

# Maize crop management part 1

In maize production, there are a series of practices that need to be followed from the time it emerges up to the time of harvesting if a good yield is to be achieved.

When doing land preparation and planting, carry out soil testing to help you ascertain how much of which fertilizer you need to apply. Leave crop residues in the field as a way to replenish soil nutrients and offer cover to the soil. Avoid bush burning as this causes serious damage to the environment and the soil. Do minimum disturbance to the soil when doing land preparation and use seed of good quality and variety suitable for both your environment and needs.

## Factors affecting productivity

Variety planted affects the productivity of the maize. Early maturing varieties tend to produce fewer leaves and tends to progress through the growth stages faster than late maturing varieties.

Planting seasons and weather patterns; farmers are encouraged to plant at the onset of rains.

Essential nutrients. Its important to understand the soil nutrient status so that you apply the relevant fertilizers to support crop growth through all stages.

## Critical growth stages

Emerging stage. This comes about 1 week after sowing. The planting depth, seed viability and consistency of rain after sowing will determine effective sprouting of the seed.

Vegetative stage. This arises after about 30 to 35 days after sowing and is followed closely by tasselling and silking.

Pollination: the success of pollination is greatly influenced by weather. At this stage, the maize begins to silk. Drought stress can desiccate silks and pollen grains which results in Burren ears and short ears with Burren tips.

Grain filling; is the final critical stage which begins after pollination. Drought, extreme temperature, foliar diseases and nutrient deficiencies can solely or in combination affect yield.

Maturity stage; leaves and silks get dry. Harvesting is done at this stage.