Some interesting cassava cultivars

3-UnB 310

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Abstract

UnB 310 is a selection from progeny of ICB 300 which is a hybrid between cassava with Manihot oligantha Pax & Hoff. It is a triploid having chromosome number 2n=54. This variety is extremely vigorous in vegetative growth. It has very high productivity reaching 25 kg per plant in the third year of planting, compared to common cassava yields which 5-10 kg per plant. It combines to high productivity, very low toxicity of 13 mg/Kg de HCN compared to 200-500 mg/Kg HCN in common cassava.

Keywords: Triploid, Low HCN, root production

Introduction

This cultivar is a selection from progeny of the polyploid hybrid ICB 300 which originated from crossing cassava with Manihot oligantha Pax (Nassar and Dorea, 1982). Like ancestor, it is rich in antioxidant lutein, (Nassar et al., 2007).

UnB 310 is a triploid having chromosome number 2n=54. It is extremely vigorous in vegetative growth. It has very high productivity reaching to 25 kg per plant in the third year of planting, compared to common cassava yields which 5-10 kg per plant. It combines to high productivity very low toxicity of 13 mg/Kg de HCN compared to 200-500 mg/Kg HCN in common cassava.

It grows up to semi erect shrub reaching 3 m tall, produces 3–4 erect branches every basal point with, diameter of 4–5 cm. Stems are glabrous; trichotomous and decumbent; Younger stems are light green and light brown when mature. They produce latex moderately. Its mature stems have scars. Its leaves are membranaceous in both faces.
Cultivar 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. 3 m tall (Fig. 1A). 3–4 erect branches leaving the same basal point, diameter 4–5 cm, glabrous; trichotomous and decumbent, young stems light green and light brown in mature, with latex; mature stems with moderate scars (Fig. 1B) cortex green-reddish and xylem cream. Leaves membranaceous alternates, alive-green adaxial face and abaxial face, glauco-green, glabrous in both faces; variably palmate-lobate, (3-) 4–9 oblongo-lanceolate lobes (Fig. 1C), rare simple leaves in inflorescence basin; apex acute to long acute; cylindric petioles, base smoothly attachment, frequently reddish to purple, decumbent when matures; stipules caduceus entire or strongly bipartite linear lanceolate, 13–18 mm long, glabrous, leaf retention better than average retention.; apical leaves and end branches green-reddish to purplish. Medium terminal panicle inflorescence, 10–15 cm long; bracts and bracteoles caducous, laminar, ca. 1–1.3 x 0.5–0.7 cm; pistilate flowers, yellow-cream and green staminate flowers. Fruit globose, glabrous, with small and purplish pigmented wings and cylindrical green peduncle. Seed and caruncle not observed. Roots numerous and vigorous cylindrical (Fig. 1D, E), ca. 50 – 80 cm long and 8–15 cm diameter, without peduncle, with smoothly constrictions; dark brown periderm, cream cortex and pulp (Fig. 1D).
Figure 1: *Manihot esculenta* Crantz cultivar UnB 310. A: habit – Shrub semi-erect, with trichotomous and decumbent branching. B: Light brown mature stems with moderate scars. C: Simple leaves, variable palmate-lobate of 1 to 9 lobes. D e E: Root, numerous and vigorous, 50-80 cm long.
References


