

IMPLEMENTING GUIDELINES ON SEED TREATMENT OF F1 HYBRID RICE SEEDS

Read online (full-text search, related cases, audio case brief): <https://batas.org/library/9cf20b9ec77c/>

In order to ensure and provide a good quality seeds of F1 Hybrid Rice, the following shall be the guidelines of the Department of Agriculture on seed treatment.

1. DEFINITION AND PURPOSE

1.1 Seed treatment referred to in this guidelines is the application of pesticides to seeds to protect the seed against insect pest infestation.

1.2 Seed treatment of hybrid rice seeds is essential to help ensure that the seed are protected from possible insect pest (particularly weevil) infestation from the time they are packed at the seed grower's processing centers up to the time they are used for planting by the farmers.

2. GENERAL REQUIREMENTS

2.1 The aim of seed treatment is more of prevention rather than cure. Hence, seed treatment must be done as early as possible once the seeds are already dried, properly cleaned, and ready for storage. Seed treatment should not be intended to control infestation already present in the seeds. (Such infestation should be controlled by fumigation as a separate operation).

2.2 The amount of pesticide solution to be applied per ton of seeds should be limited to 1 to 2 liters so as not to wet the seeds.

2.3 The moisture content of the seeds prior to the seed treatment process should not be more than 13%, the lower the better. This is to give allowance for the rise in MC after the seed treatment process.

2.4 Machines/equipment to be used in the seed treatment process must be able to uniformly apply the pesticide solution (mixture of pesticide and water) to the seeds. They must have provisions for adjustments to ensure that the targeted rate of application is attained.

3. FORMULATION AND APPLICATION OF PESTICIDES

3.1 The following active ingredients and their application rates shall be used in the treatment of hybrid rice seeds:

- a. Pirimiphosmethyl: 7 g of active ingredient per ton seeds
- b. Deltamethrin: 0.75 g active ingredient per ton seeds

3.2 To compute for the amount of pesticide (containing the specified active ingredient) to be mixed with water, the following formula shall apply:

$$A = 1000 (R)$$

B (T)

Where:

A = amount of pesticide to be mixed per liter of water (ml)

R = the recommended amount (g) of active ingredient to be applied per ton of seeds (i.e. 7g for Pirimiphosmethyl, 0.75 g for Delmethrin)

B = the amount of active ingredient present in a particular brand of pesti-cide, expressed in grams of active ingredient per liter of pesticide (g/l)

T = target amount of pesticide solution (liters) to be applied Per ton of seeds (as cited in item 2.2)

3.3 Example computation given the following:

- a. Insecticide X - contains 25g Deltamethrin per liter
- b. Insecticide Y - contains 250 g Pirimiphosmethyl per liter
- c. Target amount of pesticide solution to be applied = 2 liters per ton seeds

Applying the formula in item 3.2, the following dosage shall apply:

INSECTICIDE NEEDED AMOUNT(ml insecticide/liter water)

Insecticide X 15

Insecticide Y 14

4. APPLICATION OF LIQUID PESTICIDE

Using Ultra Low Volume (ULV) Sprayer

4.1 If seed treatment machines are not available, seed treatment could be carried out by uniformly spreading the grains on a canvass sheet or nylon net and spray them with the pesticide solution using the battery-operate ULV sprayer commonly used in the application of GA3

4.2 To ensure uniformity of application, the canvass sheet/nylon net should be evenly laid out on a flat ground (preferably concrete) and the thickness of the spread grains should not be more than 3 cm. The desired amount of pesticide solution should be consumed in at least 10 passes - the more number of passes, the better mixing/stirring of seeds before each succeeding pass, should be done.

Using seed treating machines

4.3 The seed treating machines should be properly calibrated in terms of (a) flow rate of seeds and (b) flow rate of the pesticide solutions. The flow rate of seeds should be carefully selected to ensure that each individual seed is given an equal chance of being subjected to the spray of the pesticide solution.

4.4 To attain the targeted amount of pesticide solution to be applied per ton of seed (designed "T" in the formula in item 3.2), the following guide shall be applied:

Select appropriate hopper opening. The layer of seeds coming out of the hopper should not be thick so each grain will have equal chance to be hit by the mist of pesticide solution. Once hopper opening is fixed, determine seed

discharge rate by measuring the amount of seed discharged per unit time;

Set flow of pesticide to the desired rate. The desired flow rate of pesticide could be computed as follows:

$$F = T (S)$$

Where:

F = desired flow rate of pesticide solution (liters/hour)

T = target amount of pesticide solution (liters) to be applied per ton of seeds (as cited in item 2.2, or in the formula in item 3.2)

S = seed discharge rate (tons/h)

4.5 The flow rates of the seeds and the insecticides solution should be monitored from time to time (as the treatment operation progresses) to ensure uniformity of application.

5. PACKAGING OF TREATED SEEDS

5.1 Treated hybrid rice seeds shall be packed in the prescribed bag and should be properly labeled to ensure that they will not be used for food or for other purposes.

5.2 The label should be printed on the surface of the bag containing the treated seeds. The caption, printed in letters of at least 20mm height, should at least contain the following.

Treated With Insecticides
DO NOT USE FOR FOOD OR FEED
KEEP OUT OF REACH OF CHILDREN

6. SAMPLING FOR SEED CERTIFICATION

6.1 Sampling of seed certification shall be done only after the seeds treatment process is completed and while the seeds are already placed in the bags.

6.2 Prior to sampling, the seed inspector (or the one getting the seed samples) must be informed that the seeds are treated with insecticides.

6.3 For safety reasons, the containers of the seed samples must be properly labeled indicating that the seeds are treated with insecticides.

7. SAFETY MEASURES

7.1 Seed growers or cooperatives adopting this guidelines must ensure that the handling and application of pesticides be done only by trained personnel. They must also familiarize themselves with the health risks involved in the handling and use of pesticides. It should be their responsibility to ensure that pesticide are handled carefully while doing the seed treatment process so as not to cause accident, illness or harm to the workers involved as well as the environment.

7.2 Workers should be provided with appropriate protection against possible contamination with pesticide (inhalation, eye or skin contact, etc.) while doing the seed treatment process.

7.3 Smoking or eating should be prohibited while the seed treatment process is going on.

7.4 After each seed treatment operation, the workers should be advised to wash their clothing thoroughly with detergent and water (preferably hot water) before use.

Adopted: 15 July 2004

(SGD.) ARTHUR C. YAP
Secretary

ABOUT BATAS.ORG

Study smarter at BATAS.org

The Philippine bar review and law-school companion built around how your brain actually remembers.

The complete Philippine law library - free for everyone.

More than 100,000 Supreme Court decisions, Republic Acts, and executive issuances - full-text searchable, browsable by category and year, and always free. No paywall, no login. This PDF came from it.

Audio case-brief lectures.

Any decision becomes a podcast-style lecture - facts, issues, ruling, and doctrine - with read-along highlighting and a hands-free presentation mode. Study while commuting, working out, or resting your eyes.

Bar review built on the science of memory.

Complete, sequenced courses for all eight bar subjects, narrated like podcasts and reinforced with retrieval practice and spaced review - the study techniques with the strongest evidence behind them.

The full law-school curriculum.

One subscription unlocks the entire J.D. curriculum - every subject, every lesson, with your progress tracked down to the paragraph so you can pick up exactly where you left off, on any device.

Mock exams that tell you where you stand.

Timed multiple-choice exams graded instantly, with per-subject score breakdowns and focus suggestions that point you at your weakest topics first.

A study planner that keeps you on pace.

Set your schedule and BATAS tells you every day whether you are on track for bar day - and exactly which lesson to take next.

Start free at <https://batas.org>

The law library is free forever - and your first lesson is one click away.

The text of this document is an official public record and remains in the public domain. Formatting, presentation, and compilation © 2026 batas.org.

Downloaded free from the batas.org Law Library. Share it freely - the library is free for every law student, bar reviewee, and practitioner.