'NARITA 4' is a high-yielding and disease-resistant hybrid that is related, through its female grandparent, to a group of cooking and beer bananas called East African highland bananas (EAHB). 'NARITA 4' is named after NARO and IITA, the institutes that jointly developed the NARITA hybrids[1].

Two crosses were performed to obtain 'NARITA 4'. The triploid EAHB cultivar 'Enzirabahima' was crossed with a wild source of disease resistance to produce a tetraploid. This tetraploid was then crossed with an improved diploid to produce the triploid hybrid 'NARITA 4' (see Breeding strategy below).

'NARITA 4' has been tested on station in Uganda[2] and is being evaluated in a broader range of end-users environments (including farmers’ fields), to assess its potential for adoption by farmers and consumers[3]. Its primary use is as a cooking type.

Contents

- Breeding strategy
- Agronomic performance
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Breeding strategy

'BARITA 4' is a secondary triploid obtained by crossing a disease-resistant tetraploid (660-K1) with an improved diploid (9128-3)[4].

The tetraploid female parent 660-K1 was obtained by crossing the triploid EAHB cultivar.
'Enzirabahima' and Calcutta 4, a genebank accession of the diploid wild species *Musa acuminata ssp. burmannica*, which provided a copy of the so-called A genome. Calcutta 4 provided the resistance to black leaf streak.

The diploid male parent 9128-3 (whose code used to be preceded by TMBx, for tropical *Musa* bananas[5]) had been obtained by crossing two diploid cultivars: ‘Tjau Lagada’ and ‘Pisang Lilin’.

**Agronomic performance**

Data on the agronomic performance of NARITA 4 in various field trials.

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mean plant height at flowering (cm)</td>
<td>293.0</td>
<td></td>
</tr>
<tr>
<td>Mean pseudostem girth at flowering (cm)</td>
<td>49.0</td>
<td></td>
</tr>
<tr>
<td>Mean pseudostem girth at 100 cm height (cm)</td>
<td></td>
<td>50.7±1</td>
</tr>
<tr>
<td>Mean time from flowering to harvest (days)</td>
<td>156.9</td>
<td></td>
</tr>
<tr>
<td>Mean bunch weight (kg)</td>
<td>20.5</td>
<td>16.7±0.8</td>
</tr>
<tr>
<td>Mean number of hands</td>
<td>8.3</td>
<td>8.6±0.2</td>
</tr>
<tr>
<td>Mean number of fingers</td>
<td>168.6</td>
<td></td>
</tr>
<tr>
<td>Mean number of fingers/hand[^c]</td>
<td></td>
<td>8.7±0.1</td>
</tr>
<tr>
<td>Mean fruit circumference (cm)</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Mean fruit length (cm)</td>
<td>18.4</td>
<td></td>
</tr>
<tr>
<td>Mean number of functional leaves at flowering</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>Mean number of functional leaves at harvest</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Mean height of tallest sucker at flowering (cm)</td>
<td>246.6</td>
<td></td>
</tr>
<tr>
<td>Mean height of tallest sucker at harvest (cm)</td>
<td>298.0</td>
<td></td>
</tr>
<tr>
<td>Mean youngest leaf spotted at flowering</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Mean youngest leaf spotted at harvest</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Survival rate (%)</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

[^a]: Data from 10 plants evaluated over three crop cycles in Namulonge, Central Uganda.
[^b]: Data from three sites in Rwanda (15 plants/site). The plants were evaluated over two crop cycles.
[^c]: Second lowest hand of the bunch.

**Reaction to diseases and pests**

The scores for number of functional leaves and youngest leaf spotted at flowering and harvest indicate good resistance to black leaf streak.
References

1. IITA press release on the first ever high-yielding matooke hybrids.
2. Preliminary results of NARITA hybrids trials show high yield potential to increase banana production
3. Website of the Breeding Better Bananas project.

See also on this website

Photos of NARITA hybrids in Musarama
Articles on NARITA hybrids in Musalit
Musapedia pages on NARITA hybrids:
Kabana 6H
Kiwangaazi
M9
NARITA 1
NARITA 10
NARITA 11
NARITA 12
NARITA 13
NARITA 14
NARITA 15
NARITA 16
NARITA 17
NARITA 18
NARITA 19
NARITA 2
NARITA 20
NARITA 21
NARITA 22
NARITA 23
NARITA 24
NARITA 25
NARITA 26
NARITA 27
NARITA 3
NARITA 4
NARITA 5
NARITA 6
NARITA 7
NARITA 8
Musapedia pages on improved materials:
BITA-2
BITA-3
BRS Platina
CRBP-39
FHIA-01
FHIA-02
FHIA-03
FHIA-17
FHIA-18
FHIA-20
FHIA-21
FHIA-23
FHIA-25
FLHORBAN 916
FLHORBAN 920
Formosana
GCTCV-105
GCTCV-119
GCTCV-218
Goldfinger
Kabana 6H
Kiwangaazi
M9
NARITA 1
NARITA 10
NARITA 11
NARITA 12
NARITA 13
NARITA 14
NARITA 15
NARITA 16
NARITA 17
NARITA 18
NARITA 19
NARITA 2
NARITA 20
NARITA 21
NARITA 22
NARITA 23
NARITA 24
NARITA 25
NARITA 26
NARITA 27
NARITA 3
External links

To browse accession-level information on 'NARITA 4' in MGIS
Official website of Uganda's National Agricultural Research Organization, NARO and its banana research program

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