'NARITA 7'

'NARITA 7' 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 7' is named after NARO and IITA, the institutes that jointly developed the NARITA hybrids\(^1\). The improved hybrid was originally called 'M9' (M stands for Matooke, a local name for EAHB), and in 2010 was released in Uganda as 'KABANA 6H'. The name KABANA is given to material released by the NARO banana programme (KA stands for Kawanda, BA for banana and NA for NARO). 'Kabana 6H' is also the name under which it was added to the national cultivar list\(^2\).

Farmers participating in an on-farm participatory trial conducted in Central Uganda before the cultivar was released had named it 'Kiwangaazi'. In the local Luganda language, Kiwangaazi means "long lasting". The name refers to the cultivar not needing as frequent replanting as the other local cultivars because it is generally better at withstanding high pest and disease pressure\(^2\).

Two crosses were performed to obtain 'NARITA 7'. The triploid EAHB cultivar 'Nakawere' 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 7' (see Breeding strategy below).

'NARITA 7' has been tested on station in Uganda\(^3\) 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\(^4\). Its primary use is as a cooking type.

Contents

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Ploidy level
3x

Genome group
AAA

Status
Synthetic hybrid

Breeding institutes
NARO and IITA

Breeder's code
124195-13

Pedigree
'Nakawere' (AAA), *Musa acuminata* ssp. *burmannica* (Calcutta 4), 'Sinwobogi' (AA), 'Tjau Lagada' (AA), *Musa acuminata* ssp. *malaccensis* and 'Guyod' (AA)

ITC code
ITC1791
Breeding strategy

‘NARITA 7’ is a secondary triploid obtained by crossing a disease-resistant tetraploid (1201K-1) with an improved diploid developed by FHIA (SH3217)\(^5\).

The tetraploid female parent 1201K-1 was obtained by crossing the triploid EAHB cultivar ‘Nakawere’ 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 SH3217 was the product of a cross between two improved diploids: SH2095 and SH2766. The parents of SH2095 were the products of a cross between ‘Sinwobogi’ (AA) and ‘Tjau Lagada’ (AA) and of a cross between *Musa acuminata* ssp. *malaccensis* and ‘Guyod’ (AA). The parents of the improved diploid SH2766 were ‘Tjau Lagada’ (AA) and the product of a cross between *Musa acuminata* ssp. *malaccensis* and ‘Guyod’ (AA).

Morphological characteristics

Contrary to its EAHB parent, whose upper leaf surface is dull, Kiwangaazi’s is shiny. Its fruit are also cucumber shaped, contrary to the straight fruits of Nakawere. Its pulp colour is dark yellow and soft, to Nakawere’s yellow and firm pulp\(^2\).

Agronomic performance

The following agronomic data were collected during a preliminary yield trial carried out by IITA and NARO at Namulonge in Central Uganda\(^3\):

<table>
<thead>
<tr>
<th>Traits</th>
<th>NARITA 7*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant height at flowering (cm)</td>
<td>355.6</td>
</tr>
<tr>
<td>Pseudostem girth at flowering (cm)</td>
<td>56.8</td>
</tr>
<tr>
<td>Time from flowering to harvest (days)</td>
<td>123.9</td>
</tr>
<tr>
<td>Bunch weight (kg)</td>
<td>21.3</td>
</tr>
<tr>
<td>Number of hands</td>
<td>8.7</td>
</tr>
<tr>
<td>Number of fingers</td>
<td>143.2</td>
</tr>
<tr>
<td>Fruit circumference (cm)</td>
<td>13.5</td>
</tr>
<tr>
<td>Fruit length (cm)</td>
<td>18.6</td>
</tr>
<tr>
<td>Number of functional leaves at flowering</td>
<td>10.2</td>
</tr>
<tr>
<td>Traits</td>
<td>NARITA 7*</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Number of functional leaves at harvest</td>
<td>4.4</td>
</tr>
<tr>
<td>Height of tallest sucker at flowering (cm)</td>
<td>270.9</td>
</tr>
<tr>
<td>Height of tallest sucker at harvest (cm)</td>
<td>318.2</td>
</tr>
<tr>
<td>Youngest leaf spotted at flowering</td>
<td>8.4</td>
</tr>
<tr>
<td>Youngest leaf spotted at harvest</td>
<td>3.1</td>
</tr>
<tr>
<td>Survival rate (%)</td>
<td>100</td>
</tr>
</tbody>
</table>

* Data are averages for 10 plants evaluated over three crop cycles.

**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.
3. Preliminary results of NARITA hybrids trials show high yield potential to increase banana production
4. Website of the Breeding Better Bananas project

**See also on this website**

Photos of NARITA hybrids in Musarama
Articles on NARITA hybrids in Musalit
Local names for 'NARITA 7' in the cultivar checklist
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
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
External links

To browse accession-level information on 'NARITA 7' in MGIS

Official website of Uganda's National Agricultural Research Organization, NARO and its banana research program

M-9 banana variety scores with farmers, consumers in the 9 March 2016 issue of the Daily Monitor

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The original document is available at http://www.promusa.org/NARITA+7