### Zinc deficiency in Maize

**Prevention**
- Always test your soil for Zinc levels 1-2 months before planting.
- Do not plant maize in inappropriate agroecological zone such as in the tea zone and avoid soils with PH less than 7.
- Lime the soil at the recommended rates after soil testing to raise the pH to above 5.
- Use organic manures (e.g., farm yard manure, green manure etc) to provide organic matter. Apply compost or mulch to preserve microorganisms and other useful organisms that assist in zinc release.
- Avoid excessive application of phosphorus fertilizers.
- Leave the farm fallow for at least 1 season.
- Protect the soil from erosion (see Direct control green column).
- Rotate your crops seasonally with low zinc requirement plants such as wheat.

**Monitoring**
Three weeks after planting. Look out for:
- Yellow to white broad band occurring on both sides of the midrib from the leaf stalks on younger leaves.
- Maize plants with shortened internodes throughout the cropping season.
- Take direct control when the yellow – white band is seen on younger leaves.

**Direct Control**
- Use bio-slurry from biogas digesters at the rate of 1 litre/square metre (4000L/acre).
- Use organic fertilizer (e.g., compost or farm yard manure (4 tons per acre)).
- Use Yad bio-vitalizer organic fertilizer at a rate of 750 kg/ha (300kg/acre).
- Apply inorganic basal fertilizer with Zinc (such as zinc oxide or Zinc Sulphate, to correct deficiency).
- Spray with foliar feed (e.g., Bayfolan Plus) on plants with symptoms (see Monitoring column).

**Restrictions**
- Use rates recommended after soil testing.
- When applying fertilizers always wear protective clothing.
- Store mineral fertilizers at dry conditions and separate from pesticides.