## [ BPI ADMINISTRATIVE ORDER NO. 29, S. 2004, July 15, 2004 ]

### IMPLEMENTING GUIDELINES ON SEED TREATMENT OF F1 HYBRID RICE SEEDS

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 batteryoperate 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.