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Report of new cultivar

INIVIT B 65-2013 new double purpose sweet potato cultivar

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ABSTRACT

The INIVIT B 65-2013 is a double purpose sweet potato cultivar, which combines its high yield of tuberous roots with an abundant foliar development. It achieves yield of fresh foliage of 70 t ha^{-1} with 12.7 % of dry matter and 13.2 % of crude protein at 85 days after planting. Due to its characteristics it can be exploited with a double purpose: human food and livestock. In addition, it has a greater economic impact and profitability with respect to other commercial cultivars.

Key words: breeding, foliage, yield, profitability

INTRODUCTION

Sweet potato (*Ipomoea batatas* (L.) Lam.) Plays an important role in feeding the Cuban population. The National Genetic Improvement Program (PMG) of this crop in Cuba began in 1972, at the Tropical Food Research Institute (INIVIT). Among the most important achievements is the release of 18 commercial sweet potato cultivars, including: INIVIT BS-16 (Biofortified rich in vitamin A), INIVIT B 98-3 (tolerance to *Cylas formicarius* Fab.) INIVIT B2-2005 (High yield, genetic stability and high culinary quality), INIVIT B 50

(tolerance to drought and precocity) and others such as INIVIT BM 90 (high anthocyanin content). These cultivars gradually replaced the traditional ones. Today they occupy 95 % of the area dedicated to this crop in Cuba.

An interesting aspect that has been taken into account in recent years in the PMG is the dual purpose of some cultivars, which in addition to the tuberous root, fresh foliage becomes especially important for the pig and livestock industry. The cultivar INIVIT B 65-2013 combines its high yield of tuberous roots with abundant foliar development. Reaches fresh foliage yield of 70 t ha^{-1} with 12.7 % dry matter and 13.2 % crude protein at 85 days after planting. These characteristics make the INIVIT B 65-2013 an ideal cultivar to be released for dual purpose exploitation, among peasants and national producers.

Parentals and pedigree

In 2007 a polycrossing was carried out with 28 inter-compatible genotypes of high forage production. 23 families of half-brothers were formed with the resulting progenies. After six years, the cultivar INIVIT B 65-2013 was selected from family # 9 (INIVIT B2-2005, female parent).

Description of the cultivar

Mature Leaf Size: Large

Predominant color of tuberous root skin: Red

Predominant color of tuberous root mass: Pale yellow

Dry matter of tuberous roots: 25.4 %

Harvest cycle: 120 days

Potential yield of tuberous roots: 65 t ha^{-1}