[Necessary seed amount for each level of seed multiplication]

Breeder and foundation seed multiplication had better be cultivated in the irrigated conditions under homogenous environment on moisture and fertility of soil used the method shown in the lecture such as wider space, single plant per hill, etc.

Example of calculation: necessary seed amount for breeder and foundation seed multiplication is shown below – when we transplant, we transplant only single plant per hill:

• Example 1:

- ✓ Condition
 - \Leftrightarrow Row interval is 30 cm and hill space is 20 cm \Rightarrow 16.6 hills/m²
 - ♦ 1000 grains weight of paddy is 28g
- ✓ Calculation

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16.6 \text{hills/m}^2 \Rightarrow 166,000 \text{hills/ha} \Rightarrow 28g/1000 \text{grains} \Rightarrow 166,000 \text{ x } 28/1,000 = 4.7 \text{kg/ha}
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✓ We sow the seed more than 4.7 kg/ha (7 to 8 kg/ha) of seed to ensure the number of good seedlings and compensate for missing hills after transplanting.

• Example 2:

- ✓ Condition
 - \Rightarrow Row interval is 20 cm and hill space is 20 cm \Rightarrow 25 hills/m²
 - ♦ 1000 grains weight of paddy is 28g ⇔ This is depend on the varieties
- ✓ Calculation

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25 hills/m² \Rightarrow250,000hills/ha \Rightarrow28g/1000grains \Rightarrow250,000 x 28/ 1,000 = 7kg/ha
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✓ We sow the seed more than 7 kg/ha (about 10 kg/ha) of seed to ensure the number of good seedlings and compensate for missing hills after transplanting.

In case of registered seed and certified seed multiplication, we need to prepare 4 to 5 folds of it.