



# Report of new cultivar INCA-MORENA, A NEW PURPLE SKIN POTATO VARIETY FOR FRESH CONSUMPTION

## Informe de nuevo cultivar INCA-Morena, una nueva variedad de papa de piel morada para consumo fresco

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**ABSTRACT.** The breeding program of potato (*Solanum tuberosum* L.) in Cuba allows the selection of new varieties adapted to the current market demands and changes that cause climate variations characteristics. A new variety was obtained from 2005-2006 campaign using traditional methods of hybridization-selection through Cuban clons (14-52-93x11-18-96). The new variety show two different characteristics; purple red skin and long stem under 70 cm. Purple skin potato variety has been reported first time in the country with high potential yield and tolerant to common scab (*Streptomyces scabies*) and the early blight (*Alternaria solani*) fungus.

*Key words:* clons, breeding, potato, variety

### INTRODUCTION

The current crop improvement programs of potato (*Solanum tuberosum* L.) worldwide leverage primarily tetraploid level to develop new progenies. This level is the most widely used, the possibilities offered to get offspring with high production levels without backcrosses to set specific characters. Genetic variability that occurs during crosses between parental tetraploid is extremely high and various selection cycles needed to break the linkage of genes coding for desired characters. Genotypes obtained can be used as progenitors for new progeny with desirable traits for consumption or industrial processing and, thus, obtain progeny containing genes for pest resistance, high yield potential and internal tuber quality. The range presented is the result of crossbreeding between two Cuban clones, selected from its high flowering and the combination of desired attributes for fresh consumption, conservation in refrigerated chambers and industrial quality.

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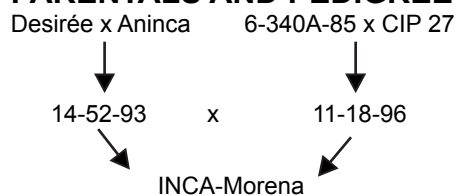
**RESUMEN.** El programa de mejoramiento genético de la papa (*Solanum tuberosum* L.) en Cuba permite la selección de nuevas variedades con características adecuadas a las exigencias actuales del mercado y los cambios que originan las variaciones del clima. La obtención de la nueva variedad comenzó en la campaña 2005-2006, mediante el método tradicional de hibridación-selección de dos clones cubanos (14-52-93x11-18-96). Esta variedad se distingue del resto de las obtenidas en el país en el color morado de su piel y la longitud del tallo, por encima de 70 cm. Se obtiene por primera vez en el país una variedad con tubérculos de piel morada, buen comportamiento para el consumo fresco, alto potencial de rendimiento y tolerancia en campo a la sarna común (*Streptomyces scabies*) y al tizón temprano (*Alternaria solani*).

*Palabras clave:* clones, mejoramiento, papa, variedad

### VARIETY DESCRIPTION

The INCA-Morena variety is a semi-inclined, compact plant, with open and dissected leaves. It presents two to three stems per plant with a length ranging between 75 and 80 cm, high anthocyanin content and with presence of hair or trichomes. The shape of tubers is oblong oval. It produces between eight and nine tubers per plant, very uniform. The tuber skin is purple and its mass is creamy white. The depth of its eyes goes superficial to half. It is characterized by a dry matter content of between 16,5 and 17,5 %. Its growth cycle is half the range from 85-90 days. The average total of yield in the past seven seasons is 36,8 t ha<sup>-1</sup> with potential exceeding 44 t ha<sup>-1</sup>. It is tolerant to early blight (*Alternaria solani* L.) (level 3) and common scab (*Streptomyces scabies*), with minor damages in evaluated campaigns (levels 1 and 2 on the scale).

#### PARENTALS AND PEDIGREE



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