WHITE OPEN POLLINATED MAIZE

ZM 421

ZM 421 is a white semi-flint/semi-dent early maturing variety. It has a good grain yield and drought tolerance. It also has good tolerance to low soil fertility and acid soils.

It has a very good resistance to MSV and a good resistance to GLS, Leaf Blight, Rust and Ear Rot.

- White Semi-flint/semi-dent
- Early maturing
- Good resistance to MSV, GLS, Leaf Blight and Ear Rot
- Drought Tolerant

ZM 521

ZM 521 is a white semi-flint grain maize with excellent GLS resistance and was bred by CIMMYT for Sub-Saharan Africa. It has an intermediate maturity.

ZM 521 yields 30 – 50% more than traditional varieties under drought and low soil fertility.
These are two problems that commonly keep smallholder farmers in a cycle of poverty.
The economic return of these improved varieties over seasons, particularly when grown in harsh environments may therefore match that of expensive hybrid seed.

Many varieties were evaluated using "Mother-Baby Trials" followed by a large number of demonstration plots. Mother-Baby Trials very effectively assess the performance and acceptance of new varieties under smallholder farmers' conditions.

ZM 521 excelled particularly under drought and low fertility conditions. The grain is more flinty than grain of commercial hybrids. Farmers perceive that flint grain dries more quickly and stores better than dent grain. Women farmers like the amount of flour produced when this flint grain is milled and the good stamp or mealie meal they get when it is pounded

ZM 523

ZM 523 has an average plant height of 180-185cm with intermediate maturity. It has white semi-dent grain with 14-16 kernel rows per ear. It has a high yield potential and was selected due to tolerance for drought, N stress and low soil pH.

ZM 523 matures at approximately 120-130 days with a grain that is white, semi-flint/semi-dent. It primarily has 14 kernels rows per ear. It has a yeild potential of 6mt/ha which is high when compared to other OPV's of the same maturity.

Resistance to biotic stresses: moderate to good levels of resistance to maize streak virus, gray leaf spot (Cercospora zeae-maydis), common rust (Puccinia sorghi) and northern leaf blight (Exserohilum turcicum.