identity, and quantity
- h. Test procedures and criteria used for identification, :  
morphology, biochemistry, serology/immunology<sup>3</sup>
- (1) Morphology description, particle size, heat :  
resistant spore count<sup>3</sup>
  - (2). Immunology assays (Elisa/Dot Blot assay test)<sup>3</sup> :
  - (3). Routine test: <sup>3</sup> :
  - (i) Level of toxin by Housefly Bioassay method :  
and relevant conditions
  - (ii) Potency of product by Bioassay method :
  - (4). Test methods/analysis :
  - (i) Bioassay method<sup>3</sup> :
  - LC<sub>50</sub> on target larvae and potency against :  
a reference using artificial diet or leaf  
disc method or in water for mosquito
  - Housefly Bioassay method for Beta :  
exotoxin (for Bt) and chemical  
contaminants
  - (ii) Dual culture for antagonistic fungi/bacteria :
  - (iii) Pathogenicity test on insect in case of :  
entomopathogenic fungi
  - (iv) Qualitative analysis<sup>2</sup> :
  - (a) CFU on selective medium :
  - (b) Test for gram negative bacterial :  
contaminants
  - (c) Test for moisture content :

- (v) Test procedure/Method of analysis<sup>4</sup> :
- (a) An appropriate test procedure and criteria used for identification by Restriction Enzymes analysis test
  - (b) Method of analysis (standard counting : method attached as Appendix 1 should be followed)
  - (c) Biological assays (Bioassay tests by Diet : Surface Contamination method against second instar host insect should be generated for determining the LC<sub>50</sub> of the formulation as against standards).
- (5) Viable Spore counts<sup>3</sup> :
- (6) Toxin content by dot blot/Elisa assay<sup>3</sup> :
- (7) Technique for separation and purification of crystals<sup>3</sup> :
- i. Shelf life claim :
- (a) Data on storage stability as per shelf life claims; and additional two months data for six months claim, three months additional data for one year's claim at two different locations at ambient temperature along with meteorological data.<sup>2,4</sup>
- II. *Toxicology Data of Formulated Product (FP) and Primary Culture* :
- a. Single exposure studies (for formulations only) :
- (i) Oral toxicity/Pathogenicity/Infectivity :
  - (ii) Dermal toxicity/Pathogenicity/Infectivity :
  - (iii) Intravenous toxicity/Pathogenicity/Infectivity<sup>2,4</sup> :
  - (iv) Inhalation toxicity/Pathogenicity/Infectivity :
  - (v) Primary Skin irritation :
  - (vi) Irritation to mucous membrane :
  - (vii) Primary Eye irritation :
  - (viii) Allergy/sensitization/immuno-suppression :

- (ix) Pulmonary toxicity/Pathogenicity/Infectivity :  
Infectivity<sup>2, 4</sup> (Intra-tracheal preferred)<sup>2, 4</sup>
- (x) Human safety records (Effect or lack of effects)<sup>2, 4</sup> :
- (xi) Cell culture<sup>2, 4</sup> (Appendix IX) :
- b. Eco-toxicity (for formulations only)<sup>3</sup> :
- (i) Toxicity to birds :
- (ii) Toxicity to fish :
- (iii) Toxicity to honey bee :
- (iv) Toxicity to silkworm :
- c. For Primary Culture<sup>2, 4</sup> :
- (i) Single dose (rats and mouse) :
- (ii) Single dose pulmonary :
- (iii) Single dose intravenous :
- (iv) Cell culture<sup>4</sup> (Appendix IX) :
- (v) Human safety records :
- d. Environmental Safety Testing (for formulations :  
only)<sup>2, 4</sup>
- (i) Non-target vertebrates (information on infection :  
and pathogenicity in mammals from mammalian  
safety testing)
- (ii) Birds (information on infection and :  
pathogenicity due to single dose-oral in  
bobwhite, quail, Japanese quail, mallard/  
pigeon and chicken)
- (iii) Fresh water fish (information on infection and :  
pathogenicity due to single dose-oral in rainbow  
trout, blue gill sunfish, Tialpia)
- (iv) Terrestrial invertebrates (Information on :  
mortality of honey bee and silkworm) (not  
required for *Trichoderma* and *Pseudomonas*)
- (v) Information on mortality of earthworm or :  
organism of similar habitat and nature ((not  
required for *Trichoderma* and *Pseudomonas*)

- III. Bio-efficacy** :
- a. Laboratory test: LC<sub>50</sub> values for each insect species under laboratory condition generated at least at two recognized national organization<sup>3</sup> :
  - b. Field test: :
    - (i) Efficacy of field trials conducted at least in two seasons under supervision of recognized national research organizations and presented in the form of authentic/published report. :
    - (ii) Phyto-toxicity data :  
Effect on non-target organisms (predators/parasites) at least in two seasons :
- 7. Packaging and Labeling** :
- (a) State weight (or for liquid volume) and the sizes of package in which the products are to be marketed and for each size, the type of package, for instance *i.e.* 1 kg in cans with screw plug and 50 kg in iron drums. (Please note that the product must be sold only in the package size and type notified to the Plant Protection Wing, Department of Agricultural Extension and for which the label is approved. :
  - (b) Classification during transport :
- 8. Methods (cite methods mentioned above or alternate authentic methods best fit)**
- (1) Culture method for human pathogens<sup>3</sup> :
  - (2) Procedure for morphology description, particle size, heat resistant spore count<sup>3</sup> :
  - (3) Immunology assays (Elisa/Dot Blot assay test)<sup>3</sup> :
  - (4) Routine test<sup>3</sup>: :
    - (i) Housefly Bioassay method for Level of toxin :
    - (ii) Bioassay method for Potency of product :

- (5) Method of analysis<sup>3</sup> :
- (i) Bioassay method :
- LC<sub>50</sub> on target larvae and potency against a reference using artificial diet or leaf disc method or in water for mosquito :
  - Housefly Bioassay method for Beta exotoxin and chemical contaminant :
- (6) Method for Viable Spore counts :
- (7). Dot blot/Elisa assay for Toxin content<sup>3</sup> :
- (8) Technique for separation and purification of crystals<sup>3</sup> :
- (9) Dual culture for antagonistic fungi/bacteria :
- (10) Pathogenicity test on insect in case of entomopathogenic fungi :
- (11) Qualitative analysis<sup>2</sup>
- (a) CFU on selective medium :
  - (b) Test for gram negative bacterial contaminants :
  - (c) Test for moisture content :
9. **Labelled samples for analysis** :
- (a) Primary reference standard 0.5 to 1g :
  - (b) Technical grade material 100 to 200g :
  - (c) Formulated product 200 to 500 g or equivalent for each formulation :
10. **Registration fee** :
- Taka ..... (Taka ..... thousand) deposited in Treasury Challan No. dated (Original Treasury Challan enclosed) under Head of Account " 1-4331-0000- 2043 :

<sup>1</sup> Microbial pesticides consist of a naturally occurring microorganism (*e.g.*, a bacterium, fungus, virus or protozoan) as the active ingredient. In case of bacterium and fungus also mention if it is antagonistic and in case of fungus also mention if it is entomogenous

<sup>2</sup>Applicable only for Antagonistic bacteria/fungi and entomogenous fungi.

<sup>3</sup> For *Bacillus spp.*

<sup>4</sup> Applicable for Virus (NPV, BV and GV)

I do hereby apply for registration of the pesticide, particulars of which are given above, and hereby certify that these particulars are, to the best of my knowledge, true and correct.



*Explanation*—In this Form. “Active agent” means an organism capable in itself of preventing, destroying, repelling or mitigating insects, fungi, bacteria, nematodes viruses, rodents, weeds or other pests when used in the same manner and for the same purpose and those for which it is intended but is not antagonistic to the activity of any other active ingredient in the same formulation.

Date.....

.....

Signature of applicant

### Notes

#### Directions for completion and submission of application. (in triplicate)

1. The application must be accompanied by :  
General literature of the product including toxicological and efficacy data. Standard specification of technical product and formulation of the product. Statement of ingredients (active and inert materials to be enclosed separately in a sealed and confidential cover). Composition of formulation in details with percentage.
2. Certified true copy of the contract/agreement made between the manufacturer and the local agent authenticated by the competent agency of the country for import and marketing the product in Bangladesh.
3. (a) In case of renewal of an existing registration, the previous certificate of registration; and  
(b) A suitable sample of the pesticide sufficient for test and analysis (physical and chemical properties).
4. Treasury challan of Taka ..... thousand evidencing payment in the head of account: “1-4333-0000-2043” shall be submitted.
5. Submission of application in a sealed cover marked “Confidential”.

#### (২৬) FORM 2 এ

item 5. এর পরিবর্তে নিম্নরূপ item 5. এবং item 6. প্রতিস্থাপিত হইবে, যথা ঃ—

5. Name and address of the manufacturer

(a) Formulated product :

(b) Technical grade material :

6. Name and address of the local manufacturer:

*Dhaka:*

*The.....201*

*Signature of the Registration Authority  
Seal*

#### Conditions:

The registration of a brand of pesticide shall be effective from the date of its registration until the thirtieth day of June of the third year following the year (fiscal) of registration

- (২৭) **FORM 3** এর item 5 এ “registration” শব্দের পরে “(Except guarantee or ingredients)” শব্দগুলি ও বন্ধনী সংযোজিত হইবে।
- (২৮) **FORM 4** এর item (b) এর পর নিম্নরূপ নূতন item (b) প্রতিস্থাপিত হইবে, যথা ঃ—  
 (b) certify that except guarantee and ingredients the following change(s) from the original registration have been accepted”;  
 (খ) “-----১৯৮----- “-----20-----”  
 ডটগুলি ও সংখ্যাটি প্রতিস্থাপিত হইবে।
- (২৯) **Form 5** এর item 10 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩০) **FORM 6** এর—  
 (ক) item 1 এর “ Name of the pesticide (s) (each pesticide to be separately specified) ” শব্দসমূহের পরিবর্তে নিম্নরূপ শব্দগুলি, বন্ধনীগুলি এবং বন্ধনীসহ বর্ণটি এবং কোলনগুলি প্রতিস্থাপিত হইবে, যথা ঃ—  
 “Name of the pesticide(s) (each pesticide to be separately specified);”  
 Brand name:  
 Common name.”  
 (খ) item 5 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩১) **FORM 7** এর item 9 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩২) **FORM 8** এর item 7 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩৩) **FORM 9** এর—  
 (ক) item 2 এ “manufacturer/formulators” শব্দসমূহের পরিবর্তে “manufacturer” শব্দটি প্রতিস্থাপিত হইবে।  
 (খ) item 5 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩৪) **FORM 10** এর item 10 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩৫) **FORM 11** এর note 2 এ “৪৫-কৃষিপ্রাপ্তি-অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে আয়” শব্দসমূহের পরিবর্তে “1-4331-0000-2043” শব্দসমূহ প্রতিস্থাপিত হইবে।
- (৩৬) **FORM 12** এর পর নূতন **FORM 12 (a)** প্রতিস্থাপিত হইবে।

FORM 12 (a)

[See rule 12(2)]

**Licence to import pesticide (s) (Technical grade material)**

1. M/s.....is hereby granted licence to import the following technical grade material  
(a) Name of technical to the imported  
(b) Brand name of pesticide(s) with registration No.
2. Name of manufacturer of technical grade material
3. Quantities to be imported :
4. The licence shall be in force for a period of two years from the date of issue.

Licence No.....

Date.....

*Licensing Authority.*

*Seal.*

**Conditions**

1. The licence shall be displayed in a prominent place of the office premises.
2. The licensee shall comply with the provision of the Pesticide Ordinance, 1971 and the rules made there under for the time being in force, provided that the condition shall not apply to import any pesticide for experimental or research purposes.
3. Renewal.

(৩৭) FORM 19 এর পর নিরূপ নূতন Enclosure সংযোজিত হইবে, যথা ঃ—

ENCLOSURE

**DEFINITIONS, SALIENT FEATURES AND CLASSIFICATION OF BIOPESTICIDES, AND THEIR DATA REQUIREMENTS FOR REGISTRATION**

**1.0 DEFINITION OF BIOPESTICIDE:**

According to EPA, biopesticides are certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals. According to FAO, biopesticides are naturally occurring substances or their synthetic analogues or genetically modified agents that are distinguished from conventional chemical pesticides by their unique mode of action, low use volume, and target species specificity.

## 2.0 CLASSIFICATION OF BIOPESTICIDES

Biopesticides fall into following three major classes:

- (i) Biochemical pesticides
- (ii) Microbial pesticides
- (iii) Plant-incorporated protectants (PIPs)

### 2.1 Biochemical pesticides :

Biochemical pesticides are naturally occurring substances that control pests by a mode of action other than direct toxicity in the target pest. A chemical must meet the following two criteria in order to be classified as a biochemical pesticide and to be subject to the data requirements for this class of compounds:

- The chemical must exhibit a mode of action other than direct toxicity in the target pest (*e.g.* growth regulation, mating disruption, attraction). Pesticides such as **strychnine, rotenone, nicotine, and pyrethrin**, which exhibit direct toxicity, are not considered biochemical pesticides; and
- A biochemical pesticide must be naturally occurring, or if the chemical is synthesized by man, then it must be structurally identical to a naturally occurring chemical. For a synthetic chemical to be identical in chemical structure to a naturally occurring chemical, the molecular structure of the major component of the synthetic chemical must be the same as the molecular structure of the naturally occurring analogy. Minor differences between the stereochemical isomer ratios (found in the naturally occurring compound compared to the synthetic compound) will normally not rule out a chemical being classified as a biochemical pest control agent unless an isomer is found to have significantly different toxicological properties than another isomer.

There are situations where a candidate chemical possesses many characteristics of a biological pesticide, but does not technically meet the two criteria established for defining biochemical pesticides. The Sub-technical Committee formed by PTAC should evaluate such chemicals on a case-by-case basis to determine whether it should be classified as a biochemical pesticide or a conventional pesticide. For example, a case-by-case evaluation would be required if the exact molecular structure of the naturally occurring compound is unknown, or if the synthetic chemical is closely related to but not identical in structure to the naturally occurring compound, or if the mode of action is different in the target, compared to non-target organisms.

In these case-by-case situations, the criteria to be used to determine whether the chemical is a biochemical pesticide, include:

- the chemical and toxicological significance of the differences in chemical structure;

- the mode of action of the synthetic analog in the target species as compared to the mode of action of the naturally occurring compound;
- differences in toxicity between the naturally occurring chemical and the synthetic analog.

### **Sub-classes of Biochemical pesticides:**

Biochemical pesticides fall into four general biologically functional classes such as Semiochemicals, Hormones, Natural plant regulators and insect growth regulators, and Enzymes. Brief description of each subclass is given below:

#### **2.1.1 Semiochemicals**

Semiochemicals (SC) are chemicals emitted by plants, animals, and other organisms, and synthetic analogues of such substances that evoke a behavioural or physiological response in individuals of the same or other species. They include pheromones and allelochemicals. Pheromones are substances emitted by individuals of one species, which modify the behaviour of others within the same species. Allelochemicals are semiochemicals produced by individuals of one species that modify the behaviour of individuals of a different species. Allelochemicals include allomones, kairomones and synomones. Allomones are chemicals emitted by one species, which modify the behaviour of a different species, to the benefit of the emitting species. Kairomones are chemicals emitted by one species, which modify the behaviour of a different species to the benefit of the receptor species. Synomones are chemicals emitted by one species, which modify the behaviour of a different species to the benefit of both the species.

#### **2.1.2 Hormones**

Hormones are biochemical agents that are synthesized in one part of an organism and translocated to another where they have controlling, behavioural or regulating effects.

#### **2.1.3 Natural plant regulators and insect growth regulators**

Natural plant regulators are chemicals produced by plants that have inhibitory, stimulatory, or other modifying effects on the same or other species of plants. Some of these are termed "plant hormones" or "phytohormones". Insect growth regulators are chemicals that have toxic, inhibitory, stimulatory, or other modifying effects on the insect growth cycle.

#### **2.1.4 Enzymes**

Enzymes are defined as protein molecules that are the instruments for expression of gene action and that catalyze chemical reactions.

### 2.1.5 Botanicals

Although not covered by FAO definition, Azadirachtin, a naturally occurring component of Neem, which controls a number of pests through non-toxic mechanism of action such as molting disruption, antifeedance, desiccation etc., may be considered as biochemical pesticide.

### 2.2 Microbial pesticides

Microbial pesticides consist of a microorganism (e.g., a bacterium, fungus, virus or protozoan) as the active ingredient. The microbial pesticides include naturally occurring agents such as bacteria, fungi, viruses, and protozoa, or genetically modified such microorganisms.

### 2.3 Plant-incorporated protectants (PIPs)

Plant-incorporated Protectants (PIPs) are pesticidal substances that plants produce from genetic material that has been added to the plant. For example, scientists can take the gene for the Bt pesticidal protein, and introduce the gene into the plant's own genetic material. Then the plant, instead of the Bt bacterium, manufactures the substance that destroys the pest. In this case the protein and its genetic material, but not the plant itself, are to be regulated. PIPs will not be considered at present because GMOs are not still covered under national policy.

(৪৩) Enclosure এর পর নিম্নরূপ নতুন Annexures সংযোজিত হইবে, যথা ঃ—

## ANNEXURES

### Annexure 1

#### SPECIFICATIONS FOR PHEROMONE TRAPS AND LURES

The pheromone trap and lure should comply with the following specifications or specifications mentioned in the application as per bio-efficacy test:

1. **Funnel shaped or any other standard trap** : Funnel shaped trap generally used for trapping the moths of *Helicoverpa armigera*, *Spodoptera litura*, *Earias* spp. etc. or any other standard type developed for the purpose.

(I) **Colour** : Any colour other than Black

(II) **Structure** : The funnel trap may have three parts (1) canopy (2) tunnel shaped "trap base" and (3) a collection device. Or, the standard trap having the requisite parts for effective use.

(1) Canopy Dia: 120 -160 mm  
Thickness: 1.0 -3.0mm  
(There should be provision for fixing the canopy to the "trap base" and also the (pheromone lure)

- (2) Trap base :
- Dia of the mouth : 75-120mm
  - Height of funnel : 45-190 mm
  - Dia of the bottom hole: 20-30 mm
  - Should possess a "L" or "T" shaped handle or any other device by which the "trap" may be fixed to the support.
  - The "Trap base" may be provided with 2 to 4 stalks for fixing the canopy to the "trap base". The canopy should be firmly rest on stalks so that the canopy is not dislodged due to wind.
- (3) **Collection device** : It should be made of polythene or any other suitable material. It should withstand wind, temperature and rain water.
- Should be fixed to the "trap base" in such a way that the device remains attached to the trap under field condition.

2. Sticky trap (for pink bollworm etc.):
- Corrugated DVC, plastic laminated cardboard, tin or any other suitable material that should be water-proof.
  - The sticky glue should be non-drying.
  - The outer surface of trap should be water-proof.
  - The colour may be except black.
  - There should be provision for fixing the trap for support.
3. Fly trap (For fruit/vegetable flies) :
- Material construction as described in sticky/funnel trap.
  - Any colour except black.
  - Should withstand rainfall, heat/temperature and wind.
  - Should be structured in such a way that the trap is escape proof.

**Specification of Lures:**

1. Lure made of sulphur free rubber/polypropylene/PVC impregnated with specific pheromone blends.
2. Field efficacy should be minimum for 15 days after application.
3. Impregnated lures should be packed singly in individual tri-laminated pouches with 30 MI Aluminum foil.
4. Shelf-life of Lure in original pack should be minimum 6 months at room temperature.
5. Lures should attract target insect species only, with 50% insect attractancy by pheromone/lure/dispenser by using wind tunnel method.

#### Other specifications of Semiochemicals:

- For potential effects on non-target insects (predators, parasites, honeybee/pollinators), a discussion of available information may be sufficient.
- Aquatic testing will not be required for fixed point dispensers applied over land.
- Aquatic invertebrate and fish toxicity data are required for direct application to aquatic sites

#### Annexure II

##### SPECIFICATION FOR ANTAGONISTIC BACTERIA/FUNGI AND ENTOMOGENOUS FUNGI

1. **CFU counts :** *Trichoderma* 2x10<sup>6</sup> CFU/ml or g  
Entomopathogenic fungi 1x10<sup>9</sup> CFU/ml or g
2. **Contaminants :** *Salmonella*, *Shigella* or *Vibro* should be absent. Other microbial contaminants should not exceed 1X10<sup>4</sup> count/ml or g
3. **Method of analysis :**
  - (a) CFU counts by serial dilution and examination under phase contrast microscope
  - (b) Plating for contaminants on specific media
  - (c) Antagonistic capability on target microbe by bioassay on plates or
  - (d) Entomopathogenic capability on target insect by bioassays.
4. An undertaking should be submitted that the strain is indigenous, naturally occurring and not exotic and not genetically modified.

#### Annexure III

##### SPECIFICATIONS FOR BACULOVIRUS

1. **Viral Unit :** NPV-1x10<sup>9</sup> POB/ml or gm  
1x10<sup>8</sup> POB/ml or gm  
GV-5x10<sup>9</sup> Capsules/ml or g  
(POB - Polyhedral occlusion body)
2. **Contaminations :** *Salmonella*, *Shigella* or *Vibro* should be absent. Other microbial contaminants should not exceed 1X10<sup>4</sup> count/ml or g
3. Identification of *Baculovirus* by restriction enzyme analysis and Southern blot.



4. An undertaking should be submitted that the strain is indigenous, naturally occurring and not exotic and not genetically modified.
5. **Method of analysis :**  
 Counting for POB /Capsule as per Appendix-I  
**Viral Unit :** NPV- $1 \times 10^9$  POB/ml or gm  
 $1 \times 10^8$  POB/ml or gm  
 GV- $5 \times 10^9$  Capsules/ml or g

**Note:**

1. In case of NPVS, POB count should be taken with haemocytometer and phase contrast microscope. In case of GVs shallow depth (0.01mm) counting chamber under dark field illumination will be used.
2. **Biological assay:** Results of bio-efficacy tests by diet surface contamination method against second instars target should be generated for determining the LC<sub>50</sub> of the formulation as against Standards as per enclosed procedure (Appendix II)
3. Plating for contaminants on specific media

(৪৩) Annexure এর পর নিরূপ নূতন Appendixes সংযোজিত হইবে, যথা ঃ—

## APPENDICES

### Appendix I

#### BIOASSAY METHOD FOR BACILLUS

The following procedure (or any other authentic alternate procedure) should be carried out:

- (i) **Test insects:** 2-3 instars larvae of target insects
- (ii) **Procedure:**

1 gm of Bacillus preparation is mixed with 40 ml. of distilled water and blended at 12000 rpm for one minute. Dilution will depend upon the nature of test sample or standard preparation. 10 gm. of artificial diet/9.5ml tap water and 0.5 ml of diluted sample are mixed thoroughly. The diet/ tap water incorporated sample food, the leaf discs of uniform size are dipped for 30 seconds in different dilutions of *Bacillus* and dried under fan. Thirty larvae (10 larvae X 3 dishes) are used for each dilution of the sample or standard preparation. The larvae are incubated for 1-3 days test period. Mortalities recorded in 3-5 dilutions are recorded and plotted on log-probability paper. If more than 3 out of control larvae die, the results are discarded.

(iii) **Calculation of results :**

The potency of the sample is calculated by the following formula :

Potency of sample = LC 50 of standard (mg/ml) X IU /mg of standard  
LC 50 of sample (mg/ml)

- (iv) Each registrant should prepare a "Self Reference" and should deposit it with the Registering authority. Each self-reference will be expressed as IU/mg using International Standard.

## Appendix II

### **Blot assay of *Bacillus thuringiensis* (B.t) toxin protein as alternate of Bioassay (or Follow any other authentic alternate method)**

- (1) B.T grown till sporulation in shake flask or in fermenter vessel and let the cells lyse and release spore/crystals into the medium.
- (2) Cells are harvested by centrifugation at 10k for 15 minutes.
- (3) Wash the pellet with 1M NaCl to remove the B.T. associated seine/ metallo proteases and washed twice with sterile distilled water.
- (4) Pellet re-suspended in 50 MM NaOH to solublize the toxin protein for 2 hours at R.T. with slow shaking and centrifuged again at 10K for 15 Minutes.
- (5) Supernatant was adjusted to P<sup>H</sup> 8.0 with the HCl P<sup>H</sup> 8.0.
- (6) Protein contents estimated by Lowry's protocol.
- (7) To fold serial dilutions of test protein were made in PBS and known amount at protein applying on NCP using S&S or Biorad Dot Blot manifold apparatus and applying water vacuum for 30 minutes.
- (8) NCP was carefully removed from Dot Blot set and soaked in excess of 3% Skim milk in PBS for blocking the remaining acetic sites on NCP for 2-3 hours at R.T/O/N at 4<sup>0</sup>C.
- (9) Wash the NCP with excess PBS with 0.01% Tween 20.3-4 times and then finally with PBS.
- (10) Polyclonal antiserum raised against total crystal protein was suitably diluted in PBS and added to the "seal a meal" containing NCP and incubated for 1-2 hours with shaking.
- (11) Remove the NCP from the bag and wash several times (as in step 9).
- (12) Anti-rabbit antibodies conjugated with HRPO/Alkaline Phosphate was diluted as per the suppliers instruction and incubated NCP (as in step 10).
- (13) Wash as in step 11

14. For HRPO :

(a) Diaminobenzeden (4mg/10ml PBS/4-Chloro-1-Naphthol (4ma/10ml 20% Alcohol) were dissolved and 10 ml of 30% of H<sub>2</sub>O<sub>2</sub> per 10 ul substrate solution was added and colour reaction developed in dark for 5-10 mins (DAB gives brick red colour. 40N gives blue colour).

(b) For Alkaline Phosphatase Buffer:  
Alkaline Phosphatase Buffer:

1M Tris pH 8.8	-10 ml/
4M NaCl	-2.5ml/make up 100 ml
1M MgCl <sub>2</sub>	-2 - 0.5ml/

For 10 ml of above buffer add NBT-66 µl and BCIP-33 µl and develop and colour reaction

(15) Stop the reaction by removing the substrate and washing with PBS

(16) Keep on filter paper and dry.

### DEFFERENT PROTEIN CONCENTRATION

10µg 5µg 2.5µg 512.5ng 256.25ng 128ng 64ng 32ng 16ng 8ng 4ng  
of different samples

#### Determination of cell dry weight

- Take a known volume of Bacterial culture spin down at 4R for min.
- Wash the Pellet in minimal distilled water.
- Transfer to a pre weighed container.
- Incubate at 80 C for 16-18 hours till become dry and weight becomes constant.

### Appendix-III

#### **PURIFICATION OF CRYSTALS BY GELATIN METHOD (OR FOLLOW ANY AUTHENTIC METHOD)**

- Centrifuge the sporulated material and wash pallet twice with 1M NaCl.
- Add 200 ml. of 0.5% Gelatin, stir and remove all froth completely.
- Dilute with sterile water and centrifuge.

- Take debris and stir with 20 ml. of 1.5 M sucrose. Further add 50 ml of 1.5 M sucrose.
- Stir and centrifuge at 3000RPM for 2 hours.
- Remove supernatant and purified crystals are harvested.

#### Appendix IV

#### BETA-EXOTOXIN DETERMINATION BY HOUSE FLY BIOASSAY METHOD (OR FOLLOW ANY OTHER AUTHENTIC ALTERNATE METHOD).

Fly Assay Diet condition		Laboratory
Agar-	16g	Temp. 25 C +2C
Milk powder	100g	R.H. +70%
Yeast	100g	Test Insect -2 days
	old Hot	
Methyl Paraben - 2.1 g		fly larvae.
Water-	1000ml	
		No. of replications = 2

#### Procedure:

- 1g sample thoroughly mixed with 9ml. of sterile saline. This solution is heat treated at 65<sup>0</sup>C (water bath) for 45 minutes and incubate at rotary shaker for 2hrs. at room temp.
- Then centrifuge this sample at 12,000 RPM for 10minutes.
- This suspension is serially diluted (1:10) to 10 dilutions.
- Liquid diet 200g for each replicate is placed in trays/beakers.
- 5ml. of heat-treated culture supernatant (10<sup>-6</sup>) is poured on diet. Let it solidify at room temp. For control, use 5 ml. of sterile water :
- 2 days old House fly larvae (50) in each replicate i.e. two replicate each for sample and control & cover with wire mesh/ clot.
- Incubate the trays at 25<sup>0</sup> C + 2<sup>0</sup>C till emergence.
- After 24 hrs. just put 5 g wheat bran in each tray on the top (On 8th to 10th day). On adult emergence freeze the trays for 2 hrs. to count the adults and % mortality may be calculated as:—  
Mortality + (100—Number of Normal Adults)

**DETERMINATION OF HEAT RESISTANT VIABLE SPORE COUNT OF BACILLUS SPP. (OR FOLLOW ANY OTHER AUTHENTIC ALTERNATE METHOD) :**

**Materials required:**

- (i) Beaker/flasks
- (ii) Sterile Water
- (iii) Test Tubes
- (iv) Micropipettes
- (v) Water bath
- (vi) Petri plates
- (vii) Nutrient Agar
- (viii) p<sup>H</sup> meter

**Method:**

- (i) Weight 1g or 1ml of the Bt formulation.
- (ii) Transfer it in a sterile 250 ml corneal flask with 100 ml sterile water.
- (iii) Mix it gently to form a uniform suspension.
- (iv) Heat this material in a preheated water bath at 80<sup>0</sup>C for 15 minutes ensure that the vegetable cells of BT and all other microorganisms are killed except the Bt spores.
- (v) Add 9 ml of sterile water in each in 10 sterile test tubes number form 1 to 10.
- (vi) Add 1 ml of heat-treated Bt suspension to test tube no. 1
- (vii) Shake well and transfer 1ml of the suspension from test tube 1 to be labeled 2.
- (viii) Repeat the procedure till the last test tube to give the dilution of 1/100 1/1000, 1/10000 i.e. 10<sup>1</sup> , 10<sup>2</sup>, 10<sup>3</sup> ..... 10<sup>10</sup> and the corresponding dilute factor ins 10, 100, 1000 ..... respectively.
- (ix) Dispense 50ml of diluted sample suspension from 5th to 10th dilute in triplicate in the plates with 15-20 ml Nutrient Agar medium Nutrient Agar plates should be prepared the previous day and must observed for any possible contamination.
- (x) Spread the sample suspension on the agar medium thoroughly with glass spreader.
- (xi) Incubate the plates at 30<sup>0</sup>C for 24 hours and count the number of colonies.

**Calculation:**

No. of viable spores/gm or ml. = Nx Dx 2x10<sup>3</sup>

N—no. of colonies in plate (Average of three plates)

D—Dilution factor

**QUANTIFICATION OF BT ENDOTOXIN USING ELISA TECHNIQUE (OR FOLLOW ANY OTHER AUTHENTIC ALTERNATE METHOD):**

## 1. Material required:

Micropipette            1000 µl ,                            20µl,                            20µl.  
 Microtips  
 Microtitre Plates  
 Measuring Cylinder  
 Electronic balance  
 Beaker/Flask  
 Petridish  
 Tissue paper or Blotting Paper  
 Primary antisera (Antibody raised in rabbit against *Bacillus* Spp. antigen (crystal proteins)  
 Secondary antibody (Goat-anti rabbit 1gG - aP conjugate)  
 ELISA Reader with 405 nm filter.  
 P<sup>H</sup> meter

## 2. Reagents:

Phosphate Buffered saline (PBS), p<sup>H</sup> 7.4 95 X conc.) :

NaCl                            40.0 g

K<sub>2</sub>HPO<sub>4</sub>                            1.4g

Na<sub>2</sub> HPO<sub>4</sub> 12 H<sub>2</sub>O            14.5g

KCL                            1.0g

Make up to 1 litre and stored at 4°C

Make it 100 mM, take 200 ml of PBS and make 1 litre with water.

Blocking solution:

Skimmed Milk Powder 3% in PBS

PBST

PBS (5x) 200ml

10% Tween 20 5 ml

Make up to 1 Litre.

Coating Buffer:

Na Co                            1.59g

NaHCo                            2.93 g

Make up to 1 litre

Substrate buffer for Alkaline Phosphatase: (Prepare freshly)

Diethanolamine                            97 ml

Water                            800 ml

Adjust the pH to 9.8 with HCL

Make up to 1 Litre.

Substrate for Alkaline Phosphatase

NitroPhenyl Phosphate (NPP) 0.5mg/ml in substrate buffer.

### 3. Method

#### Preparation of antigens:

- (i) Weigh 1mg of biopesticides and add 1ml of 100 mM Sodium Carbonate (P<sup>H</sup> 10)
- (ii) Incubate for 2 hrs at 37°C at 100 rph in an incubator shaker.
- (iii) Make two fold dilution of the test protein and the pure toxin protein separately in different rows.

#### Two fold dilution making:

- (i) Add 100 µl of 1000 mM sodium carbonate buffer in Columns 4 to 10 microtitre plate.
- (ii) Add 200 µl (containing 16 µg) of the pure crystal toxin in column 3.
- (iii) Add 100 µl of aliquots from column 3 to column 4 and mix well by gentle pipetting.
- (iv) Similarly do from 4 to 5, 5 to 6 ..... 9 to 10.
- (v) Discard 100 µl from 10 .
- (vi) Coat the test antigens in sodium carbonate buffer and incubate the plate overnight at 4°C
- (vii) Use 2 to 3 replications for each sample.
- (viii) Record the sample data in the record chart.

#### **ALLOW THE ELISA PLATE TO DRY AT ANY STAGE**

Remove the solutions in the ELISA Plate by inverting it and gentle tapping on a tissue paper or blotting paper.

Wash the microtitre ELISA plate once with 150 µl of PBS

Add the Blocking solution to each well till the brim.

Incubate the plate at 37°C for 1 hr.

Add 100 µl of Primary antibody (1:1000) dilution in PBS to each well.

Incubate the plate at 37°C for 1 hr.

Wash the microtitre ELISA plate twice with PBS:

Add 100 µl of Secondary antibody conjugate (1:2000) dilution in PBS to each well.

(Secondary Antibody is Goat - anti Rabbit 1gG-AP conjugate)

Incubate the plate at 37°C for 1 hr.

Wash the microtitre ELISA plate thrice with PBST.

Wash the Microtitre ELISA plate once with the substrate buffer.

Add 100 µl of substrate solution to each well.

Incubate the plate for 15 to 30 minutes at room temperature until colour develops.

Read the absorbance in an ELISA reader at 405 nm.

Using the standard curve determine the concentration of the Bt toxin unknown test samples.

## Appendix VII

### **COUNTING NPV (POB) USING IMPROVED NEUBAUER HAEMOCYTOMETER OR COUNTING CHAMBER (OR FOLLOW ANY OTHER AUTHENTIC ALTERNATE METHOD) :**

A haemocytometer is an essential tool used for estimating the number of microorganisms in a capsule. The Improved Neubauer haemocytometer comprised a thick glass slide with a shallow depression in the central section divided into two halves. On each side, the base of the depression has a fine ruled grid of squares, which is visible under a microscope. The dimensions of this grid are defined. With a thickened cover slip placed over the depression a chamber is created of fixed depth. A small volume of test suspension is introduced to both halves of the slide chamber from a pipette and 2-5 minutes allowed for particles to sediment to the chamber floor.

Either dark field or phase contrast microscopy is used to identify and count polyhedra (POB) with the counting chamber under the microscope. The number of Polyhedra/ capsules in a given number of grid squares can be counted. Each count consists of a tally of the number of polyhedra completely contained within a square plus the number of touching the left and upper sides. Polyhedra touching the bottom and right sides are not counted. Since both the depth of the chamber and the grid dimensions are known. It is then a straightforward calculation to determine the number of particles per ml of test suspension.

$$\text{Number of polyhedra (POB) per ml/gm} = \frac{D \times X}{N \times K}$$

Where

D= Dilution factor

X= total number of polyhedra counted

N= Number of squares counted

K= volume above one small square in cm

Area of each small square is  $1/400 \text{ mm}^2 = 0.0025 \text{ mm}^2$ . Depth of chamber is 0.1mm. Volume of liquid above a single small square is  $0.0025 \text{ mm}^2 \times 0.1 \text{ mm} = 0.00025 \text{ mm}^3$ . To convert to  $\text{cm}^3$  multiply by  $1/1000$  to get a volume of  $2.5 \times 10^{-7} \text{ cm}^3$  above 1 small square.

#### **Example**

Suppose in a sample diluted by a factor of 1000 we count 535 polyhedra in 160 small square then:

$$D = 1000$$

$$X = 535$$

$$N = 160$$

$$K = 2.5 \times 10^{-7} \text{ cm}^3$$



$$\text{Thus POB count} = \frac{1000 \times 535}{160 \times 2.5 \times 10^{-7}} \times \frac{5.35 \times 10^3}{4 \times 10^5} = 1.33 \times 10^3 \text{ Polyhedra/ml undiluted sample}$$

Usually this procedure is repeated 3 times and average taken to get a more accurate estimate.

### Appendix VIII

#### **PROCEDURE FOR ESTIMATION OF LC<sub>50</sub> OF NPV BY THE STANDARD DIET SURFACE CONTAMINATION METHOD (OR FOLLOW ANY OTHER AUTHENTIC ALTERNATE METHOD):**

- (i) **Diet to be used:** The standard chickpea-based diet without formaline.
- (ii) **Bioassay bottles:** 5ml vials with a diameter of 18 mm (255 mm surface area)
- (iii) **Doses of NPV to be tested:**

POB/ml	POB/mm <sup>2</sup>
(a) 5x10 <sup>4</sup>	19.6
(b) 1x10 <sup>4</sup>	3.9
(c) 2x10 <sup>3</sup>	0.78
(d) 0.8x10 <sup>2</sup>	0.16
(e) 0.16x10 <sup>2</sup>	0.03
(f) 1.6x10 <sup>4</sup>	0.006
- (iv) **Method of dosing :** Dispense 10 Microlitre aliquots into each vial and spread uniformly over the entire diet surface using a polished rounded lip of a 4 mm glass rod and allow to dry off under hood for 10 min.
- (v) **No. of Larvae/dose:** 50 (maintain 50 larvae without virus inoculation for control)
- (vi) **Stage of larvae:** 2nd instar larvae (preferably 4 days old) Release one larva/ vial and plug mouth with sterile absorbent cotton. Incubate at 25 + 1° C for 7 days.
- (vii) Record mortality in different doses on the 7th day.
- (viii) Apply Abbott's correction.
- (ix) **Subject the dose:** Morality response to probit analysis using a statistical soft ware in a computer.
- (x) Express LC<sub>50</sub> as POB/mm<sup>2</sup> of diet surface.

#### Expected standards for NPV for 2nd instars larvae

Species	LC <sub>50</sub> POB/mm <sup>2</sup>
1. <i>Helicoverpa armigera</i>	0.5
2. <i>Spodoptera litura</i>	20.0

**TOXICITY/PATHOGENICITY STUDY BY CELL CULTURE METHOD (IN VITRO)  
(OR FOLLOW ANY OTHER AUTHENTIC ALTERNATE METHOD)  
(APPLICATION FOR VIRUS BASED BIOPESTICIDES)**

**1.0 Cell Culture**

**A. Rationale:**

Viral agents may have toxic potential and or may be infectious to mammalian cells. The purpose of the following test is to assess the capability of viral pest control agent for infection and toxicity. The applicant should submit information and /or data addressing the above two aspects. If the results indicate toxicity or pathogenicity then data on additional cell line from other species shall be required.

**B. Protocols:**

**(1) Substance to be tested:**

The most infective forma of the viruses should be used for the test. The virus titer should be tittered using standard method and should be devoid of defective viral particles. For virus titration, the most susceptible host system should be used.

**(2) Methods of Virus Preparation:**

The process of virus manufacture should be noted with reference to cell culture method, operation, medium used and stock virus used to generate the virus product.

**(3) Cell Culture:**

For testing the toxicity and infectivity of the virus product an established human cell line (such as WI 38) or any other primate continuous cell line such as monkey CV-1 should be used. The source, genetic stability and the passage number of each cell lines used should be provided. Sub-confluent culture (containing approximately 200 cells on 25 cm sq. dish) of each cell lines should be used for the test.

**2.1 Toxicity Evaluation:**

Approximately 200 cells on 25 cms sq dish are plated in petri dishes in suitable medium. Twenty-four hours after planting, virus based biopesticides (about 10 POB/MI) are introduced into the plate. After 1 hr, colonies (an aggregation of minimum 25 cells) were counted , stained and morphological evolutions are done for Cytopathic Effects (CPE) Result from the cultures of minimum of 6 plates along with the concurrent three controls to be provided.

**2.2 Infectivity Evaluation :**

Approximately  $2 \times 10^6$  cells on 25cms sq dish in the media were exposed to virus-based biopesticides at  $1 \times 10^6$  POB/ml in petri plates. Cultures were quantitatively assayed for the virus concentration and infectivity at 1,2,5,7, 14 and 21 days if required after inoculation. Results of the cultures from 6 plates along with three concurrent controls to be provided.

### **2.3 Test Evaluation**

Both toxicity and infectivity studies should be compared with proper control experiments. Inactivated virus of same dose can be used as negative control and permissive cell line or host organism as positive control. The results of culture from 3 plates each from negative and positive controls should be presented and reported. Any cytopathic effect and /or viral infection observed in tissue culture should be described.

The following definitions apply to this protocol:

#### **Cytopathic Effects (CPE) :**

Cytopathic effects (CPE) are any host cell damage or injury resulting from infection of the cell by a virus. These effects can be morphological or biochemical, and include but are not limited to cell growth, attachment morphology, nucleus size and shape, and cellular processes such as macromolecular synthesis.

The results of CPE can be classified as follows:

- (A) 1+ = Suggestive of virus-induced morphologic changes.
- (B) 2+ = definitive morphologic changes.
- (C) 3+ = more than 50 per cent cell degeneration
- (D) 4+ = complete cell destruction

#### **Most Infectious Form (MIF) :**

Most infectious form (MIF) is the form or preparation of virus that gives optimal infection in the susceptible cell culture or organism. For occluded viruses (e.g. baculoviruses, cytoplasmic polyhedroses viruses, entomopox viruses) the MIF for cell culture or injection into an organism is extracellular virus found in cell culture medium or in infectious hemolymph. The MIF for susceptible insect host for infection by natural routes (feeding) is the viral occlusion body.

#### **Viral Infectivity:**

Viral infectivity is the ability of viral genes to become established in a host cell genome, or the ability of viral genes to be expressed in a host cell (resulting in the production of virus-encoded nucleic acids). The results of the viral infectivity should be reported as titration value of virus during entire period of incubation time.

**Viral Toxicity:**

Viral toxicity is the ability of a virus to inflict injury or damage to a host cell. Where infection by, and/or replication of the virus are not necessarily required. Toxicity can also be the ability of non-viral components or a preparation to inflict injury or damage to a host cell.

**Report Preparation:**

The report should contain:

1. Cell line and source
2. Cell culture method
3. Virus genotype and host
4. CTE-Data from positive and negative control and treatment group (results of individual plates to be provided on infectivity and toxicity).