CHARACTERISTICS OF AVAILABLE CROP VARIETIES

The characteristics of the available crop varieties, including **Hybrid maize**, OP maize, Rice (Lowland/Upland), Soyabean, Cowpeas and vegetables are hereby enclosed for your guidance.

CROP CHARATERISTICS AND ECOLOGICAL ADAPTATION

Table 1: Maize Hybrids

Characteristics	Oba Super 1	Oba Super 2	Oba 98 (QPM)
Hybrid type	Top cross	Single cross	Top cross
Grain colour/type	White, semi-flint	Yellow, semi-flint	White, flint dent
Adaptation	Forest and Savanna	Forest and Savanna	Forest and Savanna
Prolificacy	Good	Good	Excellent
Days to maturity	118 days	110 days	105 days
Resistance to lodging	Good	Very Good	Very Good
Plant Height (cm)	175	180	190
Ear Height (cm)	100	110	110
Resistance to rust/blight/streak	Moderately resistant	Moderately resistant	Resistant
Yield (Ton/Ha.)*	5 – 7	5 – 7	6.0 – 8.0
Special characteristics	High yielding potential, tolerant to Striga and weevil	Downy mildew resistant (DMR), Nitrogen use efficient	Prolific with heavy long cobs
Grain quality	Very Good	Very Good	Higher nutrient (QPM)

Table 2: REGISTERED AND RELEASED PREMIER SEEDS' PROPRIETARY HYBRIDS (2009)

HYBRID INFORMATION	OBA SUPER 3	OBA SUPER 4	OBA SUPER 5
Hybrid Type	Single Cross	Single Cross	Single Cross
Kernel Colour	White	Yellow	White
Kernel Type	Flint	Flint	Flint
Photoperiod	Neutral	Neutral	Neutral
Days to mid-silking	60	59	60
Maturity date	100 - 110	100 – 105	100 – 110
Adaptation	Rain forest, southern & northern Guinea savannas	Rain forest, derived savanna &southern Guinea savannas	Southern, northern & sudan Guinea savannas
Plant Height (cm)	190 - 200	185 – 195	190 – 200
Ear Height (cm)	85 - 95	90 – 95	90 – 95
Pest / Disease Tolerance	Tolerant to the major diseases of maize, e.g., maize streak virus, downy mildew, rust, leaf blight and *curvularia* leaf spot	Tolerant to the major diseases of maize, e.g., maize streak virus, downy mildew, rust, leaf blight and *curvularia* leaf spot	Tolerant to the major diseases of maize, e.g., maize streak virus, downy mildew, rust, leaf blight and *curvularia* leaf spot
Potential Yield (tons / hectare)	7 – 8	6 – 7	8 – 9
Outstanding Characteristics	High yield; more adapted to rain forest ecology; amenable to manual harvesting; has excellent husk cover which makes it less prone to ear rot.	More adapted to the rain forest ecology; High Yield.	Highly prolific, expressed in good yield; more tolerant to lodging; excellent plant and ear aspect; more suitably adapted to mechanized harvesting; shining, attractive, creamy-white seeds; drought tolerant.
Nutrient Content	9.28 % MC Flour; 1.55 % Ash; 4.95 % Fat; 3.25 % Sugar; 72.50 % Starch; 23.45 % Amylose; 11.36 % Protein	9.11 % MC Flour; 2.04 % Ash; 8.27 % Fat; 4.45 % Sugar; 70.58 % Starch; 22.61 % Amylose; 11.37 % Protein	8.92 % MC Flour; 1.69 % Ash; 4.50 % Fat; 2.84 % Sugar; 73.05 % Starch; 22.39 % Amylose; 12.13 % Protein

Table 3 REGISTERED AND RELEASED PREMIER SEEDS' PROPRIETARY HYBRIDS (2009) CONTINUE

HYBRID INFORMATION	OBA SUPER 6	OBA SUPER 7	OBA SUPER 9
Hybrid Type	Single Cross	Three-way Cross	Three-way Cross
Kernel Colour	Yellow	White	White
Kernel Type	Flint	Flint	Flint
Photoperiod	Neutral	Neutral	Neutral
Days to mid-silking	60	59	59
Maturity date	100 - 105	100 - 105	100 – 105
Adaptation	Southern, northern & sudan Guinea savannas	Northern & sudan Guinea savannas	Derived & southern Guinea savannas
Plant Height (cm)	180 - 195	160 - 170	165 – 170
Ear Height (cm)	85 - 95	85 - 90	75 – 80
Pest / Disease Tolerance	Tolerant to the major diseases of maize, e.g., maize streak virus, downy mildew, rust, leaf blight and *curvularia* leaf spot. Bio fortified with Pro-Vitamin A.	Tolerant to the major diseases of maize, e.g., *striga*, maize streak virus, downy mildew, rust, leaf blight and *curvularia* leaf spot	Tolerant to the major diseases of maize, e.g., *striga*, maize streak virus, downy mildew, rust, leaf blight and *curvularia* leaf spot
Potential Yield (tons / hectare)	7 - 8	4, under *striga* infestation	3.5, under *striga* infestation
Outstanding Characteristics	More adapted to southern Guinea savanna, northern Guinea savanna and Sudan savanna ecologies; high yield; drought tolerant; low soil nitrogen-efficient; excellent plant and ear aspect.	Highly *striga* resistant; more adapted to northern Guinea savanna and Sudan savanna ecologies; drought tolerant; low soil nitrogen-efficient; supports low *striga* emergence; high yield potential; good for sole cropping and rotation with legumes (integrated *striga* control); high starch content.	*Striga* resistant; more adapted to the derived savanna and southern Guinea savanna; supports low *striga* emergence; good for sole cropping and rotation with legumes (integrated *striga* control)
Nutrient Content	9.06 % MC Flour; 1.44 % Ash; 5.68 % Fat; 2.96 % Sugar; 72.88 % Starch; 23.27 % Amylose; 9.54 % Protein	10.95 % MC Flour; 1.58 % Ash; 5.06 % Fat; 2.21 % Sugar; 80.46 % Starch; 22.07 % Amylose; 10.73 % Protein	10.54 % MC Flour; 1.69 % Ash; 5.44 % Fat; 3.14 % Sugar; 71.22 % Starch; 21.37 % Amylose; 10.77 % Protein

Table 4: Open-pollinated varieties

Characteristics	EV-99-DT-STR	TZE COMP.3 DT	OBATANPA (QPM)
Grain colour / type	White / Yellow, semi-flint	White	White, opaque semi-flint
Adaptation	Forest, SGS*, NGS** and Sudan savanna	Forest, SGS*, NGS** and Sudan savanna	Forest and savanna
Maturity status	Extra-early	Early	Early
Days to maturity	70 – 80	90 – 100	85 – 90
Ear Height (cm)	60 - 65	60 – 75	90 – 100
Resistance to rust/blight/streak	Resistant	Resistant	Resistant
Yield (Ton/Ha.)* **	3.5 - 5.0	3 – 4	3 – 4.5
Special characteristics	Good as a second crop in the forest ecology; thrives well in the drier ecologies (>600mm rainfall), Drought tolerant	Drought tolerant	Quality protein maize
Grain quality	Very good	Very good	Very good

*SGS = Southern guinea savanna; **NGS = Northern guinea savanna; *** Depends on good filed management

CROP CHARATERISTICS AND ECOLOGICAL ADAPTATION CONT.

SOYBEAN

Characteristics	**TGX 1448-2E**
Plant type / Vigorous	Compact / Erect
Maturity	Early
Crop Duration	105 – 115
Adaptation	Forest / Savanna
Lodging	Low / Tolerant
Plant Height (cm)	55 – 60 cm
Level of shattering	Resistant
Seed color	Bright cream yellow
Seed viability	Very good
Disease resistance (Leaf spot)	Moderately resistant
Yield (Ton/Ha.)	1.5 – 2.5

COWPEAS

Characteristics	**IT- 90K – 277 - 2**	**IT -89KD – 288**	**IT- 93K– 452 - 1**
Seed color	Medium white seeds	Large white seeds	Medium white seeds
Flowering type	Non-photosensitive	Photo-sensitive	Non-photosensitive
Maturity	Medium	Late	Early
Crop Duration	75 – 80 days		60 days
Adaptation	Savanna	Savanna	Forest & Savanna
Lodging	Resistant	Resistant	Resistant
Insecticide Spray regime	2 – 3 sprays before flowering and podding	2 – 3 sprays before flowering and podding	2 – 3 sprays before flowering and podding
Insect resistance	Moderately resistant to aphids, thrips, bruchid and nematode	Moderately resistant to aphids, thrips, bruchid and nematode	Moderately resistant to aphids, thrips, bruchid and nematode
Yield (Ton/Ha.)	1.5 tons / ha	1.5 tons / ha	1.5 tons / ha
Outstanding characteristics	Does well without insecticide sprays	Dual purpose (fodder and human consumption)	Dual purpose (fodder and human consumption)

CROP CHARATERISTICS AND ECOLOGICAL ADAPTATION OF VEGETABLES

Crop	Variety	Salient features	Planting season	Seed Rate (kg/Ha)	Duration (days)	Yield (T/Ha.)
Tomato	UC 82B	Early, determinate type, firm square-shaped red fruit with good keeping quality	Dry and wet seasons	0.4 – 0.6	125	30 - 35
Tomato	Roma VF	Early, determinate type, firm pear-shaped red fruit with good keeping quality	Dry and wet seasons	0.4 – 0.6	126	30 - 35
Onions	Red Creole	Large, globose bulbs with pinkish skin, has 4 – 6 months storability	Dry and wet seasons	6 – 8	150	10 - 12
Cucumber	Market More	Early, vigorous, suitable for open field production. Fruits are long and dark green	Dry and wet seasons	2.5 – 3.5	55	7 - 10
Water Melon	Sugar baby	Early, 4 -5 kg fruit with dark green rind and bright red flesh	Dry and wet seasons	2.5 – 3.5	85	25 - 30
Okra	Clemson spineless	Very early, productive, bright green, pentagonal tapered pod	Dry and wet seasons	2.5 – 3.5	55	4 - 6
Carrot	Nantes	Long blunt root of orange colour, good for eating raw and vegetable purposes	Dry and wet seasons	5 – 6	75	8 - 10