

COFFEE FERTILIZATION: THE BENEFITS OF FOLIAR SPRAYING WITH PLAN "B" ORGANICS™

The recommended average rates of nutrients for coffee trees, and how PLAN "B" ORGANICS™ SOLUBLE SEAWEED EXTRACT can improve the yield and the coffee quality.

Variety: Arabica*.

Soil type: Deep, well-drained, loamy or volcanic.

Plant population: 1200-1800 mat/Ha. (3000-4000 trees/ha).

Expected yield: 45-50 t/Ha. (1.8-2 t/Ha clear coffee).

*Robusta coffee generally requires less nutrients than Arabica.

| Tree Age (Years) | Nutrient Demand (Kg/Ha/Yr) | | | Recommended Fertilizers (Kg/Ha/Yr) | | | |
|---------------------|---------------------------------|-------|------------------|--|------------------------------------|--|--|
| | N P ₂ O ₅ | | K ₂ O | Bat Guano 8-3-1 or Land & Sea Ultra Blend 9-1-5 | Bat Guano 3-6-1 or MPP 0-9-0 | Soluble Seaweed Extract or Bat Guano 8-3-1 | |
| 1 | 30-40 | 5-10 | 30-40 | 60-65 | 10-20 | 65-90 | |
| 2 | 60-80 | 10-15 | 60-80 | 130-170 | 20-40 | 130-175 | |
| 3 | 120-160 | 20-30 | 150-200 | 220-280 | 30-50 | 330-450 | |
| Maturity | 200-300 | 30-50 | 250-400 | 360-520 | 50-80 | 550-870 | |























Phosphate should be applied from the 3rd year on, according to soil or leaf analysis.

The total rate should be split along the year as follows:

| | Number of Applications | | | | | | |
|---------------------|--|------------------------------------|--|--|--|--|--|
| Tree Age (Years) | Bat Guano 8-3-1 or Land & Sea Ultra Blend 9-1-5 | Bat Guano 3-6-1 or MPP 0-9-0 | Soluble Seaweed Extract or Bat Guano 8-3-1 | | | | |
| 1 | 4 | 1 | 2 | | | | |
| 2 | 3 | 1 | 3 | | | | |
| 3 | 3 | 2 | 3 | | | | |
| Maturity | 3-4 | 3-4 | 3-4 | | | | |

The potassium should be applied with the 2nd and 3rd applications of nitrogen. It is particularly necessary during the period of fruit expansion and ripening.

Foliar spraying with PLAN "B" ORGANICS™ Soluble Seaweed Extract as a supplement to soil fertilization is the most effective way to improve potassium and nitrogen uptake by the coffee plant. This method prevents adsorption or leaching of potassium and nitrogen to the soil, and provides the plant with an accurate supply of nutrient during its critical growth periods.

Proper application of foliar spraying with PLAN "B" ORGANICS™ Soluble Seaweed Extract improves yield and coffee quality (grain size).

It is recommended that the first application should take place 12 weeks after flowering at 4% **Soluble Seaweed Extract**. Two more similar applications should be made at 30 days intervals.

Fertilization of coffee seedlings

Pot size: 3 cm diameter and 15 cm length.

Growth medium: 150 ml/pot of (soil - 70% + manure - 30%).

Fertilizers in the growth medium:

5 Kg Bat Guano 0-12-0 /m3 growing mixture

1 Kg MPP 0-9-0 + micronutrients / m3

1 Kg KCl / m3 growing mixture

After emergence (at a developmental stage of 2 leaves) Foliar spraying with 0.3% mixture of: 0.5 B + 2.2 Mg + 7 Zn + 8 N.

| Foliar Spraying Recipe | Vegetative Growth | | | Fruiting/Flowering Period | | |
|--|-------------------|--------|--------|---------------------------|--------|--------|
| Tolial Spraying Necipe | Week 1 | Week 2 | Week 3 | Week 1 | Week 2 | Week 3 |
| Soluble Seaweed Extract | 5ml | 5ml | 5ml | 5ml | 15ml | 15ml |
| High Nitro Bat Guano 8-3-1 | 5ml | 5ml | 7ml | 7ml | 7ml | 7ml |
| High Phos Bat Guano 3-6-1 | | | | 7ml | 7ml | 7ml |
| Mineralized Phosphorus Powder 0-9-0 | | | | 7ml | 7ml | 7ml |
| Crab Powder | 5ml | | 5ml | 5ml | | 5ml |

Amount used depends on size of plants being fed. Aerate and agitate water for 12-24 hours with ingredients in cloth mesh bag then filter and spray. When combining more than one type of guano, be sure not to exceed more than a combined total of 2-4 Tbsp. per gallon of water.

Check out www.planborganics.com for more information or contact us at: info@planborganics.com