# **How to Grow Cocoa - Pro-Plant Only (Per Acre)**

Stage When to Use the Bio-fertilizers	How to Use Them	Benefits
1. Nursery Stage: Growing Seedlings Months 1-2	<ul> <li>As the seedlings grow, spray 100 cc of Pro-Plant mixed with 100 litres of water every15 days.</li> <li>Spray with a fine, hazy spray before about 9 AM.</li> <li>Direct the spray diagonally upwards so that the spray hits the underside of the leaves as well because this is where the pores (stomata) are.</li> <li>Be thorough and generous when you spray.</li> </ul>	Pro-Plant protects the seedlings from disease. Pro-Plant coats the leaves with micro-organisms, which help to prevent disease.
2. Transplanting Month 3	• Continue to spray 100 cc of Pro- Plant on the leaves every 15 days.	This will add disease protection and increase the multiplication of micro-organisms around the plant.
3. Planting Shade Trees	<ul> <li>Provide shade for the saplings.</li> <li>Spray the leaves of the shade trees with Pro-Plant mixed with water. The frequency depends on the type of shade trees.</li> <li>Spray 500 cc of Pro-Plant with 500 litres of water once per month.</li> </ul>	Pro-Plant's nutrients are instantly usable by the leaves. Spraying Pro-Plant also adds nutrients to the soil.
4. Growth Stage: Months 12-24	• Spray 500 cc of Pro-Plant with 500 litres of water once per month.	
5. Growth Stage: Months 25-30	Spray 500 cc of Pro-Plant with 500 litres of water once per month.	
6. Flowering and Fruiting Stages: Apply Pro-Plant	<ul> <li>Start to spray 500 cc of Pro-Plant mixed with 500 litres of water twice a month as the buds appear and before the flowers appear.</li> <li>Continue to spray like this on the buds and flowers during the flowering stage until shortly before harvest.</li> <li>You should spray Pro-Plant: <ol> <li>Before the flowers form.</li> <li>When the buds have formed, but not opened.</li> <li>When the flowers have opened fully.</li> <li>When one-third of the flowers have fallen off.</li> <li>When the pods have formed.</li> </ol> </li> </ul>	<ul> <li>Pro-Plant provides an abundance of instantly usable nutrients to increase flowering and fruiting. The trees will receive adequate Calcium, Potassium and Phosphorus, if the farmer sprays Pro-Plant often.</li> <li>Spraying Pro-Plant during the fruiting stage reduces the competition for nutrition resources amongst the pods as they mature.</li> <li>The abundance of nutrients will increase flowering and fruiting by providing more nutrients when they are needed.</li> <li>The pods will be shinier, larger, and of greater quality.</li> <li>Usually in trees the use of the biofertilizers reduces the number of flowers which drop off before turning into fruit.</li> <li>Pro-Plant coats the leaves and flowers with micro-organisms, which prevent disease.</li> </ul>

# Number of Litres of Pro-Plant to Grow Cocoa over an Acre

# 1. Pro-Plant

## **Months 1-3:**

- Spray 100 cc mixed with 100 litres of water twice a month every 15 days.
- Total: 600 cc in the 3 months.

### **Months 4-6:**

- Spray 200 cc mixed with 200 litres of water twice a month every 15 days.
- Total: 1.2 litres in the 3 months.

#### **Months 7-12:**

- Spray 300 cc mixed with 300 litres of water twice a month every 15 days.
- Total: 3.6 litres in the 6 months.

## Months 13-24:

- Spray 500 cc mixed with 500 litres of water once a month.
- Total: 6 litres in the 12 months.

# Months 25-30 (and beyond):

- During the flowering stage and fruiting stage spray 500 cc mixed with 500 litres of water every 15 days.
- Total: 1 litre per month. 6 litres in the 6 months.

## **Months 1-30**

• Total: 17.4 litres in the 30 months.

#### **Notes:**

- 1. The dosage and frequency of spraying above assumes that the soil is poor in fertility and lacking nutrients.
- **2.** Pro-Plant should be mixed with water and sprayed with a hazy, foggy spray before 9 a.m., which is until when the stomata are open the widest.
- **3.** If the spray head produces a heavy spray, then the amounts below will have to be increased. For example: 100 cc in 100 litres of water might have to be increased to 150 cc in 150 litres of water.
- **4.** Spraying Pro-Plant twice a month during the fruiting stage is very advantageous because the cocoa pods will then receive a lot of Calcium, which will help to increase the yield and quality.
- 5. The amounts shown are the minimum amounts. If you wish to spray more, increase the water accordingly. For example, if you wish to spray 600 cc of Pro-Plant per acre instead of 500 cc in order to provide more nutrients, increase the amount of water to 600 litres. 1 litre of Pro-Plant can be mixed with 1,000 litres of water. This volume is suitable for a hectare of trees.