

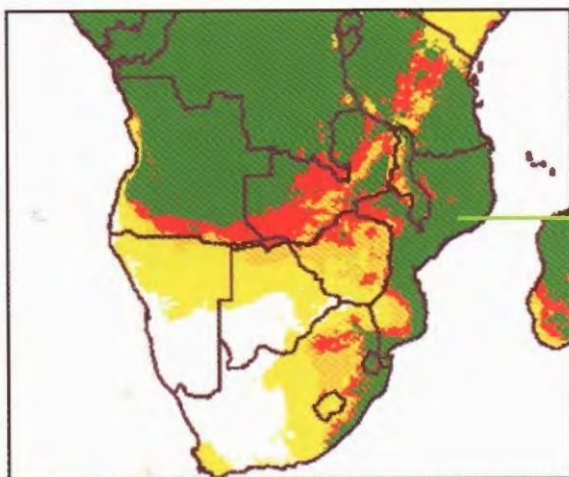
Choosing the Right Open-pollinated Maize Variety

Maize is grown throughout the SADC region. However growing conditions differ for rainfall, temperature, growing season length and the occurrence of diseases and pests. As a consequence, different maize varieties are recommended for different parts of the region.

After testing available open-pollinated varieties (OPVs) in trials under diverse conditions, we developed a guide that should help you to find the right OPV for your area.

Step 1

Determine on the map where you are and select the color of your area.



Step 1

I am from
Nampula so I am
in the green area



Step 2

Determine the maturity group you are interested in.

Early maturing variety: This variety does not need the entire rainy season to mature. If you plant it at the beginning of the rainy season, you can harvest it about one month before the rainy season ends. Alternatively, you can plant it late and still harvest it before the rainy season ends. In normal years, however, this variety may yield less than other varieties, because it grows for a shorter time.

Intermediate maturity variety: This variety also does not need the entire rainy season to mature. If you plant it at the beginning of the rainy season, you can harvest it about two weeks before the rainy season ends. Alternatively, you can plant it slightly late and harvest it at the end of the rainy season.

Ideal variety: This variety makes optimal use of the rainy season in your area to mature. Thus, you plant it at the beginning of the rainy season and harvest it at the end of the rainy season.

Late variety: You need to plant this variety very early with the first rains, so that it matures within the rainy season.

Step 3

Based on the color of your area (Step 1) and the maturity group you chose in Step 2, decide which variety group is appropriate for you, A, B, C or D.

	Yellow area	Orange area	Red area	Green area
Early maturing			A	A & B
Intermediate maturing		A	B	C
Ideal variety	A	B	C	D
Late maturing	B	C	D	
Usually not suited	C & D	D		

The ideal variety for the green area is from group D

Step 4

In the table below, choose the maturity group you are interested in. There are several varieties in this group. A color key is used to describe important characteristics of the varieties. Select the OPV that has the characteristics you like.

Variety	Origin	Maturity Group	Grain yield	Tolerance to			Disease resistance				Other traits			
				Drought	Low soils fertility	Acid soil	Maize streak virus	Gray leaf spot	Leaf blight	Rust	Ear rot	Husk cover	Lodg-ing	Grain texture
KATUMANI ST	Tanzania	A	3	3	5	3	2	4	3	2	2	2	4	SF/SD
MMV400	Zambia	A	4	5	5		2	4	4	2	1	1	2	SFlint
POOL 15 QPM	CIMMYT	A	4	5	5	3	2	3	4	2	3	3	2	Fflint
Pool 16 SR	Zambia	A	4	4	4	3	2	4	5	3	3	2	4	SD
ZM301	Botswana	A	3	3	3	2	1	5	5	4	3	3	4	SF/SD
ZM303	CIMMYT	A	2	3	2	5	2	2	4	2	3	3	3	SD
ZM305	CIMMYT	A	2	1	2	2	1	3	4	3	2	3	3	SF/SD
ZM423	CIMMYT	A	1	1	1	1	1	2	2	1	1	5	3	SF/SD
GRACE	Ecolink RSA	B	3	2	5		1	4	3	5	4	1	3	SF/SD
KAFULA	Malawi	B	3	3	3	2	4	4	4	3	5	2	3	SF/SD
KEP	Botswana	B	4	4	4	1	5	3	3	3	5	3	2	Dent
KITO ST	Tanzania	B	4	5	5		3	3	5	4	2	2	3	SF/SD
MATINDIRI	Malawi	B	4	4	3		4	2	3	2	4	4	3	Flint
MATUBA	SEMOG	B	4	5	3	4	1	5	3	2	2	2	3	SFlint
ZM421	CIMMYT	B	2	2	2	2	1	2	2	2	2	4	2	SF/SD
ZM521	CIMMYT	B	1	1	1	2	2	1	2	2	2	4	2	SF/SD
ZM523	CIMMYT	B	1	2	1	1	2	1	1	1	2	4	3	SD
CHITIBU	Malawi	C	3	4	3		3	4	3	3	5	2	5	SFlint
MASIKA	Malawi	C	2	2	3	5	2	4	3	2	3	3	3	SF/SD
Pop 10	Zambia	C	4	4	5	1	2	4	2	3	4	2	2	SFlint
SUNDWE	Malawi	C	4	5	5		2	3	2	3	5	2	4	SF/SD
TMV-1 SR	Tanzania	C	4	3	4		1	5	3	5	2	2	4	Flint
ZM611	CIMMYT	C	1	1	2	1	1	3	1	1	3	5	1	SF/SD
ZM621	CIMMYT	C	1	2	2	4	3	2	3	2	2	4	3	SF/SD
KAKHOMERA	Malawi	D	4	3	4		4	2	2	1	4	2	3	SF/SD
KILIMA SR	Tanzania	D	3	3	3		2	3	4	2	1	2	3	SFlint
OBATANPA QPM	Ghana	D	4	4	4	5	3	2	5	4	3	1	4	SD
Pop 25	Zambia	D	4	5	5	5	4	2	3	3	2	1	3	SF/SD
STAHA SR	Tanzania	D	4	5	4		1	3	5	3	5	3	3	SFlint
ZM623	CIMMYT	D	1	1	1	1	1	2	3	2	3	2	2	SD

Here are the OPVs in group D

What is the meaning of these groups?

At any given site, Group A would be earlier maturing than Group B, Group B earlier maturing than Group C, and Group C earlier maturing than Group D.

These colors and numbers mean

- 1 Very good for this trait
- 2 Good for this trait
- 3 Average for this trait
- 4 Poor for this trait
- 5 Very poor for this trait

Legend for grain texture

- F Flint
- SF Semi-flint
- SF/SD Semi-flint/semi-dent
- SD Semi-dent
- D Dent

Step 5

Enquire with the seed producers about the availability of seed.

Contact	Organization	Country	e-mail	Tel No	Fax No
Seed Companies (Regional representatives)					
Jerry Lambie	Seed-Co Int.	Botswana	lambie@batsnet.bw	267 3911 658/906	267 3311 830
Jose Carlos	SEMOC	Mozambique		258 1 460044/141	258 1 460186
Brian Lever	Advance Seed	South Africa	brian@popcorn.co.za	27 11 7625261	27 11 7624111
Andrew Taylor	Capstone Seed	South Africa	capstone.seed@nitrossoft.co.za	27 33 3304474	27 33 3303252
Grace Green	Ecolink	South Africa	oca.link@mweb.co.za	27 13 7512120	27 13 7513281
Pieter Herbst	Link Seed	South Africa	linkseed@linkseed.co.za	27 33 4171494	27 33 4131057
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Disclaimer: The OPVs were rated based on collaborative trials conducted annually by national agricultural research programs, non-governmental organizations, private seed companies and CIMMYT across southern and eastern Africa over 1999-2002. Results are based on a minimum of two years' data. The information in this publication is based on results available at the time of publication. The varieties may perform differently if grown at other sites, or under different conditions, and certain varieties may be also produced by other seed producers.