## **SILICA**

Silicon Fertilisers (Guano Gold-Kwik Start) increase the concentration od Monosilica acids in the soil solution and their absorption on soluble Phosphorus of Calcium (caHPo4), Aluminium absorption (2Al (H2Po4) and Iron (2FePo4).

By this it means Silicon Fertilisers initiate the following processes.

- 1. Transformation of slightly soluble Phosphates into mobile forms.
- 2. The physical absorption of mobile Phosphates by Silicon-rich surfaces.

**ALL FACTS SUGGEST** that Si-rich materials can be used for reducing - "P" - "TIE UP" and keep applied PHOSPHORUS in **plant available form** 

CaHPo4 + Si (OH) 4 = CaSio3 + H2O + H3 Po4 Calcium / Phosphate + Silica Acid = Calcium Silicate + water + Phosphate

2AI (H2Po4) 3 + Si (OH) 4 + H = Al2Si2O5 + SH3PO4 + 3H2O Aluminium Phosphate + Silica Acid + Hydrogen = Aluminium Silicate + Phosphate + Water

> 2FEPo4 + Si (OH4) + H = FeSiO4 + 2(H3PO4) Iron Phosphate + Silica Acid + Hydrogen = Iron Silicate + Phosphate

## SILICA & K

Silicon Fertilisers exhibit very good absorption properties; owing to this, leaching of Potassium from the surface horizon was reduced by application of Silicon. Therefore GUANO GOLD-Kwik Start blended with either MOP or SOP or KMS will allow for maximum availability of both P and K in the soils that are high in Fe, Al or Ca. The interaction of Silica allows the blend to work in both acid and slightly alkaline soils.