Some interesting cassava cultivars:

7 – UnB 338

Nagib M. A. Nassar, J. Moises Mendoza and Naian Sano

Cassava Breeding Program, Universidade de Brasilia, Brazil

Correspondence author: nagnassa@rudah.com.br

Geneconserve: 11(43) 15:18 (2012)

Abstract

This cultivar was selected from progeny of the interspecific hybrid *Manihot oligantha* × cassava. It shows high protein content reaching 6% in case of evaluation by Kildahl. It posses also essential amino acid Triptofane, Arginin and Methionin which are not found or very low in cassava. It produces 1.5–2 kg root per plant after one year of plantation using distance 70 × 70 cm, HC content ranges from 110–130 mg per kilogram. It is used for flour consumption. Roots resist post harvest deterioration.

Key words

Protein content, cassava, amino acid, interspecific hybrid, *Manihot oligantha*

Introduction

Cassava cultivar UnB 338 was selected from progeny of interspecific hybrid ICB 300 × *Manihot oligantha* Pax. It possesses 6% protein content plus essential amino acids such as Triptofane, Argginin and Methionine who are not found in cassava (Nassar et al., 2008). The progenitor root has 4.5 % protein (Nassar and Dorea, 1982). Both of progenitor and this cultivar are used for flour consumption. The very high protein percentage of this cultivar indicates its potentiality for breeding high protein content cultivars in further generations. The low productivity of root is associated with difficulty of stem cuttings germination. The latter character apparently came from the wild and strongly associated with high protein content, probably due to a strong chromosome linkage that is difficult to break within few generations. This cultivar can be obtained from the Estação biológica da universidade de Brasília. Germplasm was provided to Centro Nacional pesquisa de mandioca e fruticultura EMBRAPA, Cruz das Almas.
Botanical description

This characterization follows the botanical description of *Manihot* spp. according to Rogers and Appan (1973), and Rogers and Fleming (1973). Shrub semi-erect, ca. 1.5–2.3 m tall (Fig. 1A). 3–5 semi erect branches leaving the same basal point, diameter 2.5–3 (-6) cm; Stems alternate in central branches, di-trichotomous and decumbent in floral part, young stems green or low reddish and brown-grey in mature, with abundant latex; mature stems with prominent petiole scars (Fig. 1C) cortex yellow-greenish and xylem cream. Leaves membranaceous alternates, alive-green adaxial face and strong green-glauco in abaxial face, glabrous in both faces; variably palmate-lobate, (3-) 5–7, narrowly oblongo-lanceolate lobes (Fig. 1D), rare 2-lobate and all leaves in inflorescence stems simple (Fig. 1B); apex acuminate to attenuate; petioles cylindric (5-) 10–14 (-22) cm long, base smoothly attachment, green or some time low reddish, little decumbent when matures, glabrous; stipules caduceus, entire or moderate bipartite linear lanceolate to attenuate, (8-) 12–17 (32) mm long, clear green; apical leaves and end branches live green or some time light-reddish. Inflorescence, medium terminal panicle with 2–3 raceme leaving same basal point, 10–17 long; bracts and bracteoles caduceus, obsoletes <1 mm; pistilate flowers, yellow-green and cream-green staminate flowers. Fruit subglobose to cylindrical, glabrous, with small and purplish pigmented wings; peduncle cylindrical or light conical, strong purple. Seed and caruncle not observed. Roots, cylindrical and conical, numerous (Fig. 1E, F), ca. 7–22 cm long and 4–6 cm diameter, usually with small peduncle, some with smoothly constrictions; dark brown periderm; cortex and pulp white (Fig. 1G), oxidation in post-harvest very slow.

**References**

