



Technologies for African
Agricultural Transformation

TAAT INVESTORS FORUM

Showcasing TAAT Technologies
15 February 2022: 1000 -1600 (WAT)

Munyaradzi Jonga (AATF)



Drought TEGO Maize Hybrids



- ✓ Drought tolerant white maize hybrids from the WEMA breeding pipeline
- ✓ Over 120 new hybrids released



WE3106

DroughtTEGO Maize Hybrids

New Elite Climate-smart Maize Hybrids:

1. Drought tolerant and high yielding –

- ✓ 3 – 5t/ha under moderate drought
- ✓ 7 – 12t/ha under optimum conditions

2. **Maize Lethal Necrosis (MLN)**

disease tolerant hybrids:

- ✓ MLN tolerance put in drought tolerant germplasm

DroughtTEGO Hybrids suitable for Mid-Altitude conditions



WE6103 DroughtTEGO in Uganda: 7.5 – 8.0t/ha



DroughtTEGO Maize Hybrids

Rieta Agro in Tanzania achieved:

- 10.15t/ha with WE2109
- 9.49t/ha with WE4114

DroughtTEGO Performance in Nigeria:

- ✓ SAMMAZ 62 (WE5229) – 8.35t/ha
- ✓ SAMMAZ 63 (WE5202) – 8.13t/ha



Left – WE2109
Right – WE4114

**Fortenza Duo chemical available
for seed treatment to protect the
maize crop against FAW**



- ✓ **Market linkages – high
quality maize flour**



DroughtTEGO Maize Seed Systems



Partnerships with seed companies resulted in effective hybrid seed scale out in TAAT countries, Kenya

- ✓ Hybrid maize seed fields
- ✓ Single-cross & 3-way hybrids available
- ✓ Productive female parents

(2013 – 2021): 7,985 tons of TEGO certified seed produced – to plant over 300,000ha

WEMA DroughtTEGO Hybrids – Female Parent Seed Yield



WEMA DroughtTEGO Hybrids – Female Parent Seed Yield				
			Female Parent Seed Yield t/ha (across 7 sites)	
Hybrid		Female Parent	Pure stand	75% of the field
WE2107		Single-cross	8.6	6.5
WE2111		Single-cross	7.1	5.3
WE3102		Single-cross	7.1	5.4
WE4114		Single-cross	8.6	6.5
WE5135	MLN tolerant	Single-cross	9.0	6.7
WE7118	MLN tolerant	Single-cross	6.6	5.0
WE7133	MLN tolerant	Single-cross	7.1	5.3



WE1101 Female Parent, Zimbabwe

Licensing of DroughtTEGO Hybrids

Access to New Elite DroughtTEGO Hybrids:

- ✓ Seed companies apply for a license agreement from **AATF** to:
 1. Test the hybrids and officially register adaptable ones (Testing license)
 2. **Commercialize** (seed production & marketing) hybrids already registered by AATF
- ✓ DroughtTEGO hybrids are licensed royalty free
- ✓ Both **Non-exclusive** and **exclusive** licenses available
- ✓ WEMA Application Review Committee – reviews all applications for hybrids before a license agreement is drafted

• DroughtTEGO hybrids licensed to seed companies in:

1. Kenya
2. Tanzania
3. Uganda
4. Mozambique
5. Zambia
6. South Africa
7. Nigeria
8. Burkina Faso

More hybrids are available for licensing to seed companies



Some of the DroughtTEGO Hybrids Available for Licensing

	Hybrid Code	Hybrid Type	Grain Colour	Adaptation (m.a.s.l)	Grain Yield (t/ha). (Optimum)	Grain Yield (t/ha). (Drought)	Days to Mid-Silk	Days to Maturity	Plant Height (cm)	Ear Height (cm)	Grain Texture
1	WE1101	3-way	White	1000-1600	7.5	2.6	58	134	212	94	Flint-dent
2	WE2101	3-way	White	1000-1600	9.8	4.6	63	140	250	130	Dent-like
3	WE2103	3-way	White	1000-1600	9.6	4.3	60	150	256	135	Dent-like
4	WE2107	3-way	White	1000-1600	9.3	4.3	62	140	265	162	Dent-like
5	WE2108	3-way	White	1000-1600	9.3	4.4	65	142	258	149	Dent-like
6	WE2109	3-way	White	1000-1600	9.2	4.8	65	142	253	140	Dent-like
7	WE2112	3-way	White	1000-1600	8.1	4.7		142	243	156	Intermediate
8	WE2113	3-way	White	1000-1600	8.0	4.0	61	138	247	140	Flint-like
9	WE2114	3-way	White	1000-1600	8.4	4.0	62	150	225	101	Intermediate
10	WE2115	3-way	White	1000-1600	8.5	3.0	65	138	238	100	Flint-like
11	WE3205	3-way	White	1000-1600	9.0	3.4	66	128	174	96	Intermediate



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Data from East Africa

Potential Income From Maize Grain

- Maize grain price = USD200/mt
- National average yield/ha = 1.5t/ha
- TEGO yield/ha = 5.5t/ha

- Gross income at 1.5t/ha = USD300/ha

- ✓ Gross income at 5.5t/ha = USD1,100/ha

- ✓ Potential difference = USD800/ha more income



THANK YOU

Contact details:

Dr. Munyaradzi Jonga (AATF)

Tel: +254 735 992 202

Email: j.munyaradzi@aatf-africa.org

