# Boron in Oil Palm



# **Boron Deficiency**



Crinkled Leaf

Hooked Leaf

Parthenocarpy

### Boron is necessary for:

- Preventing "fishbone leaf" (the development of extremely small, thin pinnae
- Preventing "hooked leaf" (a single or double hook on the pinnae near the tip)
- Elimination of white stripe occurrence in leaves
- Preventing seedless fruitlet
- Adequate fresh fruit bunch formation
- Enhanced root growth



Adequate boron fertilizer and balanced nutrients produce good fruit set.

## Recommendations

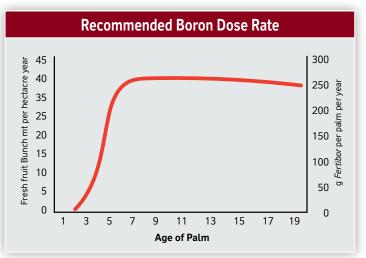
#### Seedling

Solubor concentration				
13.6 g		100 L water		
Product	% of B		% B	2 <b>0</b> 3
Fertibor®	15.2		48	.9
Granubor®	15		48	.3
Solubor®	20.9		67	.3

#### Your boron fertilizer options

- *Granubor* is an ideal material for dry blends for soil application.
- *Fertibor* works in isolated soil applications and supplemental auxiliary application.
- Solubor allows the most flexibility for applying boron in solution. It can be dissolved alone in water or in liquid fertilizer and/or pesticides, and then applied to the soil or directly onto the palms.

#### Planting



#### How much boron is enough?

Oil palm removes significant amounts of boron from the soil each year. Dosage rates for young and mature oil palm depend on the soils and yield goals. In general, the standard application for young palms is 50 g per palm per year of *Fertibor*, increasing to 100-200 g per palm per year up to 4-6 year. Always consult local department of agriculture to check the proper dosage.

Rajaratnam, J. A., Micronutrients, p. 263, Developments in Crop Science 1976

