

# Step-by-Step manual for “Minimum SSR Marker Finder for Guinea Yam”



“Minimum SSR Marker Finder for Guinea Yam” is web-application specially designed to nominate a minimum set of SSR markers interlinked with “SSR polymorphism database”.

To use “Minimum SSR Marker Finder for Guinea Yam”, please follow below 4 steps to find ideal SSR marker set to identify your varieties/lines.

## 1. Agree with our “Terms of Use”

① Please go through our “Terms of Use” for “Minimum SSR Marker Finder for Guinea Yam”.

② If you could agree, please check the bottom on “I agree to the “Terms of Use” and click “Approve”.

## 2. Nominate the varieties/lines

① Check the box of the varieties/lines potentially cause mechanical mixture in your premises/fields. You can choose minimum 2 to maximum 20 materials for this analysis.

② To search the materials, please use sorting function.

Type:	Breeding line, Germplasm, Local variety, Registered variety etc	
Source:	Name of institute/location the material collected	e.g. IITA GRC, etc.
Country:	Name of country the material originally collected	e.g. Ghana, Nigeria, etc.

Minimum SSR Marker Finder for Guinea Yam

**how to use**

- Check the boxes to select the varieties/lines (minimum 2, maximum 30)
- Use drop-down list to "show selected" varieties/lines for your confirmation
- Click [Analyze] to nominate minimum set of SSR markers

Show all **3** 4

Analyze

Show **10** entries 2 Search: 3

Genotype	Type	Source	Country	Note
<input type="checkbox"/> TDr-1478A	IITA GRC	IITA Germplasm collection	Togo	*****
<input type="checkbox"/> TDr-1489A	IITA GRC	IITA Germplasm collection	Togo	Selected as DrDRS002
<input checked="" type="checkbox"/> TDr-1491B	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1492C	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1495A	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1499A	IITA GRC	IITA Germplasm collection	Togo	Selected as DrDRS004
<input type="checkbox"/> TDr-1505A	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1508A	IITA GRC	IITA Germplasm collection	Togo	Selected as DrDRS006
<input type="checkbox"/> TDr-1510A	IITA GRC	IITA Germplasm collection	Togo	Selected as DrDRS007
<input type="checkbox"/> TDr-1513A	IITA GRC	IITA Germplasm collection	Togo	*****
Genotype	Type	Source	Country	Note

Showing 1 to 10 of 457 entries 5 rows selected

Previous **1** 2 3 4 5 ... 46 Next

3 You can search varieties/lines with keyword.

4 To confirm your selected material, please select [show selected] in the selection menu.

### 3. Click "Analysis"

Minimum SSR Marker Finder for Guinea Yam

**how to use**

- Check the boxes to select the varieties/lines (minimum 2, maximum 30)
- Use drop-down list to "show selected" varieties/lines for your confirmation
- Click [Analyze] to nominate minimum set of SSR markers

Show selected 3

Analyze 2

Show **10** entries 2 Search: 3

Genotype	Type	Source	Country	Note
<input checked="" type="checkbox"/> TDr-1491B	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1492C	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1495A	IITA GRC	IITA Germplasm collection	Togo	*****
<input checked="" type="checkbox"/> TDr-1499A	IITA GRC	IITA Germplasm collection	Togo	Selected as DrDRS004
<input checked="" type="checkbox"/> TDr-1508A	IITA GRC	IITA Germplasm collection	Togo	Selected as DrDRS006
Genotype	Type	Source	Country	Note

Showing 1 to 5 of 5 entries (filtered from 457 total entries) 5 rows selected 1

Previous **1** Next

1 Please confirm your selection. Number of varieties/lines you selected are displayed in the bottom part of table.

2 Using drop down list, you can change the number of varieties/lines displayed in one page,

3 Once the selection is OK, please click "Analysis" button.

### 4. Select ideal SSR marker set

Minimum Yam SSR Marker Result

Print Out ④

Number of marker set: 2

List of marker set:

YM8, YM54  
 YM8, YM61

①

Variety	TDr-Amula	TDr-1489A	TDr-1491B	TDr-1513A	TDr-1492C	TDr-1499A	TDr-1510A
YM7	227/227	218/182	218/206	218/182	227/227	227/206	218/182
YM8	154/154	170/170	154/154	144/144	158/158	150/150	144/144
YM16	156/156	156/156	156/156	156/156	156/156	156/156	156/156
YM18	276/276	274/274	276/276	276/276	276/276	292/292	266/266
YM25	255/255	263/263	269/219	255/255	255/255	269/219	249/249
YM27	237/237	237/237	237/237	237/237	237/237	237/237	249/237
YM28	363/363	363/342	384/384	387/363	363/363	363/363	363/363
YM30	236/236	236/236	236/236	236/236	236/236	236/236	236/236
YM31	218/218	224/224	227/218	242/218	218/218	227/218	218/218
YM43	184/184	184/184	184/184	184/184	184/184	202/184	184/184
YM44	152/152	152/152	152/152	142/142	152/152	152/142	152/152
YM49	0/0	135/135	135/135	135/135	135/135	135/135	135/135
YM50	258/258	246/246	258/246	246/246	258/258	258/258	258/258
YM54	200/178	178/156	164/156	178/156	200/178	164/164	200/178
YM61	234/216	225/215	255/225	225/215	234/216	225/216	234/216
YM69	235/235	235/235	235/235	235/235	235/235	235/235	235/235

③

- ① Check the number of nominated marker sets. In this example, 2 combinations of 2 SSR markers are nominated as potential minimum SSR marker set.
- ② ③ The allele size information of 16 SSR markers for all selected varieties are listed as table for your marker (set) nomination.
- ④ Click “Print Out” button for your printing or saving in PDF.

## Questions and Problems

If you have any question/problem on your use of this service, please first refer “Limitation” section of **“Step 1”** and use our **“Inquiry form”** to communicate with us.

## Quick link

### Step 1



[https://www.jircas.go.jp/en/database/yam\\_toolkit/step1](https://www.jircas.go.jp/en/database/yam_toolkit/step1)

### Inquiry form



[https://www.jircas.go.jp/en/database/yam\\_toolkit/inquiry](https://www.jircas.go.jp/en/database/yam_toolkit/inquiry)