

Table S2. Details on the maize varieties grown in Mangae. Sources of information: Survey in Mangae July 2010 and National variety list 1950-2008 in (Ngwediagi et al., 2009).

Variety	Year released and institution	Information
Katumani	1950s by KARI Kenya	White Flint Hybrid Low rainfall areas Suitable <1500 masl Achievable yield: 3.0-3.5 tonns/ha
Kito	1983	Open pollinated variety (OPV) White Flint Early maturity: 90 days Drought avoiding Low rainfall areas
Staha	1983 by ARI Ilonga	OPV White Flint-Dent Based on cross between Ilonga composite (local breeding population) (50%), Tuxpeño (CIMMYT population) (45%) and small proportion (5%) of Katumbili Large ears Late maturity: 120 days Drought tolerant Good standability, not very tall Tolerant to maize streak virus (MSV) Suitable <900 masl Achievable yield: 4.0 -5.0 tonns/ha
TMV 1	1987 by ARI Ilonga	OPV TMV 1: Tanzania Maize Variety 1 White Flint Based on CIMMYT/IITA breeding population 11 (includes East African material and “La revolution” from Madagascar) Intermediary maturity: 110 days Resistant to MSV and rust Suitable <1500 masl Achievable yield: 4.5 tonns/ha
TAN250	Tanseed International	TAN 250 is based on CIMMYT’s ZM 401 selected for tolerance to drought and low soil fertility Early maturity variety Excellent resistance to MSV and Grey leaf spot, good resistance to Turcium leaf blight, Cob rot and Common rust Suitable at low to medium altitude Achievable yield: 3-5 tonns/ha