

August – November 2010
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In this issue

In this issue we focus on the insights shared during the recent annual meeting, varieties released to date, and training initiatives.

Recent publications

Characterization of maize producing households in Masvingo and Bikita districts in Zimbabwe

Shamiso Chikobvu, Brian Chiputwa, Augustine Langyintuo, Roberto La Rovere and Wilfred Mwangi

Available at <http://dtma.cimmyt.org/index.php/publications>

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Characterization of Maize Producing Households in Adami Tulu - Jido Kombolcha and Adama Districts in Ethiopia

Getachew Legese, Moti Jaleta, Augustine Langyintuo, Wilfred Mwangi and Roberto La Rovere

Available at <http://dtma.cimmyt.org/index.php/publications>

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Key events

- 18 September 2010. Double Haploid Meeting. Organized by the University of Hoheinheim, Nairobi, Kenya.
- 20-21 September 2010. MAIZE Megaprogram Meeting. Nairobi, Kenya.
- 29 September 2010. Official launch of Nanga Drought Screening Site. Nanga, Zambia.
- 16 October 2010. World Food Day, and World Food Prize. Des Moines, Iowa, USA.
- November 2010. Maize Working Group Meetings. Ethiopia, Kenya, Uganda, Tanzania.

DTMA Policy Briefs

The current issues of the policy briefs focus on the improvement of the maize seed sector, in terms of production, marketing and policy reforms. These are intended to popularize information on policy issues, providing them in a user-friendly format, easily digestible to those without deep technical knowledge.

Policy Brief 1: *Reforming seed sector policies for livelihood improvement in eastern and southern Africa*

Policy Brief 2: *Improving efficiency of maize seed production in eastern and southern Africa*

Policy Brief 3: *Improving maize seed marketing in eastern and southern Africa*

The briefs are accessible on <http://dtma.cimmyt.org/index.php/publications>

‘Four years on: are we succeeding?’

This was the theme of the fourth DTMA annual review and planning meeting held during 13-17 September 2010, in Nairobi, Kenya. Ninety-two project members representing CIMMYT, IITA, the B&MGF, national partners from universities, agricultural research and extension systems, seed producers, the DTMA advisory board and the University of Hohenheim shared their insights as project teams presented their progress. Members heard of progress and success in variety development, release and adoption; seed production; capacity building and communication and advocacy. Overall, the progress is encouraging and the DTMA Project is on course to meet its vision of success: “Over 10 years, to reach 30-40 million people with improved drought tolerant maize varieties that yield 1 t/ha more under drought and give 20-30% more yields in farmers’ fields”. A field visit to the DTMA Kiboko drought screening trials was organized and project members had a chance to learn more about drought screening and assess promising varieties in the pipeline.

Updates on DT maize variety release

As of September 2010, 60 DT maize varieties have been officially released and are being marketed in the 13 project countries; with 74 more in the variety release pipeline (see Tables 1 and 2). This has been through collaboration between the project, national agricultural research and extension system, and seed companies. Although this is encouraging, more progress will be made through shortening the time for variety release and the harmonization of regional seed regulations and laws for promoting testing, release and marketing of seed of new varieties across borders. Other efforts such as developing the local grain markets will encourage farmers to adopt new DT maize varieties, as farmers will be assured of a market for their produce. In the coming year, the DTMA project will continue working with governments, partners and other stakeholders such as non-governmental and community-based organizations in the project countries towards realization of this goal.

Category	Type	AO	ET	KE	MW	MZ	TZ	UG	ZM	ZW	Total
Registered & in Production	OPV	1	1	4	3	0	3	0	2	5	19
	Hybrid	0	0	2	3	0	1	1	4	3	14
In Release Process	OPV	1	0	0	0	2	4	0	2	3	12
	Hybrid	0	0	0	0	3	14	0	3	7	27

Table 1: DT maize varieties released and in progress (September 2010) in eastern and southern Africa (AO-ZW= Angola, Ethiopia, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia and Zimbabwe)

Category	Type	BN	GH	ML	NG	Total
Registered & in Production	OPV	8	5	2	7	22
	Hybrid	0	1	0	4	5
In Release Process	OPV	7	6	6	7	26
	Hybrid	2	2	2	3	9

Table2: DT maize varieties released and in progress (September 2010) in West Africa (BN-NG= Benin, Ghana, Mali and Nigeria)

Training news

Empowering tomorrow’s maize breeders

A training course on maize breeding was held in Harare, Zimbabwe, during 16-31 August 2010 to share new breeding methods and technologies, with early-career maize breeders interested in maize improvement for stress environments. The course, was jointly organized by the DTMA project and the Department of Research and Specialist Services (DR&SS) of the Zimbabwe Ministry of Agriculture, and attracted 57 participants from the private sector and various national agricultural research systems (NARS) from almost all of the DTMA countries. The course covered aspects of: breeding maize with desirable traits (drought tolerance, disease and insect resistance, and good yield); and the use of: marker-assisted breeding and transgenics in maize improvement; advanced information technology tools in maize breeding; and doubled haploid technology to accelerate the development of maize inbred lines. Although focusing on maize, the course also covered general aspects of choosing desirable parents for breeding programs. The course participants observed the maize-breeding process firsthand when they visited the on-going CIMMYT and DR&SS drought screening trials at breeding nurseries in Chiredzi, Chisumbanje, and Mzarabani. Cosmos Magorokosho and Dan Makumbi, CIMMYT maize breeders, organized and coordinated the course.

Training on updated maize information tools

A training workshop on the integrated International Maize Information System (IMIS)-Fieldbook platform was held for scientists, technicians, and research assistants in Nairobi, Kenya, on 05-06 August 2010. Similar training had been held in Zimbabwe on 02-04 August 2010. Héctor Sánchez, CIMMYT crop information specialist, conducted the courses. In Kenya, participants were from CIMMYT and the Western Seed Company, a DTMA project partner. The training covered the basic use of IMIS and IMISFieldbook. IMISFieldbook has all the utilities of Fieldbook software, together with functions for management of genealogy, inventory, and data. The participants tried out their new-found skills in installing the software, generating inventories and analyses, seed preparation for trials and nurseries, adding information to the IMIS database, and managing pedigrees using Fieldbook.



“We can now code our germplasm numerically, and upload it into a local database, which can then be exported to MaizeFinder,” said Silvano Assanga, one of the participants. MaizeFinder is a web-based program, hosting information on CIMMYT germplasm and performance data.

Inaugurating drought screening facilities in Nanga, Zambia

Nanga, a national irrigation research station in Zambia, became the newest DTMA project drought screening site on 29 September 2010. The site represents significant investments by both CIMMYT (through the DTMA Project) and the Zambian Agricultural Research Institute (ZARI) and was selected because it has well defined dry and rainy seasons, uniform soils, and a reliable irrigation source. The site was inaugurated by Zambia's Deputy Minister of Agriculture, Enoch Embebe, and the participants included farmers, local leaders, students, the surrounding community and CIMMYT staff – Boddupalli Prasanna, Global Maize Program Director; Wilfred Mwangi, Associate Director and DTMA Project Leader; and maize breeders John MacRobert and Amsal Tarekegne. During the event, participants experienced firsthand the site's managed drought screening activities by viewing ongoing CIMMYT and ZARI drought trials. The site will enhance the DTMA Project's efforts of developing DT maize in southern Africa.

Ethiopia, Kenya, Zambia, and Zimbabwe win regional DTMA excellence awards

To promote excellence and team work among national DTMA partners, the project awards the best teams in DT maize breeding and technology dissemination. In 2010, in southern Africa, Zimbabwe won the best breeding team award, while Zambia won the best technology dissemination team award. In eastern Africa, Kenya won the best technology dissemination team award with Ethiopia winning the best breeding team award for the fourth time running. We congratulate all the teams for their concerted efforts to develop and provide improved drought tolerant varieties to farmers in their region!



Wilfred Mwangi, DTMA Project Leader presenting the DTMA Breeding Team Award to the Zimbabwe team

Promoting the DTMA Project through radio and video

"Drought-tolerant maize - high yielding and affordable"

In September and October 2010, Wilfred Mwangi, DTMA Project Leader, and Dellings Phiri, Managing Director, Seed Co Malawi were interviewed by radio journalists in Kenya and Malawi on the emerging importance of drought tolerant open pollinated maize varieties, especially for smallholder farmers. Following is a short introduction to the interview:

For subsistence and smallholder farmers, buying improved maize seed, such as hybrid varieties, is a gamble. If rains fail, they can lose not only their crop, but also the savings they have invested in the seed. In response, the Drought Tolerant Maize for Africa (DTMA) project is developing open pollinated varieties of maize which have shorter maturity and offer high yields. They are also cheaper for seed companies to multiply, and therefore can be sold at a more affordable price. Wilfred Mwangi of DTMA and Dellings Phiri of Seed Co Malawi discuss the new varieties, and their growing popularity.

The interview is available at <http://www.agfax.net/radio/detail.php?i=380>

"Maize is Life"

On 16 October 2010, during the World Food Prize, Jeff Raikes, the CEO of the Bill & Melinda Gates Foundation screened a short film on the DTMA Project's work in Tanzania and Malawi. The film was produced by the Gates Foundation.

Following is a short introduction to the film: *For Sharifa Numbi, a smallholder farmer in Tanzania, maize is life. Maize nourishes her family at every meal. It's also her main source of income, giving her money to send her children to school, visit the doctor, and put a roof over her head.*

The video is available at <http://www.gatesfoundation.org/agriculturaldevelopment/Pages/maize-is-life-video.aspx>

DTMA in the news

In August 2010, as part of the media promotion around the DTMA Ex-ante Impact Study, Wilfred Mwangi, DTMA Project Leader, gave interviews to several major international radio channels including the BBC –Focus on Africa; Voice of America; and Radio France International. Additionally, the DTMA Ex-ante Impact features were carried by outlets including Reuters, SciDev and many regional and local newspapers.

25-26 August 2010

1. Study predicts massive impact of drought tolerant maize in Africa, EurekAlert, *R&D Magazine* <http://www.rdmag.com/News/Feeds/2010/08/environment-study-predicts-massive-impact-of-drought-tolerant/>
2. New Corn Varieties Could Combat Famine During Drought, Michael Onyiego, Voice of America <http://www.voanews.com/english/news/environment/New-Corn-Varieties-Could-Combat-Famine-During-Drought-101487689.html>
3. Study Evaluates Use of Drought-Tolerant Maize in Africa, Staff, U.S. Global Health Policy <http://globalhealth.kff.org/Daily-Reports/2010/August/26/GH-082610-Maize-Study.aspx>
4. Drought tolerant maize to hugely benefit Africa: study, Tim Cocks, *Reuters Africa* <http://af.reuters.com/article/topNews/idAFJ0E67P01D20100826>
5. New Varieties of Drought-tolerant Maize Could Generate up to US \$1.5 Billion for African Farmers, Consumers, International Institute of Tropical Agriculture, AlphaGalileo <http://www.alphagalileo.org/ViewItem.aspx?ItemId=83621&CultureCode=en>

2 September 2010

6. New maize could prepare farmers for climate change, Busani Bafana, SciDev <http://www.scidev.net/en/news/new-maize-could-prepare-farmers-for-climate-change.html>

Others

October 2010

African governments urged to increase uptake of drought tolerant maize, Maina Waruru, *New Agriculturist* <http://www.new-ag.info/news/newsitem.php?a=1777>

November 2010

Drought-tolerant maize - high yielding and affordable
www.agfax.net/radio/detail.php?i=380
Radio interview on AgFax

13 November 2010

Drought Tolerant Maize Seeds Seen as Solution to Food Insecurity in Kenya, all of Africa <http://www.globalpressinstitute.org/global-news/africa/kenya/drought-tolerant-maize-seeds-seen-solution-food-insecurity-kenya-all-africa?page=2>

The Drought Tolerant Maize for Africa (DTMA) Project is being implemented jointly by CIMMYT and the IITA, and is funded by the Bill & Melinda Gates Foundation and the Howard G. Buffett Foundation. The project is part of a broad partnership also involving national agricultural research and extension systems, seed companies, non-governmental organizations (NGOs), community-based organizations (CBOs), and advanced research institutes, known as the Drought Tolerant Maize for Africa (DTMA) Initiative. Its activities build on longer-term support by other donors, including the Swiss Agency for Development and Cooperation (SDC), the German Federal Ministry for Economic Cooperation and Development (BMZ), the International Fund for Agricultural Development (IFAD), and the Eiselen Foundation. The project aims to develop and disseminate drought tolerant, high-yielding, locally-adapted maize varieties and to reach 30-40 million people in sub-Saharan Africa with these varieties in 10 years.