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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

MINISTRY OF AGRICULTURE

Section II

NOTIFICATION

Dhaka, the 16th 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. **Definitions.**—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;

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- (f) "licensing authority" means the Director, Plant Protection Wing of the Department of Agricultural Extension and includes any person authorised 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 authorised 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 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 authorised 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;
- (g) 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 labelled 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	Renewal fee
	Taka	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 in accordance with these rules, suspended or revoked or, where an appeal is preferred until the appeal is disposed of.

16. Appeal.—(1) An appeal against the decision for refusal to grant or renew a licence or against/suspension or cancellation of a licence shall be 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—কৃষিপ্রাপ্ত—অনিষ্টকারী পোকা-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ ঋতে 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 of 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 authorised 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 authorised 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 of 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 labelling.**—(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 (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 recognised 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 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 realised under this rule shall be deposited with the Director of Plant Protection under the Head of Account. “৪৫—কৃষি প্রাপ্ত-অনিষ্টকারী পোকা-মাকড়, রোগ-বলাই 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 relating 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 of 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 clothings 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 labelled "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

	Taka	
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. Suspensibility/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)

SCHEDULE II

(see rule 59)

Insect, Mite, Vertebrate and Snail Pests of different crops and forests etc.

1. Rice (*Oryza sativa*)

Scientific name.	Common name.
<i>Mythimna seperata</i> W.	Rice ear-cutting caterpillar.
<i>Spodoptera mauritia</i> B.	Rice swarming caterpillar.
<i>Sesamia inferens</i> W.	Pink stem borer.
<i>Scirpophaga incertulas</i> W.	Yellow stem borer.
<i>Chilothea polychrysa</i> M.	Dark headed stem borer.
<i>Nymphula depunctalis</i> G.	Rice case worm.
<i>Cnaphalocrosis medinalis</i> G.	Rice leaf roller.
<i>Pelopidas agna</i> M.	Rice skipper.
<i>Melanitis leda ismene</i> C.	Rice butter fly.
<i>Dicladispa armigera</i> Ol.	Rice hispa.
<i>Leptisma pygmoea</i> B.	Rice leaf beetle.
<i>Nephotettix nigropictus</i> M.	Green leaf hopper.
<i>N. virescens</i> D.	Do.
<i>Kolla mimica</i> D.	White leaf hopper.
<i>Tettigella spectra</i> D.	Do.
<i>Thaia oryzivora</i> G.	Orange headed leaf hopper.
<i>Recilia dorsalis</i> M.	Zigzag leaf hopper.
<i>Sogatella furcifera</i> H.	White backed plant hopper.
<i>Nilaparvata lugens</i> S.	Brown plant hopper.
<i>Leptocorisa acuta</i> T.	Rice bug.
<i>Brevinlia rehi</i> (Ldgr.)	Rice moaly bug.
<i>Hieroglyphus banian</i> F. <i>Oxya</i> sp.	Rice grass hopper.
<i>Brachytrypes portentosus</i> L.	Rice field cricket.
<i>Orseolia oryzae</i> W-M.	Rice gall midge.
<i>Hydrellia sasaki</i> Y-I.	Rice whorl maggot.
<i>Haplothrips</i> spp	Rice thrips.
2. Wheat (<i>Triticum aestivum</i>)	
<i>Dicladispa armigera</i> Ol.	Rice hispa.
<i>Agriotes</i> spp.	Wire worm.
<i>Microtermes anandi</i> H.	Wheat termite.
<i>Odontotermes obesus</i>	Do.
<i>Rhopalosiphum rufiabdominalis</i> S	Aphis.
<i>Sesamia inferens</i> W.	Pink stem borer.
<i>Chilothea polychrysa</i> M.	Dark headed stem borer.
3. Maize (<i>Zea mays</i>)	
<i>Myllocerus blandus</i> F.	Maize leaf weevil.
<i>Sesamia uniformis</i> W.	Maize shoot borer.
<i>Heliothis obsoleta</i> F.	Maize leaf feeder.

Scientific name.	Common name.
4. Joar (<i>Sorghum vulgare</i>)	
<i>Pachnophorus bretinghani</i> B.	Joar leaf beetle.
<i>Prodontia pitalohita</i> M.	Joar leaf beetle.
<i>P. quatuodecimpunctata</i> L.	Do.
<i>Rhadinosa loehus</i> M.	Do.
<i>Carpophilus mutilatus</i> E.	Beetle.
<i>Aiolopus affinis</i> B.	Grass hopper.
<i>Ceama internella</i> W.	Hairy caterpillar.
<i>Leewenia kernviana</i> P.	Thrips.
5. Barley (<i>Hordeum vulgare</i>)	
<i>Agrotis ypsilon</i> H.	Cut worm.
<i>Gonocephalum</i> sp.	Root beetle.
6. Jute (<i>Corchorus capsularis</i> and <i>C. olitorius</i>)	
<i>Diacrisia obliqua</i> W.	Jute hairy caterpillar.
<i>Pericallia ricini</i> F.	Black hairy caterpillar.
<i>Earias cupreoviridis</i> W.	Pod borer.
<i>Anomis sabulifera</i> G.	Jute semi looper.
<i>Spodoptera litura</i> F.	Cut worm.
<i>S. exigua</i> H.	Indigo caterpillar.
<i>Scopula emissaria</i> W.	Jute stick insect.
<i>Apion corchori</i> M.	Jute stem weevil.
<i>Phytoseaphus</i> sp.	Weevil.
<i>Trachys pacifica</i> K.	Jute Buprestid.
<i>Hemitarsonemus latus</i> B.	Jute white mite.
<i>Tetranychus bioculatus</i> W-M.	Jute red mite.
<i>Brachytrypes portentosus</i> L.	Mole cricket.
<i>Attractomorpha crenulata</i> F.	Common hopper.
<i>Pseudococcus virgatus</i> C.	Mealy bug.
<i>Phenacoccus</i> sp.	Do.
<i>Aphis gossypii</i> G.	Aphid.
<i>Otinotus elongatus</i> D.	Sucking insect.
<i>Graptostethus servus</i> F.	Bug.
<i>Agonoscelis nubila</i> F.	Bug.
<i>Odontotermes obesus</i> R.	Termite.
<i>Microtermes obesi</i> H.	Termite.
7. Cotton (<i>Gossypium</i> Sp.)	
<i>Platyedra gossypiella</i> S.	Cotton pink bollworm.
<i>Earias insulana</i> B.	Spotted bollworm.
<i>E. fabia</i> S.	Do.
<i>Acontia graclisi</i> F.	Flower caterpillar.
<i>Sylepta derogata</i> F.	Cotton leaf roller.
<i>Dysdercus cingulatus</i> F.	Red cotton bug.
<i>Oxycarenus loetus</i> K.	Dusky cotton bug.
<i>O. lugutaris</i> D.	Do.

Scientific name.	Common name.
<i>Cerococcus hibisci</i> G.	Scale insect.
<i>Nipaecoccus vestiator</i> M.	Do.
<i>Saissetia nigra</i> N.	Do.
<i>Pseudococcus virgatus</i> G.	Mealy bug.
<i>Phenacoccus hirsutus</i> G.	Do.
<i>Aphis gossypii</i> G.	Cotton aphids.
<i>Kolla mimica</i> D.	Cotton Jassid.
<i>Nephotettix bipunctatus</i> F.	Do.
<i>Platyretus marginatus</i> M.	Do.
<i>Empoasca devastans</i>	Do.
<i>Talingana curvispina</i>	Hooper hopper.
<i>Sphenoptera gossypii</i> K.	Stem borer.
<i>Astycus lateralis</i> F.	Leaf eating weevil.
<i>Myllocerus discolor</i> B.	Leaf eating weevil.
<i>M. blandus</i> F.	Do.
<i>M. pastalatus</i> F.	Do.
<i>Mylabris pustalata</i> T.	Blister beetle.
<i>Pheidole</i> sp.	Brown ant.
<i>Componotus compressus</i> F.	Black ant.
<i>Chrotogonus</i> sp.	Green hopper.
8. Sundhemp (<i>Crotalaria juncea</i>)	
<i>Phytoscapus triangularis</i> O.	Leaf eater.
<i>Utethesia pulchella</i> L.	Sundhemp Hairy caterpillar
<i>Argina argus</i> K.	Pod borer.
<i>A. cribraria</i> C.	Leaf caterpillar.
9. Sugarcane (<i>Saccharum officinarum</i>).	
<i>Scirpophaga excerptalis</i> W.S.	Sugarcane top shoot borer.
<i>auriflua</i> Z.	
<i>Chilo-infuscatellus</i> S.C. <i>tumidicostalis</i> H.	Stem borer.
<i>C. auricilius</i> D.C. <i>indicus</i> K.	Do.
<i>Sesamia inferens</i> W.	Stem borer.
<i>Emmalocera depressella</i> S.	Root borer.
<i>Pyrilla perpusilla</i> var <i>pusana</i> W.	Leaf hopper.
<i>Eoerysa floyocapitata</i> M.	Black leaf hopper.
<i>Rhopalosiphum padi</i> L.	Woolly aphid.
<i>Ripersia sacharina</i> G.	Scale insects.
<i>Melanaspis glomerata</i> G.	Do.
<i>Odontotermes obesus</i>	Termites.
<i>Coptotermes hermitii</i>	Do.
<i>Microtermes</i> Sp.	Do.
<i>Baliothrips verrata</i>	Thrips.
<i>Myllocerus discolor</i>	Leaf cutting beetle.
<i>Tanymechus sciurus</i> O.	Do.
<i>Baros</i> sp.	Shoot boring beetle.
10. Tobacco (<i>Nicotiana</i> sp.).	
<i>Gnorimoschema heliopa</i> L.	Shoot borer.
<i>Agrotis ypsilon</i> H.	Cat worm.
<i>Euxoa segetum</i> S.	Stem borer.
<i>Plusia signata</i> F. <i>Heliothis assulta</i> G.	Leaf eating caterpillar.

Scientific name.	Common name.
<i>Myzus persicae</i> S.	Tobacco aphid.
<i>Gallobellicus crassicornis</i> D.	Capsid bug.
<i>Nesidiocornis tenuis</i> R.	Mirid bug.
<i>Stibaraopus tabulatus</i> S.	Pod bug.
<i>Urostylis intractivus</i> R.	Do.
<i>Neohaegeeria indica</i> H.	Trips.
sp. <i>Thrips</i> sp.	
<i>Gonocephalum bilineatum</i> W.	Seedling eating beetle.
<i>G. tuberculatum</i> H.	Leaf eating beetle.
11. Mustard (<i>Brassica</i> sp.)	
<i>Lipaphis pseudobrassicae</i> D.L.	Mustard aphid.
<i>erysimi</i> K.	
<i>Athelia proxima</i> K.	Sawfly.
<i>Delias eucharis</i> Dr.	Butter fly.
<i>Crocidolomia binotalis</i> Z.	Leaf caterpillar.
12. Soyabean (<i>Glycine soja</i>)	
<i>Pseudococcus corymbatus</i> G.P.	Soybean mealy bug.
<i>filamentosus</i> G.	
<i>Lipaphis pseudobrassicae</i> D.	Aphid.
<i>Stomopteryx nerteria</i> M.	Soyabean leaf eater.
<i>Lamprosema indicata</i> F.	Do.
<i>Diaclisia obliqua</i> W.	Do.
<i>Monolapta signata</i> OL	Leaf beetle.
13. Ground nut (<i>Arachis hypogea</i>)	
<i>Oxytetula versicolor</i> F.	Leaf beetle.
<i>Monolepta signata</i> OL	Do
<i>Aphanus sordidus</i> F.	Hopper.
<i>Lipaphis pseudobrassicae</i> D.	Aphids.
<i>Epilosoma nydia</i> B., <i>Diaclisia</i>	Hairy caterpillar.
<i>obliqua</i> W.	
<i>Anarsia ephippias</i> M.	Leaf roller.
<i>Stomopteryx nerteria</i> , M. <i>Scoupula</i>	Leaf eater.
<i>emissaria</i> W., <i>Plusia</i> sp.	
<i>Atractomorpha psittacina</i>	Grass hopper.
<i>Haplothrips indicus</i> B.	Thrips.
14. Til (<i>Sesamum indicum</i>)	
<i>Eusarcocoris ventralis</i>	Til pod bug.
<i>Acherotia styx</i> W.	Til hawk moth.
<i>Ambulyx substrigilis</i> W.	Do
<i>Brachytrypes achatinus</i> L.	Field cricket.
15. Castor (<i>Ricinus communis</i>)	
<i>Pericallia richni</i> F.	Castor Leaf eater.
<i>Phiusa melicerta</i> D.	Do.
<i>Ergolis ariadne</i> J.	Castor leaf eater.

Scientific name.	Common name.
16. Gram (<i>Cicer arietinum</i>)	
<i>Agrotis ypsilon</i> H.	Cutworm.
<i>Heliothis obsoleta</i> L.	Pod caterpillar.
<i>Centhorrhyncus asperulus</i> F.	Pod weevil.
<i>Alcides collaris</i> P.	Leaf weevil.
<i>Pachynerus chinensis</i> L.,	Pod beetle.
<i>Chectocnema</i>	
<i>concinripennis</i> B., <i>Monoloepta</i>	Pod beetle.
<i>signata</i> OL.	
<i>Gonocephalum elongatum</i> F.	Root beetle.
<i>Agromysa abtaza</i> M.	Pod fly.
<i>Clavigralla horrens</i> D.	Gram bug.
17. Mash Kalai (<i>Phaseolus radiatus</i> L.)	
<i>Anthena servula</i> D.	Leaf caterpillar.
<i>Diacrisia oblique</i> W.	Hairy caterpillar.
<i>Aphis madicagenis</i> K.	Ahid.
18. Cowpea (<i>Vigna catjang</i>)	
<i>Episomus lecerta</i> F.	Leaf weevil.
<i>Agromyza</i> Sp.	Stem fly.
<i>Celyphus obtectus</i> D.	Stem fly.
<i>Riptotus fuscus</i> Fb.	Bug.
<i>Aphis madicagenis</i> K.	Ahids.
<i>Amata pasalis</i> Fb.	Leaf eater.
19. Pea (<i>Pisum sativum</i>)	
<i>Callosobruchus chinensis</i> L.,	Pulse beetle
<i>Bruchus pisorum</i> L.	
<i>Chaetocnema concinnipennis</i> B.	Leaf beetle.
<i>Alcides collaris</i> P., <i>A. fabricii</i> F.	Leaf weevil.
<i>Episomus segax</i> Fst.	Do.
<i>Agromyza</i> sp., <i>Melanagromyza</i>	Stem fly.
<i>canctaus</i> M.	
<i>Clavigralla horrens</i> D.	Bug.
<i>Aphis craccivora</i> K.	Aphis.
20. Arhar (<i>Cajanus indicus</i>)	
<i>Apion clavipes</i> G., <i>Deiradolous</i>	Arhar pod weevil.
<i>cajanus</i> A.	
<i>Episomus humeralis</i> Ch.	Leaf weevil.
<i>Mylabris pustulata</i> T.	Blister beetle.
<i>Riptortus pedestris</i> T., <i>Clavigralla</i>	
<i>Goibbosa</i> S.,	Pod bug
<i>Nezara viridula</i> L., <i>Coptosoma</i>	
<i>siamicus</i> F.	
<i>Megachile anthracina</i> S.	Arhar leaf feeder.
<i>Eupterota lestacca</i>	Leaf caterpillar.
<i>Frankliniella</i> sp., <i>Taeniothrip</i>	
<i>nigricornis</i> .	Thrips.
<i>Thrips nigricornis</i>	

Scientific name.	Common name.
<i>Odontotermes parvidens</i> H.	Root termite
<i>Lasperesia</i> sp.	Leaf roller.
<i>Anarsia</i> sp.	Do.
21. Zinger (<i>Zingiber officinale</i>)	
<i>Chalacidomyia alricornis</i> M.	Root fly.
<i>Formosina flavipes</i> M.	Do.
<i>Udespes falus</i> C.	Leaf eater.
22. Turmeric (<i>Curcuma longa</i>)	
<i>Panchaetothrips indicus</i> B.	Thrips.
<i>Udespes folus</i> C.	Leaf eater.
23. Onion and Garlic (<i>Allium cepa</i> and <i>A. sativum</i>)	
<i>Thrips tabacci</i> L.	Thrips.
24. Brinjal (<i>Solanum melongena</i>)	
<i>Leucinodes orbonalis</i> C.	Brinjal shoot and fruit borer
<i>Selepa celtis</i> M.	Hairy caterpillar
<i>Agrotis ypsilon</i> Hfn.	Cut worm.
<i>Eubledma olivacea</i> W.	Leaf roller.
<i>Epilachna 12-punctata</i> M. } <i>E. 28-punctata</i> Fb. }	Epilachna beetle.
<i>Monolepta signata</i> Ol.	Leaf beetle.
<i>Centrococcus insolitus</i> G.	Mealy bug
<i>Aphis gossypii</i> G.	Aphis.
<i>Nephotettix bipunctatus</i> Fb.	Hopper
<i>Unrentiu</i> sp.	Lace wing.
<i>Oxyrachis teradus</i> Fb.	Hopper
<i>Componotus compressus</i>	Black ant
<i>Tetramonium quineenae</i> Fb.	Brown ant
<i>Brachytrypes portentosus</i> L.	Field cricket
<i>Atractomorpha psittacina</i> D.	Grass hopper
<i>Orthacris</i> sp., <i>Chrotogonus</i> sp.	Hopper.
<i>Tetranychid</i> sp.	Mite
25. Potato (<i>Solanum tuberosum</i>)	
<i>Agrotis ypsilon</i> H.	Cut worm.
<i>Gnorimoschea operculella</i> Z.	Tuber worm.
<i>Dednyschira medosa</i> H.	Hairy caterpillar.
<i>Empoasca devastans</i>	Leaf hopper
<i>Macrosiphum solanifilli</i>	Aphis
<i>Dorylus orientalis</i> W.	Red ant (Tuber eating ant)
<i>Pheidologeton diversus</i> J.	Small black ant.

Scientific name.	Common name.
<i>Pseudococcus nipae</i> M.	Mealy bug.
<i>Monolepta signata</i> Ol.	Leaf beetle.
<i>Epilachna 12-punctata</i> M.	Epilachna beetle.
<i>E 28-punctata</i> Fb.	Do.
26. Sweet Potato (<i>Ipomea batatas</i>)	
<i>Metriona circumdata</i> H.	Leaf eating beetle.
<i>Aspidomorpha dorsata</i> F.	Tortoise beetle.
<i>Estigmere chinensis</i> H.	Leaf eating beetle.
<i>Blosyrus asselus</i> L.	Sweet potato weevil.
<i>Cylus formicarius</i> Fab., <i>Monophyes</i> sp.	Do.
<i>Carphurus</i> sp.	Beetle.
<i>Ollarus lodganati</i> D.	Potato bug.
<i>Exitianus indicus</i> D.	Hopper
<i>Pericallia ricini</i> F.	Hairy caterpillar.
<i>Euchromia polymena</i> L.	Leaf caterpillar.
27. Lady's finger (<i>Hibiscus esculentus</i>)	
<i>Formiconus antiguus</i> Kr.	Leaf eating beetle.
<i>Ametonychus peregrinus</i> Ol.	Shoot borer.
<i>Myllocerus 11-postulatus</i>	Root feeding weevil.
<i>H. minodes indicus</i> gag.	Leaf eater.
<i>Monolapta orientalis</i> gag.	Do.
<i>Melanepthalma distinguend</i> G.	Do.
<i>Aphis fabae</i> L.	Aphid
<i>Empoasca devastans</i> Dist.	Leaf hopper
<i>Ptyelinellus nebulosus</i> F.	B.g.
<i>Rhopalus macropictus</i> D.	Spittle bug.
<i>Paromius exiguus</i> D.	Lygaeid bug.
<i>Dolycoris indicus</i> S.	Pentatomid bug.
<i>Dysdercus cingulatus</i> F.	Red cotton bug.
<i>Sylepta</i> sp.	Leaf roller.
<i>S. derogata</i> F.	Do.
<i>Earias fabea</i> S.	Fruit & shoot borer.
28. Amaranthus (<i>Amaranthus</i> sp.)	
<i>Apoderus</i>	
<i>tranquebaricus</i> F.	Leaf eating weevil.
<i>Hypolixus truncatulus</i> F.	Do.
<i>Hymenea fascialis</i>	Leaf eating caterpillar.
<i>Lixus brachyrhinus</i> B.	Shoot boring weevil.
<i>Cletus pognator</i> F.	Coroid bug
<i>Nysius inconspicuous</i> D.	Lygaeid bug.
<i>Aeolothrips collaris</i> P.	Thrips.
<i>A. fulvicollis</i> B.	Do.
<i>Frankliniella intonsa</i> T.	Do.

Scientific name.	Common name.
29. Bean (<i>Dolichos lablab</i>)	
<i>Sagra carbunculus</i> H.	Shoot borer
<i>S. femorata</i> D.	Do.
<i>Alcides collaris</i> P.	Shoot weevil.
<i>Blosyrus oniscus</i> O.	Leaf weevil.
<i>Aphis medicaginis</i> K.	Bean aphid.
<i>Leptocentrus taurus</i> F.	Hooper hooper.
<i>Coptosoma cribrarinn</i> F.	Bean bug.
<i>Plusia orichalacea</i> F.	Green senmi looper.
<i>Cosmopterix</i> sp.	Leaf miner.
<i>Tetranychus</i> sp.	Mite.
<i>Epilachna 12-punctata</i> M.	Epilachna beetle.
<i>E. 28-punctata</i> Fb.	Do.
<i>E. corrupta</i> M.	Do.
<i>Aulacophora abdominalis</i> Fb.	Red pumpkin beetle.
<i>A. foveicollis</i> Lac.	Do.
<i>A. frontalis</i> Baly.	Do.
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Lasioptera falcata</i> F.	Stem fly.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. cucurbituae</i> Coq.	Fruit fly.
30. Bottle gourd (<i>Lagenaria vulgaris</i>)	
<i>Aulacophora abdominalis</i> F.	Red pumpkin beetle.
<i>A. foveicollis</i> Lac.	Do.
<i>A. frontalis</i> Bally.	Do.
<i>Carpophilus cylindricus</i> M.	Flower beetle
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Apomecyna neglecta</i> pase.	Leaf beetle.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. cucurbituae</i> Coq.	Do.
<i>Aspongopus janus</i> F.	Pentatomid bug.
<i>Nesidiocoris</i> sp.	Mirid bug.
<i>Thrips flavidus</i> Bag.	Trip.
31. White gourd (<i>Cucurvits pepo</i>)	
<i>Aulacophora abdominalis</i> Fb.	pumpkin beetle.
<i>A. foveicollis</i> Lac.	Do.
<i>A. frontalis</i> B.	Do.
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. cururbituae</i> Coq.	Do
<i>Leptoglossus mambranaceus</i> Fb.	Corcid bug.
<i>Aspongopus janus</i> F.	Pentatomid bug.
32. Sweet gourd (<i>Cumbita maxima</i>)	
<i>Epilachna 28-punctata</i> Fb.	Epilac -a beetle.
<i>E. 12-punctata</i> M.	Do.

Scientific name.	Common name.
<i>Aulacophora abdominalis</i> Fb.	Red pumpkin beetle.
<i>A. foveicollis</i> Lac.	Do.
<i>A. frontalis</i> B.	Do.
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Apomecya neglecta</i> P.	Leaf beetle.
<i>Sciara rufithorax</i> W.	Seedling fly.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. cucurbitae</i> C.	Do.
<i>Exitianus</i> sp.	Hopper.
<i>Aspogopus brunneus</i> T.	Pentatomid bug.
<i>A. janus</i> F.	Do.
<i>Melittia indica</i> B.	Shoot borer.
33. Chichinga (<i>Luffa serpentina</i>)	
<i>Epilachna 12-punctata</i> M.	Epilachna beetle.
<i>E. 28-punctata</i> Fb.	Do.
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. cucurbitae</i> C.	Do.
34. Cucumber (<i>Cucumis sativus</i>)	
<i>Epilachna 12-punctata</i> M.	Epilachna beetle.
<i>E. 28-punctata</i> Fb.	Do.
<i>Aulacophora abdominalis</i> Fb.	Red pumpkin beetle.
<i>A. foveicollis</i> Lac.	Do.
<i>A. frontalis</i> B.	Do.
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Sciara rufithorax</i> W.	Seedling fly.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. cucurbitae</i> Coq.	Do.
<i>Gegines gullatus</i> B.	Cucumber skipper.
<i>Melittia indica</i> B.	Shoot borer.
35. Jhinga (<i>Luffa acutangula</i>)	
<i>Epilachna 12-punctata</i> M.	Epilachna beetle.
<i>E. 28-punctata</i> Fb.	Do.
<i>Aulacophora abdominalis</i> Fb.	Red pumpkin beetle.
<i>A. foveicollis</i> L.	Do.
<i>A. frontalis</i> B.	Do.
<i>Sciara rufithorax</i> W.	Seedling fly.
<i>Dacus caudatus</i> Fb.	Fruit borer.
<i>D. cucurbita</i> Coq.	Do.
<i>Exitianus</i> sp.	Hopper.
<i>Leptocentrus taurus</i> Fb.	Do.

Scientific name.	Common name.
<i>Agonoscelis nubila</i> Fb.	Pentatomid bug.
<i>Aspongopus janus</i> F.	Do.
<i>Phidologeton diversus</i>	Small black ant.
<i>Melittia indica</i> B.	Shoot borer
36. Kankrol (<i>Momordia mixta</i>)	
<i>Epilachna 12-punctata</i> M.	Epilachna beetle.
<i>E. 2-punctata</i> Fb.	Do.
<i>Phyllotreta chotanica</i> D.	Flea beetle.
<i>Dacus caudatus</i> Fb.	Fruit fly.
<i>D. curcurbitae</i> Coq.	Do.
37. Kankri (<i>Cucumis utilissimus</i>)	
<i>Dacus cucurbitae</i> Coq	Fruit fly.
<i>D. caudatus</i> Fb.	Do.
<i>Aulacophora foveicollis</i> L.	Red pumpkin beetle.
<i>Aulacophora abdominalis</i> Fb.	Red pumpkin beetle.
38. Chillies (<i>Capsicum Sp.</i>)	
<i>Prodenia litura</i> F.	Leaf eating caterpillar
<i>Haplothrips ganglgaueris</i> S.	Thrips.
<i>Frankliniella schultzei</i> T.	Thrips.
<i>Scirtothrips dorsalis</i> H.	Thrips.
<i>Tetrangchid</i> spp.	Mite.
<i>Camponotus compressus</i> Fb.	Black ant.
<i>Lipaphis pseudobrassicae</i> D.	Aphis.
39. Tomato (<i>Lycopersicum esculentum</i>)	
<i>Aphis craccivora</i> Koch.	Aphis.
<i>Geocica lucifugus</i> Z.	Do.
<i>Rhopalosiphum maidis</i> F.	Do.
<i>R. rufiabdominalis</i> S.	Do.
<i>Schizaphis minuta</i>	Do.
<i>Tetraneura hirsuta</i> B.	Do.
<i>T. nigriabdominalis</i> S.	Do.
<i>Pseudococcus virgatus</i> C.	Mealy bug.
<i>Heliothis obsoleta</i> Fb.	Fruit bug.
<i>Prodenia litura</i> F.	Leaf eating caterpillar.
40. Cabbage (<i>Brassica oleraceae</i>)	
<i>Haltica cyanea</i>	Leaf beetle.
<i>Leme coromendaliana</i> Fb.	Cabbage leaf beetle.
<i>Sciara rufithorax</i> W.	Seedling fly.
<i>Lipaphis pseudobrassicae</i> D.	Aphis.
<i>Prodenia litura</i> F.	Leaf eating caterpillar.

Scientific name.	Common name.
<i>Agrotis ypsilon</i> H. <i>Pieris brassicae</i> Linn. <i>P. canidia</i> <i>P. hecabe</i> L. <i>Prioneris sita</i> <i>Plutella maculipennis</i>	Cut worm. Cabbage butter fly. Do. Do. Do. Dimond back moth.
41. Cauliflower (<i>Brassica alba</i>)	
<i>Sciara rufithorax</i> <i>Lipaphis pseudobrassicae</i> D. <i>Prodenia litura</i> F. <i>Pieris brassicae</i> L. <i>P. canidia</i> K. <i>P. hecabe</i> L.	Seedling fly. Aphid. Leaf eating caterpillar. Cabbage butter fly. Do. Do.
42. Radish (<i>Raphanus sativus</i>)	
<i>Haltica cyanea</i> <i>Phyllotreta brassicae</i> A. <i>Phyllotreta</i> sp. <i>Lepaphis pseudobrassicae</i> D. <i>Eurydema pulchrum</i> W.	Leaf beetle. Flea beetle. Do. Aphid. Pentatomid bug.
43. Konlkhoh (<i>Brassica rapa</i>)	
<i>Phyllotreta chotanica</i> D. <i>Lipaphis pseudobrassicae</i> D. <i>Crocidolomia binotalis</i> <i>Prodenia litura</i> F. <i>Pieris brassicae</i> L.	Flea beetle. Aphid. Mustard caterpillar. Leaf eating caterpillar. Cabbage butter fly.
44. Turnip (<i>Brassica rapa</i>)	
<i>Haltica cyanea</i> <i>Lipaphis pseudobrassicae</i>	Leaf beetle. Aphid.
45. Lettuce (<i>Lactuca sativa</i>)	
<i>Haltica cyanea</i> <i>Lipaphis pseudobrassicae</i>	Leaf beetle. Aphid.
46. Mango (<i>Mangifera indica</i>)	
<i>Sternochetus frigidus</i> F. <i>Cryptorrhynchus mangiferae</i> M. <i>Alcides frenatus</i> M. <i>Deporaus marginatus</i> P. <i>Apion pakistanensis</i> Al. <i>Rhynchoneus mangiferae</i> M. <i>Endaliscus</i> Sp.	Mango fruit borer. Mango nut borer. Mango shoot borer. Mango leaf cutting weevil. Mango leaf weevil. Mango leaf miner. Leaf weevil.

Scientific name.	Common name.
<i>Cryptorrhynchus</i> spp.	Brown bark weevil.
<i>Tadius laticollis</i> F.	Mango bark weevil.
<i>Echinocnemus mangiferae</i> A.	Do.
<i>Bagoniae alauddini</i> A.	Do.
<i>Camptorrhinus</i> Sp.	Do.
<i>Trochopopulus angustus</i> A.	Do.
<i>Desmidohorus hebes</i> F.	Do.
<i>Batocera rubus</i> L.	Mango stem borer.
<i>B. rufomaculata</i>	Do.
<i>Monolepta limbata</i> Ol.	Mango leaf beetle.
<i>Chaetodecus ferrugineus</i> H.	Mango fruit fly.
<i>Indiocerus atkinsoni</i> Leth	Mango hopper.
<i>I. nevispersus</i> Leth	Do.
<i>I. clypealis</i> Leth.	Do.
<i>Labioproctus polei</i> G.	Giant Mealy bug.
<i>Icerya pulchar</i> L.	Leaf scale.
<i>Hemaspido proctus</i> sp.	Mealy scale.
<i>Chionaspis</i> sp.	Snow scale.
<i>Apsylla cistellata</i> Buc.	Mango leaf gall psyllid.
<i>Cricula trifen estrata</i> H.	Mango defoliator.
Mite (Unidentified)	Mite.
47. Citrus (<i>Citrus</i> sp)	
<i>Rhynchocoris humeralis</i> Th.	Orange bug.
<i>Euphalerus citrii</i> K.	Citrus psyllid bug.
<i>Diaphorina citrii</i>	Do.
<i>Toxoptera aurantii</i> B.	Citrus aphid.
<i>Aleurocanthus woglumi</i> A.	Citrus white fly.
<i>A. spiniferus</i> Q.	Do.
<i>Anoidiella citrina</i> Cop.	Citrus yellow scale.
<i>A. aurantii</i>	Citrus red scale.
<i>Pseudococcus virgatus</i> Ck.	Citrus long tailed mealy bug.
<i>Pseudococcus</i> sp.	Citrus mealy bug.
<i>Chaetodacus</i> sp.	Orange fruit fly.
<i>Monohammus versteegi</i> R.	Orange tree borer.
<i>Chloridolum aleemene</i> Th.	Orange trunk borer.
<i>Chelidonium cinetum</i> G.	Citrus stem borer.
<i>Papilio demoleus</i> L.	Lemon butter fly.
<i>P. polytes</i> L.	Do.
<i>Arbela tetraonis</i> M.	Orange shoot borer.
<i>Phyllocnistis citrella</i> St.	Citrus leaf miner.
<i>Frankliniella</i> sp.	Citrus flower thrips.
<i>Schizetranychus</i>	Citrus mite.
<i>hindustanicus</i> H.	Citrus mite.
48. Litchi (<i>Nephelium litchi</i>)	
<i>Argyroploce illipida</i> B.	Fruit borer.
<i>Arbela tetraonis</i> M.	Stem borer.
<i>Zeuzera coffeae</i> N.	Trunk borer.
<i>Acrocercop hieroecasma</i> M.	Leaf Miner.
<i>Cosmopteryz</i> sp.	Do.
<i>Chionaspis</i> sp.	Snow scale.
<i>Acria litchi</i> K.	Litchi mite.

Scientific name.	Common name.
49. Jack Fruit (<i>Artocarpus integrifolia</i>)	
<i>Margaronia caesalis</i> W.	Jack fruit borer.
<i>Aporina germari</i> L.	Jack trunk borer.
<i>Ochyromera artocarni</i> M.	Jack bud weevil.
50. Guáva (<i>Psidium guava</i>)	
<i>Pulvinaria psidii</i>	Mealy bug.
<i>Aphis gossypii</i> G.	Aphis.
<i>Myllocerus discolor</i> B.	Myllocerus weevil.
<i>Aeolesthes holosericea</i> W.	Trunk borer.
<i>Chaetodacus</i> Sp.	Fruit fly.
51. Banana (<i>Musa sapientum</i>)	
<i>Nodostoma viridipennis</i> M.	Leaf and fruit beetle.
<i>Cosmopolites sordidus</i> G.	Stem weevil.
<i>Odoiporus longicollis</i> O.	Do.
<i>Aularches miliaris</i> L.	Spotted grasshopper.
<i>Lecanium discrepans</i>	Mealy bug.
52. Coconut and other palms.	
<i>Helicopriss bucephalus</i>	Leaf beetle.
<i>Rhynchophorus ferugienus</i> Ol.	Red palm weevil.
<i>Oryctes rhinoceros</i> L.	Rhinoceros beetle.
<i>Aspidiotus destructor</i>	Mealy bug.
<i>Elymnias undularis</i>	Coconut caterpillar.
<i>Nephantis serinopa</i> M.	Do.
53. Pineapple (<i>Annanus sativus</i>)	
<i>Pseudococcus bromeliae</i> D.	Mealy bug.
<i>Desmecoccus brevipes</i> Ck.	Scale.
54. Ber (<i>Ziziphus jujuba</i>)	
<i>Euproctis fraterna</i> M.	Ber hairy caterpillar.
<i>Pseudococcus</i> sp.	Mealy bug.
<i>Carpomyia</i> sp.	Ber fruit fly.
<i>Myllocerus</i>	Green weevil.
55. Jam (<i>Eugenia Jambolana</i>)	
<i>Acrocercops phoeospora</i> M.	Jam leaf minor
<i>Lecwenia karnyiana</i> Pr.	Jam thrips.
<i>Balaninus C-album</i> F.	Jam leaf weevil.
56. Castard apple (<i>Anona squamosa</i>) and wood apple (<i>Feronis elephantum</i>)	
<i>Heterographis bengalella</i> R.	Fruit borer.
<i>Euzophora plumbeifasciata</i> H.	Wood apple borer.
<i>Pseudococcus virgatus</i> Ck.	Mealy bug.
<i>Aonidiella citrina</i> Coq.	Citrus yellow scale.

Scientific name.	Common name.
57. Pomegranate (<i>Punica granatum</i>)	
<i>Virachola isocrates</i> F.	Pomegranate butter fly.
<i>Pseudococcus</i> sp.	Mealy bug.
58. Betel leaf (<i>Piper betel</i>)	
<i>Aleurocanthus nubilans</i>	Betel leaf white fly.
59. Betel nut (<i>Areca catechu</i>)	
<i>Disphinctus politus</i>	Betel nut bug.
<i>Aspidiotus</i> sp.	Mealy bug.
60. Tamarind (<i>Tamarindus indica</i>)	
<i>Caryoborus gonogra</i>	Bruchid
61. Tea (<i>Camellia thoifera</i>)	
<i>Heterobostrychus aequalis</i> W.	Wood borer.
<i>Oscinis theae</i> L.	Leaf eating fly.
<i>Toxoptera aurantii</i>	Aphid.
<i>Ceronema japonica</i>	Scale.
<i>Erichiton theae</i>	Do.
<i>Saissetia coffee</i>	Do.
<i>Disphinctus humeralis</i>	Tea mosquito or <i>Helopeltis</i> bug.
<i>Helopeltis antonii</i>	Do.
<i>H. theivora</i> W.	Do.
<i>Paccilocoris latus</i>	Pentatomid bug.
<i>Lecanium viride</i>	Green bug.
<i>Arbelada</i> sp.	Bark borer.
<i>A. theivora</i>	Do.
<i>A. quadrinoata</i>	Do.
62. Stored grains and other stored products.	
<i>Sitophilus oryzae</i> L.	Rice weevil.
<i>Rhizopertha dominica</i> Fb.	Lesser grain borer.
<i>Dinoderus ocellaries</i> F.	Ghoon beetle.
<i>Tribolium castaneum</i> H.	Rust red flour beetle.
<i>T. confusum</i> J.	Confused flour beetle.
<i>Latheticus oryzae</i> W.	Long headed flour beetle.
<i>Alphitobius diaperinus</i> (P)	Lesser meal worm.
<i>Oryzaephilus surinamensis</i>	Saw-toothed grain beetle.
<i>Laemophloeus surinamensis</i>	Flat grain beetle.
<i>Trogoderma versicolor</i> F.	Stored lac beetle.
<i>Trogoderma granarium</i> (E)	Khapra beetle.
<i>Attagenus piceus</i> OL.	Black carpet beetle.
<i>Lasioderma serricorne</i> F.	Cigarette beetle.
<i>Stegobium paniceum</i> L.	Drug store beetle.
<i>Gastrallus indicus</i> L.	Book worm.

Scientific name.	Common name.
<i>Carpophilus hemipterus</i> L.	Dried fruit beetle.
<i>Bruchus</i> spp.	Pulse beetle.
<i>Sitotroga cerealella</i> (O)	Rice moth.
<i>Gnorimoschema operculella</i> Z.	Tuber worm.
<i>Corcyra cephalonica</i> (S)	Rice meal moth.
<i>Ephestia cautella</i> W.	Ephestia moth.
<i>Plodia interpunctella</i> H.	Indian meal moth.
<i>Tinea pellionella</i> L.	Cloth moth.
<i>Lepisma saccharina</i> L.	Silver fish.
<i>Lecanium</i> sp., <i>Pinnaaspis</i> sp.	Scale.
63. Rats of Field Crops, stores, godowns and houses.	
<i>Bandicota indica</i>	Greater bandicot (Big black field rat)
<i>B. bengalensis</i>	Black field rat (lesser bandicot)
<i>Rattus rattus</i>	Indian mole rat.
<i>R. norvegicus</i>	Black rat.
<i>R. exulans</i>	Brown rat.
<i>R. meltada</i>	Pacific rat.
<i>Mus musculus</i>	Soft furred rat
<i>M. booduga</i>	House mouse
<i>Nesokia indica</i>	Do.
<i>Cannomys badius</i>	Short tailed mole rat.
	Bay bamboo rat.
64. Other rodent pests of fruits, nuts, vegetables, young leaves, shoots and sweet potatoes	
<i>Hystrix hodgsoni</i> (Gray)	Porcupine.
<i>Atherurus macrourus</i> L.	Do.
<i>Petionomys fuscocapillus</i> (Jardou)	Squirrel.
<i>Hylomys alboniger</i> (Hodgson)	Do.
<i>Petaurista alborufus</i> (Milne-Edwards)	Do.
<i>P. magnificus</i> (Hodgson)	Do.
<i>Belomys pearsoni</i> (Gray)	Do.
<i>Ratufa bicolor</i> (Sparrman)	Do.
<i>Funabulus pennanti</i> Wroughton	Do.
<i>Callosciurus pygerythrus</i> (Geoffroy)	Do.
<i>C. Maccllellandi</i> (Horsfield)	Do.
<i>C. erythraeus</i> (Pallas)	Do.
<i>Dremomys lokriah</i> (Hodgson)	Do.
65. Pests of flowers	
<i>Adoretus bicolor</i>	Rose beetle.
<i>Progonia partonalis</i>	Dahlia flower caterpillar.
66. Pests of forests	
<i>Psitoptera fastuosa</i>	Buprestid beetle.
<i>Phassus viguifera</i>	Stem borer

Scientific name.	Common name.
<i>Mecopoda elongata</i>	Grasshopper
<i>Pulvinaria floceifera</i>	Scale
<i>P. maizima</i>	Do.
<i>Petionomys fuscocapillus</i> (Jardou)	Squirrel
<i>Hylopetes alboniger</i> (Hodgson)	Do.
<i>Petaurista alborufus</i> (Milne-Edwards)	Do.
<i>P. magnificus</i> (Hodgson)	Do.
<i>Belomys personi</i> (Gray)	Do.

67. *Miscellaneous pests of different crops and forests*

Bird:

<i>Passer domesticus</i>	House sparrow
<i>Psittacula</i> spp.	Parakeet
<i>Streptopella decaocto</i>	Dove
<i>Ploceus</i> sp.	Weaver
<i>Columbia livia intermedia</i> (Strickland)	Blue Rock Pigeon.
<i>Phenonotus cafer bengalensis</i> Blyth	Redvented Bulbul

Snail and other vertebrate pests:

<i>Achatina fulica</i> Brownditch	Giant African Snail.
<i>Elephant maximus</i>	Asian elephant, Wild boar, Jackle.

Important Plant Diseases and Nematodes.

1. **HOST: Rice (*Oryza sativa*)**

Scientific Name.	Common Name.
<i>Cochliobolus miyabeanus</i> (<i>Drechslera oryzae</i>) (Ito et Kur)	Brown leaf spot
Dress, ex Dastur	Blast
<i>Pyricularia oryzae</i> Cav.	Foot-rot and Bakanae
<i>Gibberella fusikuroi</i> (<i>Fusarium moniliforme</i>) (Saw.) Ito. (Sheld.)	
<i>Magnaporthe salvinii</i> Kruse and Webster.	Stem-rot.
<i>Thanatephorus cucumeris</i> (Frank) Dont	Sheath blight
<i>Ustilagionidea virens</i> (Cke) Tak	False smut
<i>Entyloma oryzae</i> H.P. Sydow	Leaf smut
<i>Sphaerulina oryzae</i> H. Myake	Narrow brown leaf spot.
<i>Nigrospora oryzae</i> , <i>Phyllosticta glumarum</i> (Ell. and Tr.) Miyake	Grain spot and grain discolouration.
<i>Phoma glumarum</i>	
<i>Ramularia oryzae</i>	
<i>Pyrenochaeta oryzae</i>	
Shiraj Ox Mayake	

Scientific name.	Common name.
<i>Nephotettix virescens</i> (vector)	Tungro.
<i>N. virescens</i> and <i>N. nigropictus</i> (Vector)	Yellow dwarf.
<i>Xanthomonas oryzae</i> (Uyeda et. Ishi.) Dowson	Bacterial Leaf blight (BLB)
<i>Xanthomonas</i> <i>translucens</i> f. sp. (<i>Oryzicola</i>)	Bacterial Leaf streak (BLS)
<i>Ditylenhus angustus</i> Filipjev.	Ufra (Dakpora)
<i>Meloidogyne</i> spp.	Root-knot
<i>Acrocylindrium oryzae</i> Sawada	Sheath rot
<i>Metasphaeria albescens</i> <i>Rynchosporium oryzae</i> (G & Y)	Leaf Scald
<i>Achlya proliferata</i> (Nees) de Bary	Seedling damping-off
<i>Corticium rolfsii</i> Curze (<i>Sclerotium</i> <i>rolfsii</i>)	Seedling blight.
2. HOST : Wheat (<i>Triticum aestivum</i>)	
<i>Puccinia graminis</i> f.sp. <i>tritici</i> Eriks and Henn.	Stem rust or Black rust
<i>Puccinia recondita</i> Rob. ex. Desm.	
<i>Ustilago tritici</i> (Pers.)	Loose smut
<i>Helminthosporium sativum</i> Pamm. King Bakke.	Seedling blight and leaf spot.
<i>Sclerotium rolfsii</i> Sacc.	Foot and Root rot
<i>Cladosporium herbarum</i> Lk.	Black mould.
3. HOST : Maize (<i>Zea mays</i> L.)	
<i>Xanthomonas</i> Sp.	Bacterial Leaf Streak.
<i>Helminthosporium turcicum</i> Pass	Leaf blight
<i>Penicillium</i> , <i>Aspergillus</i> and	
<i>Gibberella zeae</i>	Cob rot.
<i>Fusarium</i> Sp. <i>Rhizoctonia</i> Sp.	Seed and seedling disease.
<i>Pythium</i> Sp.	
<i>Ustilago zeae</i>	Smut
4. HOST : Barley (<i>Hordeum vulgare</i>)	
<i>Helminthosporium gramineum</i> Rabh	Leaf stripe
<i>Ustilago nuda</i> Rosstr (Jens.)	Smut
<i>Sclerotium rolfsii</i> Sacc.	Stem rot
5. HOST : Oat (<i>Avena sativa</i>).	
<i>Helminthosporium avenae</i> Br. Cav.	Leaf spot

Scientific name.	Common name.
6. HOST : Joar (<i>Sorghum vulgare</i>)	
<i>Colletotrichum graminicolum</i>	Red leaf spot
<i>Sphacelotheca sorghi</i> (Link) Clint.	Grain smut
<i>Phyllachora graminis</i> Pers	Black spot
7. HOST : Kaon (<i>Setaria italica</i>)	
<i>Phoma</i> sp.	Grain spot
<i>Pyricularia</i> sp.	Leaf spot
8. HOST : Jute (<i>Corchorus capsularis</i> L.) (<i>C. olitorius</i>)	
<i>Macrophomina phaseolina</i> (Maubl.) Ashby.	Stem rot
<i>Botryodiplodia theobromae</i> Pat	Black band
<i>Colletotrichum corchorum</i> Tar. & IR.	Anthracnose
<i>Glomerella cingulata</i> (Ston.)	Die-back
<i>Sclerotium rolfsii</i> Sacc.	Soft-rot
<i>Rhizoctonia solani</i> Kuhn	Wilt
<i>Cercospora corchori</i>	Leaf spot
<i>Oidium</i> Sp.	Powdery mildew
<i>Virus</i>	Mosaic
<i>Meloidogyne javanica</i> (Treub)	Root knot
Chit.	
<i>M. incognita</i> chitwood	
9. HOST : Cotton (<i>Gossypium hirsutum</i>)	
<i>Colletotrichum gossypii</i> South	Anthracnose
<i>Cercospora gossypina</i> (Cke.) Atk.	Leaf spot
<i>Fusarium vasinfectum</i> Atk	Wilt
<i>F. oxysporum</i> f. <i>vasinfectu</i> . (Atk.) Sny. and Han.	Angular leaf spot or Black arm
<i>Xanthomonas malvacearum</i>	
<i>Rhizoctonia</i> sp.	Damping off
<i>Virus</i>	Mosaic Dosaic
10. HOST : Sunnhemp (<i>Crotalaria juncea</i>)	
<i>Cercospora crotalareae</i>	Leaf spot
<i>Alternaria</i> Sp.	
<i>Fusarium udum</i> var	Wilt
<i>Crotalariae</i> (Kul) Pad.	
<i>Colletotrichum</i> Sp.	Anthracnose
<i>Uromyces decoratus</i> Syd.	Rust
11. HOST : Flax (<i>Linum usitatissimum</i> L.)	
<i>Alternaria</i> Sp.	Leaf spot
<i>Sclerotium</i> Sp.	Stem rot
<i>Fusarium oxysporum</i> f. <i>lini</i> .	Wilt

Scientific name.	Common name.
12. HOST : Mestha. (<i>Hibiscus subdariffa</i> L.)	
<i>Macrophomina phasolina</i>	Stem rot
<i>Colletorichum</i> Sp.	Anthracnose
<i>Phyllosticta hibisci</i>	Leaf spot
<i>Phoma subdariffae</i>	Pod spot
13. HOST, Rhea, ((<i>Boehmeria nivae</i>) :	
<i>Diplodia rhea</i>	Leaf spot
14. HOST : Rape and Mustard (<i>Brassica campestris</i> var. sarson Pr. B. <i>campestris</i> var. toria, <i>B. juncea</i> Coss.	
<i>Alternaria brassicae</i> (Berk.) Sacc.	Blight
<i>Albugo candida</i> (Pers.)	White rust
15. HOST : Til (<i>Sesamum indicum</i>)	
<i>Macrophomina phaseolina</i> (Maubl.)	Stem rot.
<i>Cercospora sesami</i> Zimm.	Leaf spot
<i>Alternaria</i> SP.	Leaf spot
16. HOST : Ground nut (<i>Arachis hypogaea</i>)	
<i>Cercospora personata</i> (Berk and Curt)	
Ell., <i>C. arachidicola</i> Hori.	Tikka disease
<i>Sclerotium rolfsii</i> Sacc	Stem rot
<i>Macrophomina phaseolina</i> (Maubl) Asbhy.	Stem rot
<i>Phyllosticta</i> sp.	
<i>Alternaria</i> Sp.	Leaf spot
17. HOST : Sunflower (<i>Helianthus annus</i>)	
<i>Colletorichum</i> sp.	Anthracnose
<i>Sclerotium rolfsii</i> Sacc.	Stem rot
18. HOST : Castor (<i>Ricinus communis</i>)	
<i>Cercospora ricinella</i> Sacc. and Bear.	Leaf spot
<i>Alternaria ricini</i> (Yoshi) Hansf.	Blight
<i>Phytophthora parasitica</i> Dastur.	Seedling Blight
19. HOST : Safflower (<i>Carthamus tinctorius</i> L.)	
<i>Puccinia carthami</i> (Hutz.) Corda.	Rust

Scientific name.	Common name.
20. Cowpea (<i>Vigna sinensis</i>) Endl.	
<i>Cercospora cruenta</i> Sacc.	Leaf spot
<i>Erysiphe polygoni</i> DC	Powdery mildew
<i>Glomerella lindemuthiana</i> Shear	Anthracnose
<i>Uromyces appendiculatus</i> (Pers.)	Rust
<i>Vermicularia capsici</i>	Die-back
<i>Macrophomina phaseolina</i> (Maulb) Ashby.	Stem-rot
<i>Hypochnus solani</i> Pril and Del.	Root-rot
Virus	Mosaic
21. HOST : Arhor (<i>Cajanus cajan</i> L.)	
<i>Fusarium udum</i> Butler	Wilt
<i>Mycoplasma</i>	Witches broom
22. HOST : Pea (<i>Pisum sativum</i> L.)	
<i>Peronospora viciae</i> . (Bek) de Bary	Downy mildew
<i>Erysiphe polygoni</i> DC.	Powdery mildew
<i>Uromyces fabae</i> (Pers.) de Bary	Rust
<i>Ascochyta pisi</i>	Blight
23. HOST : Bean (<i>Dolichos lablab</i> L. <i>Phaseolus vulgaris</i>)	
<i>Erysiphe polygoni</i> DC.	Powdery mildew
<i>Glomerella lindemuthiana</i> Shear	Anthracnose
<i>Uromyces appendiculatus</i> (Pers.)	Rust
Virus	Mosaic
24. HOST : Soyabean (<i>Glycine max</i> Merr.)	
<i>Peronospora trifoliorum</i> Virus	Downy mildew
	Mosaic
25. HOST : Keshari (<i>Lathyrus sativus</i>)	
<i>Peronospora viciae</i> (Berk.) de Bary	Downy mildew
<i>Uromyces</i> sp.	Rust
<i>Cercospora cruenta</i> Sacc.	Leaf spot
26. HOST : Gram (<i>Cicer arietinum</i> L.)	
<i>Ascochyta rabiei</i> (Pers.)-	Blight
<i>Mycosphaerella pinodes</i> B and Blox	
<i>Uromyces cicerisarietini</i> (Gro.) Jac	Rust
<i>Fusarium oxysporum</i> Appl. and Woil.	Foot-rot, Wilt
27. HOST : Mung (<i>Phaseolus mungo</i>)	
<i>Cercospora cruenta</i> (Pers.) De Bary.	Leaf spot
Virus	Yellow mosaic

Scientific name.	Common name.
28. HOST : Lentil (<i>Lens esculentus</i>)	
<i>Cercospora cruenta</i> (Pers.) De Bary.	Leaf spot
<i>Uromyces fabae</i> (Pers.) de Bary.	Rust
<i>Fusarium oxysporum</i>	Root-rot
<i>Sclerotium rolfsii</i>	Wilt
29. HOST : Mathikalai (<i>Phaseolus</i> sp.)	
<i>Collectotrichum caulicola</i>	Anthracnose
<i>Cercospora cruenta</i> (Pers.) de Bary	Leaf spot
<i>Meloidogyne</i> sp.	Root-rot
30. HOST : Sugarcane (<i>Saccharum officinarum</i> L.)	
<i>Collectotrichum falcatum</i> Went	Red-rot
<i>Hendersonina sacchari</i> Bult	Collar-rot
<i>Ceratocystis paradoxa</i> (Dade)	Sett-rot or Pineapple disease
<i>Cercospora longipes</i> Butl.	Brown leaf spot
<i>Leptosphaeria sacchari</i>	Ring spot
<i>Helminthosporium sacchari</i>	Helminthosporiose or Eye spot
(Bradade Hann) Butl	
<i>Ustilago scitaminea</i> Sydow	Smut
<i>Cephalosporium sacchari</i>	Wilt
<i>Xanthomonas vascularum</i> (Cobb.) Dew	Gumming disease
<i>Cercospora</i> sp.	Yellow spot
<i>Puccinia kuehnii</i> (Kr.) Bult.	Rust
<i>Sterile mycellium</i>	Banded sclerotial disease
<i>Capnodium</i> sp.	Sooty mould
<i>Striga</i> sp.	Phanerogamic parasite
Virus	Mosaic
Virus	Chlorotic streak
31. HOST : Beet (<i>Beta vulgaris</i>).	
<i>Cercospora beticola</i> Sacc.	Leaf spot
<i>Sclerotium rolfsii</i> Sacc.	Foot-rot
32. Potato (<i>Solanum tuberosum</i> L.)	
<i>Phytophthora infestans</i> (Mont.) Bary	Late blight
<i>Alternaria solani</i> (Ell. and Mart.) Jones and Gt.	Early blight
<i>Rhizoctonia solani</i> Kuhn	Rhizoctonia Foot-rot
<i>Sclerotium rolfsii</i> Sacc.	Stem rot
<i>Fusarium oxysporum</i> Schl.	Wilt
<i>F. caeruleum</i> (Lib.) Sacc.	Dry rot
<i>Erwinia carotovora</i> (Jones)	Blackleg
<i>Corynebacterium sepedonicum</i> (Sp. and Kot.) Sk. and Bink	Ring rot
<i>Bacillus solanacearum</i>	Bacterial Wilt
<i>Erwinia carotovora</i> and other	
<i>Putrifiactive bacteria</i>	Wet-rot

Scientific name.	Common name.
<i>Meloidogyne</i> sp.	Root-knot
Virus (Aphid vector)	Leaf roll
Physiological	Black heart
Physiological	Hollow heart
Insect vector (Virus)	Mosaic
<i>Streptomyces scabies</i>	Scab
(Thax.) Wak, and Hen.	
33. HOST : Tomato (<i>Lycopersicon esculentum</i> Mill.)	
<i>Phytophthora infestans</i> (Mont) De Bary	Late Blight
<i>Hypochnus solani</i> Pril & Del.	Root-rot
<i>Pseudomonas solanacearum</i> smith	Bacterial Wilt
<i>Fusarium oxysporum lycopersici</i>	Fungal Wilt
Physiological disorder	Blossom end-rot
Virus	Leaf curl
<i>Alternaria solani</i> (Ell. and Mart.) Jones.	Early blight
<i>Meloidogyne javanica</i> (Treub) Chit.	Root-knot
Virus	Bushy stunt
34. HOST : Kachu (Arum) <i>Colocasia esculenta</i> , (<i>Cantiquorum</i>)	
<i>Phyllosticta</i> sp.	Leaf spot
<i>Phytophthora colocasiae</i> Rac.	Leaf blight
35. HOST : Data (<i>Amaranthus viridis</i>)	
<i>Phyllostictia</i> Sp.	Leaf spot
<i>Cercospora</i> sp.	Leaf spot
<i>Colletotrichum</i> sp.	Anthracnose
36. HOST : Spinach (<i>Spinacia oleracea</i>)	
<i>Cercospora</i> sp.	Leaf spot
37. HOST : Patal (<i>Trichosanthes dioeca</i>)	
<i>Pseudoperonospora cubensis</i> (B & C) Rostr.	Downy mildew
38. HOST : Karala (<i>Momordica charantia</i> L.)	
<i>Cercospora momordiceae</i> Mc. Rae.	
39. HOST : Brinjal (<i>Solanum melongena</i>)	
<i>Vermicularia capsici</i>	Fruit rot
<i>Meloidogyne javanica</i>	Root-Knot
<i>Pseudomonas solanacearum</i> Smith	Wilt
<i>Phyllosticta hortorum</i>	
<i>Alternaria solani</i>	Leaf spot
<i>Colletotrichum atramentarium</i>	Black rot

Scientific name	Common name.
40. HOST : Cabbage (<i>Brassica oleracea</i> var. <i>capitata</i>)	
<i>Albugo candida</i> (Pers.)	White rust.
<i>Pythium</i> Spp.	Damping off.
<i>Peronospora parasitica</i> (Pers.) Kuntz.	Downy mildew.
<i>Alternaria brassicae</i> (Berk.) Sacc.	Blight.
<i>Plasmodiophora brassicae</i> Wor.	Club-root.
41. HOST : Cauliflower <i>Brassica oleracea</i> Var. <i>borytis</i>	
<i>Albugo candida</i> (Pers) Kuntz	White rust.
<i>Alternaria brassicae</i> (Berk)	Blight
<i>Peronospora parasitica</i> (Pers.) Kuntz.	Downy mildew.
42. HOST : Turnip (<i>Brassica rapa</i>)	
<i>Albugo candida</i> (Pers) Kuntz	White rust
<i>Erysiphe polygoni</i> DC	Powdery mildew
<i>Cercospora</i> sp.	Leaf spot
<i>Alternaria brassicae</i> (Berk) Sacc.	Blight.
43. HOST : Lady's finger (<i>Hibiscus</i> <i>esculentus</i> L.)	
<i>Cercospora abelmoschi</i> Ell. and Ev.	Leaf spot
Virus	Yellow Mosaic
Virus	Vein clearing
<i>Meloidogyne</i> sp.	Root-knot
44. HOST : Radish (<i>Raphanus sativus</i>)	
<i>Alternaria brassicae</i> (Berk) Sacc.	Blight
<i>Macrophomina phaseolina</i> (Maubl.) Ashby	Petiole rot
45. HOST : Lettuce (<i>Lactuca sativa</i>)	
<i>Cercospora lactucae</i>	Leaf spot
<i>Alternaria sonchi</i>	
<i>Bremia lactucae</i>	Downy mildew
46. HOST : Bottle Gourd (<i>Lagenaria vulgaris</i>)	
<i>Erysiphe cichoracearum</i> DC	Powdery mildew
<i>Pythium aphinadermatum</i> (Ed.) Fitz.	Fruit rot
<i>Colletotrichum lagenarium</i> (Pers.) Dill and Hol.	Anthraco nose
<i>Cercospora</i> sp., <i>Phyllosticta</i> sp.	Leaf spot
Virus	Leaf curl
Virus	Mosaic

Scientific name.	Common name.
47. HOST : Squash (<i>Sechium edule</i>) <i>Pseudoperonospora cubensis</i>	Leaf spot
48. HOST : Sweet Gourd (<i>Cucurbita pepo</i>) <i>Erysiphe cichoracearum</i> DC Virus	Powdery mildew Mosaic
49. HOST : Jhinga (<i>Luffa acutangula</i> Roxb.) <i>Colletotrichum</i> sp. <i>Pseudoperonospora cubensis</i> (B & C.) Rost.	Anthracnose Downy mildew
50. HOST : Cucumber (<i>Cucumis sativus</i>) <i>Phyllosticta</i> sp. Virus	Leaf spot. Mosaic.
51. HOST : Chalkumra (<i>Benincasa cerifera</i>) <i>Cercospora cucurbitae</i>	Leaf spot
52. HOST : Snake Gourd (<i>Trichosanthes anguina</i> L.) <i>Cercospora tricosanthes</i> (Rang & hand)	
53. HOST : Sweet Potato (<i>Ipomoea batatas</i>) <i>Cercospora batatae</i> Zimm. <i>Rhizopus nigricans</i> Ehr. <i>Ceratocystis fimbriata</i> Ellis	Leaf spot Soft rot Black rot
54. HOST : Pui shak (<i>Basella rubra</i> B. alba) <i>Alternaria</i> sp., <i>cercospora</i> sp. <i>Colletotrichum</i> sp.	Leaf spot Anthracnose
55. HOST : Kakrul (<i>Momordica cochinchinensis</i>) <i>Cercospora momordicae</i> Mc. Rac.	Leaf spot
56. HOST : Turmeric (<i>Curcuma longa</i> Roxb) <i>Taphrina maculans</i> Butler <i>Phyllosticta</i> sp.	Leaf spot
57. HOST : Ginger (<i>Zingiber officinale</i> Ros) <i>Pythium aphanidermatum</i> (Ed.) Fitz. <i>Phyllosticta</i> sp.	Soft rot Leaf spot

Scientific name.	Common name.
58. HOST : Black Pepper (<i>Piper nigrum</i>)	
<i>Cephaleuros parasitica</i> Kar.	Leaf spot
<i>Phyllosticta</i> sp.	
<i>Collectotrichum</i> sp.	Anthraco-nose
59. HOST : Coriander (<i>Coriandrum sativum</i> L.)	
<i>Protomyces macrosporus</i> Unger	Stem gall
<i>Erysiphe polygoni</i> DC.	Mildew
60. HOST : Tejpata (<i>Cinnamomum</i> sp.)	
<i>Cephaleuros parasitica</i> Kar.	Leaf spot
<i>Phyllosticta cinnamomi</i>	Leaf spot
61. HOST : Onion (<i>Allium cepa</i> L.)	
<i>Peronospora destructor</i>	Downy mildew
<i>Sclerotium cepivorum</i>	White rot
62. HOST : Garlic (<i>Allium fistulosum</i>)	
<i>Sclerotium cepivorum</i>	White rot.
63. HOST : Chilli (<i>Capsicum annum</i>)	
<i>Vermicularia capsici</i> Syd.	Die back
<i>Glomerella piperata</i> (Stone)	Ripe-rot
S. & V.S.	
<i>Choanephora cucurbitarum</i> (B&R)	Soft rot
Thax	
<i>Colletorichum nigrum</i> E. & Hal.	Anthraco-nose
<i>Cercospora capsici</i>	Leaf spot.
64. HOST : Jira (<i>Cumin</i>) (<i>Cuminum cyminum</i>)	
<i>Oidium</i> sp.	Powdery mildew
65. HOST : Tobacco (<i>Nicotiana tabacum</i>)	
<i>Pythium</i> sp.	Damping-off and Stem rot
<i>Alternaria longipes</i> (Ell. & Eva) Mas	Brown leaf spot
<i>Sclerotium rolfsii</i> Sacc.	Foot rot
<i>Cercospora nicotianae</i> Ell. & Eve.	Frog eye leaf spot
<i>Pseudomonas solanacearum</i> smith	Bacterial wilt
Virus	Mosaic
Virus	Leaf curl
<i>Meloidogyne</i> sp.	Root-knot
<i>Orobanche</i> sp. (<i>Phanerogamic parasite</i>)	

Scientific name.	Common name.
66. HOST : Indian Hemp (<i>Ganja</i>) (<i>Cannabis sativa</i>) <i>Sclerotium rolfsii</i> Sacc.	Stem rot
67. HOST : Pan (<i>Betel vine</i>) (<i>Piper bettle</i>) <i>Phytophthora parasitica</i> Dast. <i>Sclerotium rolfsii</i> Sacc. <i>Colletotrichum pipersis</i> Petch	Leaf rot Root rot Anthracnose
68. HOST : Betelnut (<i>Areca catechu</i> L.) <i>Helminthosporium</i> sp. <i>Epicoccum nigrum</i> <i>Phyllostictina arecae</i> <i>Colletotrichum catechu</i> <i>Chlamydomyces palmarum</i> <i>Phytophthora arecae</i> <i>Gloeosporium</i> sp. (<i>Phomopsis heteronema</i>) <i>Cetatoscystis paradoxa</i> (Dade.) Moz. <i>Thielaviopsis paradoxa</i> (Dade.) Moz. <i>Physiological</i>	Leaf spot Do. Do. Do. Leaf and sheath spot Koleroga } Stem rot and Bleeding } Chlorosis
69. HOST : Tea (<i>Camellia sinensis</i>) <i>Cephaleuros mycoidea</i> Kar. <i>Exobasidium vexans</i> Massoe. <i>Cercospora theae</i> van Breda <i>Pestalotia theae</i> Saw <i>Glomerella cingulata</i> (Ston) <i>Botryodiplodia theobromae</i> Pat.	Red rust Blister blight Leaf spot Grey blight Brown blight Internal root disease
70. HOST : Coffee (<i>Coffea arabica</i>) <i>Mycosphaerella coffeicola</i> Cke. <i>Colletotrichum coffeanum</i> Noack. <i>Cercospora coffeicola</i> B. & Cke.	Leaf spot Brown blight or Anthracnos Brown eye spot
71. HOST : Hollyhock (<i>Althea rosea</i> L.) <i>Cercospora</i> sp. <i>Puccinia malvacorum</i>	Leaf spot Rust
72. HOST : China rose (<i>Hibiscus rosasinensis</i>) <i>Colletotrichum</i> sp. <i>Choanephora infundibulifera</i>	Anthracnose Flower-rot
73. HOST : Chrysanthemum (<i>Chrysanthemum sinense</i>) <i>Septoria chrysanthemella</i>	Leaf rot

Scientific name.	Common name.
74. HOST : Gardenia <i>Cercospora</i> sp.	Leaf spot
75. HOST : Dahlia (<i>Dahlia</i> sp.) <i>Oidium</i> sp. Virus	Powdery mildew Leaf curl
76. HOST : Marigold (<i>Tagetes</i> sp.) <i>Alternaria</i> sp. <i>Alternaria</i> sp.	Leaf spot Petals spot
77. HOST : Zinnia (<i>Zinnia elegans</i>) <i>Cercospora</i> sp. Virus	Leaf spot Leaf curl
78. HOST : Calendula (<i>Calendula officinalis</i> L.) Virus	Mosaic
79. HOST : Lalpata (<i>Amarantus oleraceus</i>) <i>Sclerotium rolfsii</i> Sacc.	Root rot
80. HOST : Lupin (<i>Lupinus</i> sp.) <i>Cercospora</i> sp.	Leaf spot.
81. HOST : Krishnachura (<i>Cesalpinia pulcherrima</i>) <i>Glomeralla cingulata</i>	Leaf spot
82. HOST : Palash (<i>Butea frondosa</i>) <i>Pestalozzia</i> sp. <i>Phyllosticta</i> sp.	Leaf spot
83. HOST : Balsam (<i>Impatiens balsamina</i>) <i>Cercospora impatiens</i>	Leaf spot
84. HOST : Bakphul (<i>Sesbanta grandiflora</i>) <i>Phoma</i> sp.	Leaf spot.
85. HOST : Rose (<i>Rosa</i> sp.) <i>Diplocarpon rosae</i> <i>Cercospora</i> sp. <i>Oidium</i> sp.	Black spot Leaf spot Powdery mildew
86. HOST : Carnation <i>Uromyces caryophyllum</i>	Rust
87. HOST : Button flower (<i>Cephalanthus occidentales</i>) <i>Cercospora</i> sp. Virus	Leaf spot Leaf curl

Scientific name.	Common name.
88. HOST : Agave or Century plant (<i>Agave</i> sp.)	(<i>Agave</i> sp.)
<i>Colletotrichum agave</i>	Anthracnose
<i>Diplodia agave</i>	Leaf spot
89. HOST : Aster (<i>Callistephus hortensis</i>)	
Virus	Mosaic
90. HOST: Citrus (<i>Citrus</i> sp.)	
<i>Colletotrichum gloeosporioides</i> Penz	Die back or wither tip
<i>Sphaceloma fawcetti</i> B&J	Scab
(<i>Elsinoe fawcetti</i> B&J)	
<i>Colletotrichum</i> sp.	Anthracnose
<i>Xanthomonas citri</i> (Hesse) Dow	Canker
Defferent species of <i>Phytophthora</i>	Gummosis
<i>Meliola butleri</i>	Leaf spot
<i>Oidium</i> sp.	Powdery mildew
91. HOST : Banana (<i>Musa</i> sp.)	
<i>Fusarium oxysporum</i>	
<i>F. cubense</i> (Smith) Snyder & Hanson	Panama disease
<i>Mycosphaerella musicola</i>	Leaf spot
<i>Cercospora musae</i> Zimm.	
Bacteria	Heart rot
Virus	Bunchy top
<i>Macrophoma musue</i>	Stem rot
<i>Gloeosporium musarum</i> Che.	Anthracnose
<i>Meloidogyne</i> sp.	Root-knot
<i>Sclerotium rolfsii</i>	Foot-rot
<i>Thielaviopsis paradoxa</i>	
92. HOST: Coconut (<i>Cocos nucifera</i> L)	
<i>Phytophthora palmivora</i> Butt	Bud rot
<i>Pestalotia palmarum</i>	Grey leaf spot
<i>Botryodiplodia theobromae</i> Pat	Leaf & Sheath spot
<i>Colletotrichum</i> sp.	Anthracnose
<i>Cercospora</i> sp.	Leaf spot
<i>Glomerella cingulata</i> (ston) Spa.	Leaf spot
<i>Ceratocystis paradoxa</i> (Dade) Mor.	Stem rot and Bleeding
93. HOST: Date Palm (<i>Phoenixis dactylifera</i>)	
<i>Graphiola phoenicis</i>	Leaf spot
<i>Pestalotia phoenicis</i>	Leaf spot
94. HOST: Palm (<i>Borassus flabillifer</i>)	
<i>Exosporium palmarum</i>	Leaf spot
<i>Pestalotia palmarum</i> Cke.	Leaf spot

Scientific name.	Common name.
95. HOST: Mango (<i>Mangifera indica</i> L.)	
<i>Pestalotia mangiferae</i>	Leaf spot
<i>Alternaria</i> sp.	
<i>Cephaleuros parasitica</i> Kar.	
<i>Dothiorella mangiferae</i>	Stem rot
<i>Colletotrichum gloeosporioides</i> Penz.	Anthraxnose
<i>Gloeosporium</i> sp.	Fruit rot
<i>Macrophomina</i> sp.	Twig blight
<i>Loranthus</i> sp. (A phanerogamic parasite)	Loranthus
96. HOST: Pineapple (<i>Ananas sativas</i> L)	
<i>Phytophthora</i> sp.	Heart rot and stem rot
<i>Thielaviopsis paradoxa</i> (De Sey. V. Hoeh)	Black rot
<i>Colletotrichum gloeosporioides</i> Penz.	Anthraxnose
<i>Phyllosticta</i> sp.	Leaf spot
<i>Curvularia</i> sp.	Leaf spot
97. HOST: Plam (Kul) (<i>Zizyphus jujuba</i>)	
<i>Oidium</i> sp.	Powdery mildew
<i>Cladosporium</i> sp.	Leaf spot
<i>Cercospora</i> sp.	Leaf spot
98. HOST: Jack fruit (<i>Artocarpus heterophyllus</i> Lan.)	
<i>Phyllostictina artocarpina</i>	Leaf spot
<i>Rhizopus artocarpi</i> Racib	Fruit rot
<i>Cladosporium</i> sp.	Leaf spot
<i>Curvularia</i> sp.	Leaf spot
<i>Alternaria</i> sp.	Leaf spot
99. HOST: Black berry (<i>Kalojam</i>) (<i>Eugenia jambolana</i> L.)	
<i>Monochaetia</i> sp.	Leaf spot
<i>Capnodiastrum</i> sp.	Leaf spot
100. HOST: Carambola (Kamranga) (<i>Averrhoa carambola</i> L.)	
<i>Phyllosticta</i> sp.	Leaf spot
101. HOST: Water melon (<i>Citrullus vulgaris</i> L.)	
<i>Fusarium</i> sp.	Wilt
102. HOST: Papaya (<i>Carica papaya</i>)	
<i>Phyllosticta</i> sp.	Leaf spot
<i>Colletotrichum</i> sp.	Anthraxnose
<i>Gloeosporium</i> sp.	Fruit rot
<i>Phyllosticta caricacola</i>	Leaf spot

Scientific name.	Common name.
<i>Macrophoma</i> sp.	Fruit rot
<i>Aspergillus</i> sp.	Fruit rot
<i>Pleosphaerulina</i> sp.	Fruit rot
<i>Pythium aphanidermatum</i> (Eds.) Eitz.	Stem rot or Foot rot
Virus	Mosaic
Virus	Leaf curl
<i>Pythium</i> sp., <i>Fusarium</i> sp.	
<i>Phytophthora</i> sp., <i>Aphanomyces</i> sp.	Damping off.
<i>Rhizoctonia</i> sp.	
103. HOST: Guava (<i>Psidium guajava</i>)	
<i>Pestalotia</i> sp. <i>Cephaleuros Parasica</i> Kar.	Leaf spot
<i>Metasphaeria</i> sp. <i>Physalospora</i> sp.	
<i>Botryodiplodia theobromae</i> Pat	Die-back
104. HOST: Sofeda (<i>Achras sapota</i> L.)	
<i>Cephaleuros parasitica</i> Kar	Leaf spot.
105. HOST Custard Apple (<i>Annona squamosa</i> L.)	
<i>Gloeosporium</i> sp.	Fruit rot
106. HOST: Avocado (<i>Persea americana</i>)	
<i>Phyllosticta</i> sp.	Leaf spot
107. HOST: Hog Plum (Amra) (<i>Spondias mangifera</i>)	
<i>Colletotrichum</i> sp.	Stem rot
108. HOST: Bel (<i>Aegle marmelos</i>)	
<i>Asterina delicatula</i> Syd. & Bal.	Leaf spot
109. HOST: Teak (<i>Tectona grandis</i>)	
<i>Uredotectonae</i> sp.	Rust
<i>Phyllosticta tectonae</i>	Leaf spot
110. HOST: Bamboo (<i>Bambusa</i> sp.)	
<i>Isaria</i> sp.	Leaf spot
111. HOST: Rubber (<i>Hevea brasiliensis</i>)	
<i>Phytophthora meadii</i> Mc. Rac.	Black thread and leaf fall
<i>Corticium salmonicolor</i> B & Br.	Pink disease
<i>Hymenochaete noxia</i> Berk.	Brown rot
<i>Glomerella cingulata</i> (Ston) Spa.	Anthracnose
<i>Helminthosporium heaveae</i> Pet	Leaf spot
112. HOST: Banyan (<i>Ficus bengalensis</i>)	
<i>Cephaleuros mycoidea</i> Kar.	Leaf spot

Scientific name	Common name
113. HOST: Shal (<i>Shorea robusta</i>) <i>Cephaleuros mycoidea</i> Kar.	Leaf spot
114. HOST: Shunaru <i>Stagonospora</i> sp.	Leaf spot

Weeds:

Sl. No.	Botanical name, Bengali name (B) & name of Family (F), English name(E)	Growth season K-Kharif (summer) R-Rabi (winter)	Habitat/Crop association
1	2	3	4
1	<i>Aeschynomene aspera</i> Linn. B. Bhatshola, F. Leguminosae E. Indian cork plant	K	Deep water Aman, Capsularis Jute.
2	<i>Alternanthera sessilis</i> R. Br. B. Chanchi, F. Amaranthaceae E. Glove amaranth	RK	T. Aman, Aus, Jute, Pulses, Sugarcane, Non-crop land, Road side.
3	<i>Amaranthus spinosus</i> Linn. B. Katanatey/Katakhdura, F. Amaranthaceae. E. Prickly amaranth	RK	T. Aman, Potato Wheat, Pulses, Tobacco, Vegetables, Oil Seeds, Non-crop land.
4	A. <i>Viridis</i> L. B. Shakanatey, F. Amaranthaceae E. Mat Amaranth	RK	Ditto.
5	<i>Argemone mexicana</i> L. B. Shial Kanda, F. Papaveraceae E. Prickly poppy	RK	Road side, canal side, non-crop land.
6	<i>Azolla pinnata</i> R. Br. B. Kutipana, F. Salviniaceae E. Salvinia.	RK	T. Aman, Boro, Deep water rice.
7	<i>Bonnaya brachiata</i> Link & Otto B. Bhuineem, F. Schrophulariaceae	R	Sugarcane, maize, wheat.
8	<i>Cassia tora</i> L. B. Araich, F. Leguminosae E. Foetid cassia	R	Road side, Lawn, non-crop land.

1	2	3	4
9	<i>Chenopodium album</i> L. B. Bathua, F. Chenopodiaceae E. Goosefoot	R	Potato, sweet potato, Wheat pulses, oil seeds, garden peas, tobacco, mustard.
10	<i>Chrysopogon aciculatus</i> Retz. B. Premakata/Upotlangra, F. Gramineae E. Love grass	RK	Road side, non-crop land
11	<i>Commelina bengalensis</i> Linn. B. Kanajbashi, F. Commelinaceae, E. Day flower.	K	T. Aman, Boro, Irrigation channel and its dikes.
12	<i>Colocasia esculenta</i> Schott. B. Kachu, F. Araceae E. Aram.	RK	Road side, canal side, home side, dikes and non-crop land
13	<i>Commelina diffusa</i> Burn I. B. Manaina, F. Commelinaceae	RK	Aus, T. Aman, Jute, Sugarcane
14	<i>Croton sparsiflorus</i> Morung: B. Banmireha, F. Euphorbiaceae.	K	Jute, non-crop land.
15	<i>Cuscuta reflexa</i> Roxb. B. Swarnglata, F. Convolvulaceae. E. Dodder.	RK	Fence, hedge, bushes, etc.
16	<i>Cyanotis acillaris</i> R. & S. B. Kanainala, F. Commelinaceae.	RK	T. Aman, Aus, Jute, Pulses & winter vegetables, sugarcane.
17	<i>Cynodon dactylon</i> Pers. B. Durba, F. Gramineae. E. Doob grass, Bermudagrass.	RK	Aus, T. Aman, Jute, Pulses, Sugarcane, Oils eeds, Vegetables, Wheat, non-croplands, canal side.
18	<i>Cyperus iria</i> L. B. Barachucha, F. Cyperaceae, E. Sedge.	RK	T. Aman, Aus, Jute, Sugarcane.
19	<i>Cyperus michelianus</i> L. B. Nakphulee, F. Cyperaceae.	K	Ditto.
20	<i>C. rotundus</i> L. B. Mutha/Badhail, F. Cyperaceae, E. Nut grass.	RK	Aus, Jute, Potato, Pulses, chilli, Wheat, Sugarcane, Oilseeds Vegetable.

1	2	3	4
21	<i>Cyperus strigosus</i> L. B. Shaktaghagra, F. Cyperaceae. E. Mat grass.	RK	Aus, Jute.
22	<i>Dactyloctenium aegyptium</i> L. B. Kakpaya Ghash, F. Gramineae. E. Coast button grass.	K	Aus, T. Aman.
23	<i>Datura stramonium</i> L. B. Dhatura, F. Solanaceae. E. Thorn apple.	K	Road side, canal side.
24	<i>Desmodium trifolium</i> Dc. B. Iripatri Shak. F. Leguminosae. E. Telegraph plant.	RK	Road side, canal side.
25	<i>Digitaria ischaemum</i> Schreb. B. Khudeyangulee, F. Gramineae. E. Smooth crabgrass.	RK	T. Aman, Road side.
26	<i>D. sanguinalis</i> (L.) Scop. B. Angulee Ghash. F. Gramineae. E. Crabgrass.	K	T. Aman, Road side.
27	<i>Dryopteris filixmas</i> (L.) S. Schot B. Dheki shak. F. Polypodiaceae. E. Terrestrial fern.	RK	Road side, Homeside, Non-crop land, jungle.
28	<i>Echinochloa colonum</i> Link. B. Khudey Shak. F. Gramineae. E. Shama millet.	K	Aus, T. Aman, Jute.
29	<i>E. crusgalli</i> P. Beauv. B. Shama Ghash, F. Gramineae. E. Barnyard grass.	K	Aus, Jute, Boro, Wheat.
30	<i>Eclipta prostrata</i> Herusk B. Keshuti, F. Compositae. E. Eclipta plant.	RK	Potato, Wheat, Jute, T. Aman, Oil crops, non-crop land.

1	2	3	4
31	<i>Eichhornia crassipes</i> Solms. B. Kachuripana, F. Pontederiaceae. E. Water hyacinth.	RK	T. Aman, Deep water rice, Boro River, Pond, Canal, Marshy land.
32	<i>Eleocharis plantaginea</i> R. Bp. B. Chochalo Chechra. F. Cyperaceae.	K	Ditto.
33	<i>Eleusine indica</i> L. Gaertn. B. Chapra, F. Gramineae.	RH	Aus, Jute, Pulses, Oil crop, Vegetables, Pepper, Tobacco, Non-crop land canal.
34	<i>Enhydra fluctuans</i> Lour B. Titadoga, F. Compositae, E. Water cress.	RK	T. Aman, Boro, River, Canal, Pond.
35	<i>Eragrostis aspera</i> Nees. B. Chhopa dudhanal. F. Gramineae. E. Rough love grass.	K	Aus, Jute, Sugarcane.
36	<i>E. ciliaris</i> Link. B. Dadhnal, F. Gramineae. E. Stinkgrass.	K	Sugarcane, Jute, Aus, Maize.
37	<i>Euphorbia hirta</i> L. B. Bara Dhudia. F. Euphorbiaceae.	RK	Aus, Jute, Wheat, Sugarcane, T. Aman, Potato, Oil crops Non-crop land.
38	<i>E. microphylla</i> Heyne. B. Chota Dudhia. F. Euphorbiaceae.	RK	Ditto.
39	<i>Fimbristylis miliacea</i> Vahl. B. Joina, F. Cyperaceae.	K	T. Aman, Aus, Jute, Sugarcane.
40	<i>Gnaphalium luteo labum</i> L. B. Shetlomi, F. Compositae.	R	Pulses, Wheat, Sugarcane, Oil-crop.
41	<i>Heliotropium indicum</i> L. B. Hatisur, F. Boraginaceae. E. Helistrop.	K	Road Side.
42	<i>Hygroryza aristata</i> Retz. B. Jangli Dhal, F. Gramineae. E. Floating grass.	R	Deep water aman.
43	<i>Hydrocotyle asiatica</i> Linn. B. Thankuni, F. Umbelliferae, E. Indian penny wort.	RK	T. Aman, Road side, Non-crop land dikes.

1	2	3	4
44	<i>Hypochoeris radicata</i> L. B. Biralkarnee, F. Compositae.	K	T. Aman, Road side, Non-Crop land dikes.
45	<i>Imperata cylindrica</i> P. Beauv. B. Ulu, F. Gramineae E. Cogongrass.	RK	Road side, forests, Non-crop land, Canal side, dike.
46	<i>Ipomoea aquatica</i> Forsk. B. Kalmisak, F. Convolvulaceae E. Water bind weed.	RK	Deep water rice, T. Aman, Boro, River, pond, marshy land.
47	<i>Jussieua decurrens</i> (Walt, DC.) B. Panilong, F. Onagraceae.	K	T. Aman, Irrigation canal and other wet places.
48	<i>Jussieua repens</i> Linn. B. Helnencha, F. Onagraceae.	K	Deep water rice, T. Amn, Boro Pond, river Beel (Marshy land).
49	<i>Xanthium italicum</i> B. Ghagra, F. Compositae.	K	Road side.
50	<i>Lagarosiphon roxburghii</i> Benth. B. Basna Jhanji, F. Hydrocharitaceae.	K	T. Aman.
51	<i>Lemna trisul-ca</i> Linn. B. Tilakapana, F. Lemnaceae, E. Duckweed.	K	Deep water Aman, T. Aman.
52	<i>Leersia hexandra</i> Sw. B. Araila, F. Gramineae, E. Swarming rice grass.	RK	Deep water Aman, T. Aman.
53	<i>Leonurus sibiricus</i> Linn. B. Raktadrone, F. Labiatae, E. Mother wont.	RK	Potato, Wheat, Sugarcane, Pulses, Jute, Aus, T. Aman, Non-crop land.
54	<i>Leucas aspera</i> Spreng B. Shetadrone, F. Labiatae, E. Leucas.	K	Sugarcane, pulses, Aus, Jute.
55	<i>Marsilea quadrifolia</i> L. B. Shushnishak, F. Marsileaceae.	R	T. Aman, pulses, Dikes.
56	<i>Mimosa pudica</i> L. B. Lajjabati, F. Leguminosae, E. Sensitive Plant.	RK	Road side, Non-crop land, Sugarcane, maize.
57	<i>Monochoria hastata</i> solm. B. Panceo Kachu, F. Pontederiaceae.	K	T. Aman, Boro, Irrigation chanel, Marshy land, etc.

1	2	3	4
58	<i>Murdannia nudiflora</i> B. Kandulee, F. Commelinaceae.	K	Aus, Jute, T. Aman.
59	<i>Oldenlandia corymbosa</i> Linn. B. Khetpara, F. Rubiaceae.	RK	T. Aman, Pulses, Wheat, Potato, Sugarcane.
60	<i>Oryza rufipogon</i> Griff. B. Jharadhan, F. Gramineae, E. Wild red rice.	K	Deep water Aman.
61	<i>Ottelia alismoides</i> (Linn. Pers) B. Panikala, F. Hydrocharitaceae.	K	T. Aman, Deep water Aman.
62	<i>Oxalis europaea</i> jord. B. Amrusak, F. Oxalidaceae. E. Wood sorrel.	R	T. Aman, Wheat, pulses.
63	<i>Panicum dichotomiflorum</i> Michx. B. Mayurlaia Ghas, F. Gramineae, E. Smooth witch grass.	K	Aus, T. Aman, Jute.
64	<i>Parapholis incurva</i> (Linn.) B. Chela Ghash, F. Gramineae, E. Para grass.	K	Aus.
65	<i>Paspalum commersonii</i> Lamk. B. Gaicha, F. Gramineae, E. Ditch millet, Indian pas- palam.	K	Aus.
66	<i>Physalis heterophylla</i> Nees. B. Foske begoon, F. Solanaceae.	K	Wheat, sugarcane, potato, toba- cco. and road side.
67	<i>Polygonum hydropiper</i> L. B. Panee Marich, F. Polygonaceae.	K	T. Aman, Marshy land side.
68	<i>Pistia stratiotes</i> Linn. B. Tokapana, F. Araceae.	RK	T. Aman, Boro, Deep water Aman river, pond, marshy land.
69	<i>Polygonum persicaria</i> L. B. Panee marich, F. Polygonaceae, E. Oriental pepper.	K	T. Aman, pulses, road side, canal side.
70	<i>Portulaca oleracea</i> L. B. Nunia, F. Protulaceae, E. Purslane.	RK	Potato, Aus, Pulses, Wheat, Tobacco, Sugarcane, Vegetable.

1	2	3	4
71	<i>Rumex obtusifolius</i> L. B. Tita marich, F. Polygonaceae.	K	Non-crop land, sugarcane.
72	<i>Saccharum spontaneum</i> (Linn.) B. Kash, F. Gramineae.	RK	Road side, canal side, sugarcane, non-crop land, dike, etc.
73	<i>Sagittaria guayanensis</i> H.B. & K. B. Chandamala, F. Alismaceae.	KK	T. Aman.
74	<i>Salvinia natans</i> Hoffm B. Ulkipana, F. Salviniaceae.	R	T. Aman.
75	<i>Scirpus actus</i> Muhl. B. Shakta chechra, F. Cyperaceae. E. Sedge.	RK	Boro, T. Aman, Marshy land.
76	<i>S. mucronatus</i> L. B. Chechra, F. Cyperaceae.	RK	T. Aman, Boro, marshy land.
77	<i>Setaria glauca</i> (L) B Halud shial laja, F Gramineae, E Pale pegion grass.	K	Ditto
78	<i>S. viridis</i> (L.) B Shabuj shial laj, F Gramineae, E Green foxtail.	K	Ditto
79	<i>Sida vernicae folia</i> Lank B Kanphul, F. Malvaceae.	K	Jute, Aus, Cowpea.
80	<i>Solanum carolinense</i> L. B Kata begoon, F Solanaceae, E Prickly brinjal.	K	Pulses, Aus, Wheat, Potato, Sugarcane, Tobacco, road side.
81	<i>S. nigrum</i> L. B. Gurki, F. Solanaceae, E. Black night shade.	RK	Ditto.
82	<i>S. rostratum</i> Dunal B. Chochalo begoon, F. Solanaceae.	K	Ditto.
83	<i>S. torvum</i> Swartz B. Tita begoon, F. Solanaceae, E. Bitter brinjal.	RK	Ditto.

1	2	3	4
84	<i>Sporobolus diander</i> (Retz) P. Beauv. B. Benajoni, F. Gramineae, E. Smutgrass.	RK	Pulses, Aus, Wheat, Potato, Sugarcane, Tobacco, road side.
85	<i>S. indicus</i> Auctt. B. Chenagachhopa, F. Gramineae, E. Smutgrass.	RK	Non-crop land.
86	<i>Utricularia flexuosa</i> Vahl. B. Jhanji, F. Lentibulariaceae, E. Bladder wort.	R	T. Aman, Deep water Aman.
87	<i>Vicia hirsuta</i> (L.) S.F. Gray. B. Masurchana, F. Leguminosae.	R	Pulses, Sugarcane, Wheat, Potato.
88	<i>V. sativa</i> L. B. Banmasur, F. Leguminosae, E. Common vetch.	R	Ditto.

Veterinary Pests

Scientific name.	Common name.
<i>Boophilus microplus</i>	Ticks
<i>Haemaphysalis bispinosa</i>	Do.
<i>Rhipicephalus sanguineus</i>	Do.
<i>Hyalomma</i> spp.	Do.
<i>Domodex bovis</i>	Mites
<i>Sarcoptes scabiei</i>	Do.
<i>Dermanyssus gallinae</i>	Do.
<i>Pnemedocoptes mutans</i>	Do.
<i>Pnemedocoptes gallinae</i>	Do.
<i>Musca</i> spp.	Fly
<i>Hippo bosca</i>	Do.
<i>Tabanus</i> spp.	Do.
<i>Crysops</i> .	Do.
<i>Stomexys</i>	Do.
<i>Haematopeta</i>	Do.
<i>Siphona</i>	Do.
<i>Cestrous ovis</i>	Do.
<i>Haematopinus eurysternus</i>	Lice
<i>Linegnathus vituli</i>	Do.
<i>Solenopotes capillatus</i>	Do.

Scientific name.

Common name.

<i>Haematopinus tuberculatus</i>	Lice
<i>Damalinis ovis</i>	Do.
<i>Damalinis caprae</i>	Do.
<i>Linognathus stenopsis</i>	Do.
<i>Heterodexsus elephantis</i>	Do.
<i>Haematomyzus elephantis</i>	Do.
<i>Lipeurus caponis</i>	Do.
<i>Lipeurus lawrensis tropicalis</i>	Do.
<i>Goniodes dissimilis</i>	Do.
<i>Gonicetis gallinae</i>	Do.
<i>Menopon gallinae</i>	Do.
<i>Menaeanthus pellidulus</i>	Do.
<i>Menacanthus stramineus</i>	Do.
<i>Anaticela eerassicornis</i>	Do.
<i>Anatoecus icterodes</i>	Do.
<i>Helemenopon</i>	Do.
<i>Columbicola ecolumbae</i>	Do.
<i>Stenocephalides felis</i>	Flea
<i>Xenopsylla cheopis</i>	Do.
<i>Babesia bigemina</i>	Blood protozoan parasite.
<i>Thileria mutans</i>	Do.
<i>Babesia felis</i>	Do.
<i>Babesia gibsoni</i>	Do.
<i>Thileria ovis</i>	Do.
<i>Dirofilaria immitis</i>	Do.
<i>Dipetalonema evansi</i>	Do.
<i>Haemoprotus sp.</i>	Do.

Public Health Pests

Scientific name.

Common name.

<i>Anopheles minimus</i>	Mosquito
<i>An. sundaicus</i>	Do.
<i>An. dirus</i>	Do.
<i>An. philippinensis</i>	Do.
<i>Aedes aegypti</i>	Do.
<i>Ae. albopictus</i>	Do.
<i>Mansonia uniformis</i>	Do.
<i>Mn. annulifera</i>	Do.
<i>Mn. indiana</i>	Do.
<i>Culex quinquefasciatus (fatigans)</i>	Do.
<i>Cx. vishnui</i>	Do.
<i>Cx. tritaeniorhynchus</i>	Do.
<i>Cx. galidus</i>	Do.
<i>Cx. fuscocephala</i>	Do.
<i>Cx. bitaeniorhynchus</i>	Do.

Scientific name.	Common name.
<i>Phlebotomus argentipes</i>	Sand flies
<i>Xenopsylla cheopis</i>	Rat flea
<i>Ctenocephalides canis</i>	Dog flea
<i>C. felis</i>	Do.
<i>Musca domestica</i> and other	House flies
<i>Musca</i> spp.	Blow flies
	Flesh flies
<i>Cyclop</i> spp.	Water flea
<i>Diaptomus</i> spp.	Flea
Harvest mites of chiggers,	Mite
<i>Trombicula</i> spp.	
Ticks	
Body lice	Relapsing fever
(Pathogen : <i>Spirochaetes</i>)	

SCHEDULE III

(see rule 60)

Poisons.

Neoron 500 EC	Kelthane 42 MF
Thiovit 80 WP	Kumulas-s
Omite 57 EC	Tedion V 18
Vitavax-200	Agallol-3
Aretan-6	Santar A
Copper Sandoz 50 WP	Copper Oxide
Macuprex	Cupravit 50 WP
Lime Sulphur	Dithane M-45
Celphos	Calixin
Phostoxin	Detia Gas-Ex-T
Methyl Bromide	Quickphos
2, 4-D Sodium Salt	2, 4-D Amine
Basfapon	U46 D Fluid
Dalapon-Na	Dalapon Na-85
Gramoxone	Karmex
Stam F-34	Surcopur 360 EC
Aerovin 85 WP	Nexion 25
Sevin 10 Dust	Carbin 85 SP
Furadan 3G	Sevin 85 SP
Padan 50 SP	Curaterr 3G
Basudin 10G	Padan 10 G
Diazinon 14G	Chlordane 40 WP
Diazinon 60 E	Ethion 4 EC
Aerovap 100 EC	Diazinon 50 EC
Dichlorvos 100 EC	Diazinon 60 EC
Phosvit 100 EC	Dichlorvos 100
Bidrin 24 WSC	Nogos 100
Carbicron 50 SCW	Vapona 100
Dioldrin 20 EC	Bidrin 85 WSC
Dioldrin 50 WP	Aerodriel 20EC
Perfekthion 40EC	Dioldrin 40 WP
Roxion 40 EC	Daphene 40 EC
Agrothion 50 EC	Rogor L40
Fenitrothion 98 ULVC	Thiodan 35 EC
Sumithion 98 ULVC	Folithion 98 ULVC
Sumicidin 20 EC	Sumithion 50 EC
Heptachlor 40 WP	Lebaycid 50 EC
Diamal 57 EC	Anthio 25 EC
Malathion 98 ULVC	Aeromal 57 EC
Malathion 57 EC	Fyfanon 57 EC
Nuvacron 40 SCW	Zithiol 57 EC
Elsan 92 ULV	Azodrin 40 WSC.
Zolone 35 EC	Metasystox-R 25 EC
Ekalux 25 EC	Elsan 50 EC

Dipterex 85 SP

Cymag

Zinc phosphide

Ripcord 10 EC

Cymbush 10 EC

Damfin 2 P

Marshal 20 EC

Novathion 96 Technical

Cidial 50 L

Naftil 85 SP

Dimecron 100

Ekalux 5 G

Racumin

Mipcin 75 WP

Gardona 75 WP

Actellic 50 EC

Damfin 950 EC

Hinosan 50% EC

Denkavepon 100 EC

U 46 D Powder

SCHEDULE IV

(see rule 61)

Symptoms of Poisoning first Aid and Antidotes

Chlorinated hydrocarbon insecticide :

Symptoms—These insecticides affect the central nervous system leading to convulsions, exhaustion, numbness of extremities, apprehensions and excitement are other symptoms of poisoning from these insecticides.

First Aid—As absorption through skin is most likely route of poisoning it is essential to wash off the contaminated from the body with soap and water and remove the soiled clothing. In case of ingestion evacuation of stomach is necessary.

Antidotes—Usual antidotes are paraldehyde or a water soluble barbiturate given intramuscularly or thiopentone diazepam administered intravenously.

Organophosphates and carbamate insecticides:

Symptoms—These compounds depress cholinestrase enzyme activity in the body tissue, blood and brain. Usual symptoms of intoxication are muscular trembling, weakness, clodsweat, nausea, vomiting, abdominal discomfort, irritability or restlessness coupled with constricted pupil/pupils and a feeling of tightness in chest.

First Aid—Necessary steps may be taken immediately to decontaminate the patient. If exposure is mild the effect will be transient. In severe cases death may occur. Keep the patient at rest and maintain respiration by artificial means, if necessary. Immediate steps may also be taken to hospitalise the patient.

Antidotes : If symptoms are obvious first dose of two tablets of atropine sulphate (of 0.6 mg. strength each) may be administered by giving one tablet each at an interval of 20—30 minutes.

FUMIGANTS :

Cyanides : *Symptoms*—Slight poisoning causes metallic taste in the mouth, irritation of the nose and throat, dizziness, frontal headache, constriction of chest, weakness of limbs and a sensation of lack of air. These symptoms appear within a few seconds or minutes of exposure and if these warnings are ignored and if immediate treatment is not made available death may follow quickly.

First Aid : Remove the patient from the contaminated area, keep at rest and remove contaminated clothing and wash skin thoroughly start artificial respiration.

- Antidote** : Cobalt EDTA or sodium nitrate and sodium thio-sulphate are standard antidotes. Treatment should be given by a medical practitioner.
- Methyl Bromide** : Symptoms—Burning of skin, oedema of lungs and central nervous system disorders are obvious symptoms. Warning symptoms of exposure are irritation of eyes and throat, headache and abdominal discomfort.
- First Aid** : Contaminated clothing, shoes and skin must be washed off promptly. Call Medical practitioner for assistance or hospitalise the patient at once.
- Antidotes** : Where exposure is mild recovery will take place without special treatment. In other cases, BAL is recommended to be tried as antidote. Treatment should therefore be symptomatic.
- Ethylene dichloride** : Symptom—Effects are narcotic and cause renal and liver damage and the irritation of mucous membranes.
- Antidote** : No specific antidotes are available. Therefore treatment should be symptomatic.
- Ethylene dibromide** : Symptoms—Blistering occurs on contact with skin causes irritation of mucus membrane.
- First Aid** : Splashes should be washed from the skin and contaminated clothing removed.
- Antidotes** : Symptomatic treatment may be provided because of absence of any specific antidotes.
- Phosphene** : Symptoms—Effects gastrotestinal tract and central nervous system with nausea, abdominal pain, vomiting and diarrhoea.
- Antidotes** : No specific antidotes are available which calls for symptomatic treatment.
- Herbicides Phenoxy acetates** : Symptoms—Hypersalivation, cramps, vomiting and diarrhoea, convulsions and mental confusion are obvious symptoms.
- First Aid** : Contaminated clothing should be removed and skin washed thoroughly with soap and water.
- Treatment** : No specific antidotes are available, therefore, treatment must be symptomatic.

- Organo-Mercurial fungicides** : Symptoms—Among organic mercurials alkyl compounds (with alcohol radical) are more toxic than aryl compounds (with phenol radical). Acute effect of both compound cause skin burn with redness and blisters and irritation of mucous membranes. Systemic absorption causes renal damage and digestive system symptoms. Chronic toxicity from alkyl-compounds causes widespread damage of central nated clothings.
- First Aid** : Wash skin thoroughly with soap and water and remove contaminated clothings.
- Antidote** : In acute systemic poisoning stomach may be washed out. Therapy may be tried with dimerreapral (BAL) intramuscularly, or with oral, doze of 250 mg. of N-acetyl penicillamine, four times daily. Drugs may be administered by a medical practitioner.
- Inorganic mercurial fungicides.** : Symptoms—Mercuric chloride causes coagulation, irritation and superficial currosion of the tissue resulting in discoloration of mucous membrances. Internal abdominal pains with vomitting follows. Circulatory failure may also occur. Mercurous is much less toxic.
- First Aid** : Stomach may be washed with 5% solution of formaldehyde sulphoxylate. Remove clothing and wash body and hair thoroughly.
- Antidotes** : Treatment with dimerapral (BAL) or preferably N-acetyl penicillamine proves effective. Treatment should be provided by a medical practitioner.

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. 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 in 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, visible and infrared, etc. :
 - (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 :
 - (d) Odour :
 - (e) Acidity/Alkalinity or PH 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. Formulated Product :
- (l) Identity/Appearance (colour) :

- (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, e.g., technical grade, adjuvants and inert ingredient) :
- (6) Water content/Moisture (above relevant). :
- (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) Flamability :
 - (a) Liquid : Flash point :
 - (b) Solids : A statement must be made as to whether the product is flammable. :
- (12) Acidity :
- (13) Alkalinity :
- (14) PH Value :
- (15) Other properties may in certain cases need evaluation. :
- (16) Carrier materials :
- (17) Wetability (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 concentration) :
- (22) Dry sieve test (for granules, dust) :
- (23) Emulsion stability (for emulsifiable concentrates) :
- (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, *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. Toxicology data :
- (a) Acute Oral toxicity and Dermal toxicity :
- (b) Acute Percutaneous 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 metabolites, break-
down products or impurities. :
 - (j) Metabolic-studies :
 - (k) Long-term toxicity, including car-
cinogenicity. :
 - (l) Neurotoxicity :
 - (m) Reproduction studies :
 - (n) Embryotoxicity, including teratoge-
nicity. :
 - (o) Nutagenicity :
 - (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) :
15. Residue studies :
- (a) Primary physical, chemical and
biological data. :
 - (b) Identification of residue-design of
analytical method. :

- (c) Reliable residue data from super- :
vised trials.
- (d) Estimation of maximum residue :
level at harvest.
- (e) Data on further disappearance on :
storage, transport, etc.
- (f) Estimation of residue level in com- :
modity 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 in- :
take.
- (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 applica- :
tion etc.).
- (f) Climatic and geographical locality :
- (g) Volality of product :
- (h) Water solubility :
- (i) Octonol 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 organisms :
- (v) Disposal of used, condemned and :
surplus pesticides and pesticides
containers.
- (w) Proposal for labelling and directions
for use.

17. Packaging :

- (a) State weight (or for liquids, volumes) and the sizes of package in which the products is 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, Deptt. of Agril. Extension and for which the label is approved.)
- (b) Classification during transport.

18. Method of analyses:

- (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-product.

19. Labelled samples for analyses:

- (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 পুষ্টি—অনিষ্টকারী পোক-নাকড় রোগ-বালাই ব্যবস্থাপনা ও বিবিধ ঋতে আর"।

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.

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

Direction 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/ 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 or Taka Two thousand evidencing payment shall be deposited under the receipt head: "৪৫—কৃষি পুষ্টি—অনিষ্টকারী পোক-নাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ ঋতে আর"।
5. Submission of application in a sealed cover 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:

The198

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:

Signature of the Applicant.

FORM 4

[see rule 6(2)]

Certificate of Renewal of Registration of Pesticides

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 ;

The198

*Signature of the Registration
Authority.
(Seal)*

FORM 5

[see rule 12(1)]

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 or 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 প্রাণি—অনিষ্টকারী পোক-মাকড়, বোম্ব-
ঝালাই ব্যবস্থাপনা ও বিবিধ ঝাঙে 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)]

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 atthe 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 for 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 “সে-কৃষি প্রাপ্তি—অনিষ্টকারী পোক-নাশক রোগ-বালাই ব্যবস্থাপনা ও বিবিধ খাতে কার”। In treasury challan No.....dated.....

Date :

Signature.

NOTES :

- (1) In the case of application for manufacturer'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 of Pesticides.

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 শ্রান্তি—অনিষ্টকারী পোক-মাকড়, রোগ-বালাই ব্যবস্থাপনা ও বিবিধ বাস্তব
আম”। in treasury 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 thereof is false.
 - (b) I/We carefully have read the terms and conditions of the licence and
agree to abide by them.

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).

Applicant 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 "সে-কৃষি প্রাধিকার-অনিষ্টকারী পোকা-মাকড়, রোগ-বাচাই ব্যবস্থাপনা ও বিবিধ ঝাউ কার" in treasury 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.

I/We.....heroby apply
for a licence or renewal of licence for re-packing pesticides situated at.....
.....

2. Name(s) of the brand of pesticide(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 পুষ্টি—সিনিষ্টিকারী পোকা-নাড়ু, রোগ-বাহাই
ব্যবস্থাপনা ও বিবিধ খাতে আয়" in treasury 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 of 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.....has been credited to the Government under the head of account “৪৫-কৃষি প্রাপ্তি—অসিষ্টকারী পোকা-মাকড়, রোগ-বালাই বাহ্যাপনা বিবিধ খাতে জাম” in reasury challan No, 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 11

[see rule 12 (1)]

Application for grant or renewal of licence to make advertisement of pesticide (s).

To

The Licensing Authority.

I/We hereby apply for a licence or renewal of a licence for advertisement of the following pesticides by publication in the news paper, distribution of circular or by other means:—

Common name.	Brand name/ Trade name.	Name of the manu- facturer/repacker.	Registration No.
--------------	----------------------------	---	---------------------

2. Full name and address of the applicant (in block letters).

Date

Signature of the applicant(s).

NOTE:

1. Previous licence to be enclosed in the case of renewal of licence.
2. Licence fee of Tk.....to be credited to the Government under the Head of Account "৪৫-কৃষি-প্রাতি-অনিষ্টকারী পোকা-মাকড়, রোগ-বানাই ব্যবস্থাপনা বিবিধ খাতে আর"।

RORM 12

[See rule 12(2)]

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 licensee 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 licensee 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 17

[see rule 12(2)]

Licence for Pest Control Operation on Commercial Basis

M/s.....of.....situated at..... is hereby granted licence to undertake pest control operation on agricultural crops, water-hyacinth, obnoxious weeds and infested places such as hotel(s), warehouse, storage(s), godowns, buildings on commercial basis subject to the conditions specified below and to the provision of the Pesticide Ordinance, 1971 and the rules made thereunder under the direction and supervision of the following expert staff:

(a)

(b)

2. Licence shall be in force for a period of two years from the date of issue.
3. Pesticide(s) to be used.

Licence No.....

Date.....

Licensing Authority

(Office 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 for the time being in force.
3. Renewal.

FORM 18
[see rule 12(2)]

Licence for advertisement of pesticides.

M/s..... is hereby granted licence for advertisement of the following pesticides by publications, distributions of circular or by other means under the Pesticide Ordinance, 1971 and the rules made thereunder:

Name of pesticide(s)		Name of the manufacturer/ repacker.	Registration Number(s).
Common name.	Brand name.		
1	2	3	4

- The licence authorises the licensee to make advertisement of pesticide(s) as per approved contents of advertisement.
- The licence shall be in force for a period of two years from the date of issue.

Licence No.

Date.

Licensing Authority
(Seal).

Conditions

- The licence shall be displayed in a prominent place in the part of the premises open to the public.
- The licensee shall comply with the provision of the Pesticide Ordinance, 1971 and the rules made thereunder for the time being in force.
- 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.....
of 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.

Details 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 atsamples 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 container with the name of Pesticide which it purports to contain.

Signature of Inspector
(Official seal).

NOTE : A copy of the memorandum and specimen impression of the seal used in the packet shall be sent separately to the Government Analyst or by registered post. A copy shall be retained by the Inspector.

By order of the President
SAIYID AHMAD MAHMOOD
Secretary.