Some interesting cassava cultivars:

UnB 703

Nagib M. A. Nassar, Nayra N. Bomfim, Rayssa G. R. Melo, João Lucas Duarte e Sabrina C. de Oliveira

Cassava Breeding Program, Universidade de Brasília, Brazil, DF

Corresponding author: Nagib Nassar

E-mail: nagibnassar@geneconserve.pro.br

Geneconserve 13 (51): 01-03

Abstract

This cultivar is a periclinal chimera, which has the epidermis constituted by M. esculenta Crantz, and internal tissues constituted by Manihot fortalezensis Nassar et al. It is a very vigorous plant, easily propagated vegetively by cuttings. It produces edible and huge cylindrical roots reaching 14 Kg per plant.

Key-words: periclinal chimera, chromosome number, diploid, triploid

Introduction

UnB 703 is a cassava periclinal chimera constituted by two Manihot species: M. esculenta on epidermis and internal tissues from M. fortalezensis (Nassar et al., 2011). This variety was synthesized experimentally by grafting rootstock M. fortalezensis with scion of M. esculenta cultivar UnB 032, cutting fusion region followed by treating with naphthalene acetic acid solution 10 ppm for 7 days period to induce adventitious chimeral shoots on the fusion region between scion and stock, as described by Nassar and Bomfim (2013). This variety presents a very vigorous growth, when compared to parents under the same conditions. It is composed by a triploid internal tissues and a diploid epidermis (Bomfim and Nassar, 2014).

Cultivar botanical description

This description follows the style of Rogers and Appan (1973), and Rogers and Fleming (1973): Semi-erect shrub ca. 4m (Figure 1A), with latex, 1-2 central stems from the same base, 2-5 cm diameter, silver young stem (Figure 1B), light brown mature stem (Figure 1 C), purplish green apical leaf and apical branches. Tetragonal apical stems, semi-decumbent dichotomously and trichotomously branching. Enlarged nodes and stipels scars. Leaves palmately 1 to 7 lobes (Figure 1D), brevi-peltate, deep green adaxial and abaxial leaf faces. Central lobes obovate with apiculate apex; entire margins to slightly undulating. Glabrous, simple, and caduceus stipules more than 2 cm long. Red petioles, 10-40 cm long. Inflorescence in panicle with 2-3 lateral branches, pistillate flowers with green petals. Ovaries with slightly red wings (Figure 1E). Yellow disc with red base. Globose fruits with slender straight wings in whole fruits (Figure 1F), and with peduncle forming a globe near to the fruit. Tuberous cylindrical roots, reaching 90 cm long and predominantly 5 cm diameter (Figure 1G). Root periderm light cream, without constrictions.
Figure 1 Morphological characters of UnB 703. A: Semi-erect shrub ca. 4m, B: Silver young stem, C: Light brown mature stem, D: Leaves palmately 1 to 7 lobes, with obovate central lobe. E: Ovaries with slightly red wings and yellow disc with red base. F: Globose fruits with slender straight wings (right), and fruits of the parental species Manihot esculenta (Cassava variety UnB 032) (left). G: Tuberous cylindrical roots, with light cream periderm, without constrictions.
References


