



**Protocol for Castor Bean Production using
The Masinag Organic
Land Area: 1 hectare**

Land Preparation

1. Plow the field once and harrow twice.
2. Make holes about 30 to 40 cm in diameter and 40 to 45 cm deep at a distance of 1.5 m between rows and 1.5 m between hills.
3. Transplant (1 seedling per hill) in the furrow at 1.5 meter distance between hills
4. Irrigate the field after planting when the moisture content of the soil is not enough to allow seed germination otherwise do not irrigate.

Seedling Production

1. Propagate seeds in plastic bags with potting media composed of 25% decomposed rice hull or sawdust, 50% topsoil, and 25% organic fertilizer.
2. One week after seedling emergence, dilute 1 liter of Masinag Organic into 100 liters of water (1% Masinag solution) or equivalent to one can of small “ligo” sardines per 16 liters knapsack sprayer.
3. Dilute 1 liter of Masinag Organic into 100 liters of water (1% Masinag solution) and spray every 14 days interval within one and half month.

Transplanting and Care of Plants in the field

1. Put 500g of organic fertilizer per hole at transplanting time.
 2. At transplanting spray, dilute 1 liter of Masinag Organic into 100 liters of water (1% Masinag solution).
 3. Two weeks after transplanting, dilute 1 liter of Masinag Organic into 100 liters of water (1% Masinag solution).
 4. One month after transplanting, dilute 1 liter of Masinag Organic into 100 liters of water (1% Masinag solution).
 5. Repeat spraying of Masinag Organic every after a month.
- Prune the top of the growing plant to encourage branching. More branches means more fruiting points.
 - Irrigate as needed (Castor does not need much water, though).
 - Apply recommended crop protection chemicals following the manufacturer’s recommendation if necessary. The normal pests of the castor-oil plant are spider mites and some sucking insects attacking the leaves. The plant is not normally bothered by birds or rodents, nor by fungal-borne diseases as it contains a toxic substance that acts as a repellent.
 - Harvest the fruit when it ripens or when the color of the pod or capsule is cream or yellow.

IMPORTANT REMINDERS..

1. Avoid spraying Masinag Liquid fertilizer when the air temperature is high (between 12 NOON to 3 PM).
2. As much as possible, do not mix the Masinag liquid fertilizer with insecticide.
3. No need to spray any pesticide once sprayed with Masinag liquid fertilizer.