



Report of new varieties

JOSÉ LP-20, NEW RICE CULTIVAR FOR LOW WATER AND FERTILIZER SUPPLIES

Informe de nuevas variedades

José LP-20 nuevo cultivar de arroz (*Oryza sativa* L.) tolerante a bajos suministros de agua y fertilizantes

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ABSTRACT. A new middle rice cultivar nominated José LP-20 was obtained in Unidad Científico Tecnológica de Base de los Palacios (UCTB), belonging to the National Institute of Agricultural Sciences (INCA). It presents excellent features in terms of grain yield, milling quality and pests resistance, as well as a good behavior to low water and fertilizer supplies conditions. With this new cultivar the UCTB hope to favor producers from rice farmer cooperative sector.

Key words: rice, hybridization, cultivars

RESUMEN. En la Unidad Científico Tecnológica de Base de los Palacios (UCTB), perteneciente al Instituto Nacional de Ciencias Agrícolas (INCA), se obtuvo un nuevo cultivar de arroz de ciclo medio denominado José LP-20, obtenido mediante hibridaciones, con excelentes características en cuanto a rendimiento de grano, calidad molinera y resistencia a plagas, así como un buen comportamiento en condiciones de bajo suministro de agua y fertilizante. Con esta nuevo cultivar la UCTB espera favorecer a los productores de arroz del sector cooperativo campesino.

Palabras clave: arroz, hibridación, cultivares

INTRODUCTION

Rice (*Oryza sativa* L.) is the main food of the Cuban population, with a consumption of 72 kg per capita. However, it occurs only 50 % of the rice that the country needs to feed them, showing a substantial reduction in yields due to the effect of various biotic and abiotic factors, including the drought. The aim of this study is to disclose a new variety of rice half cycle, obtained in Cuba by hybridizations for conditions of low water and fertilizer.

DESCRIPTION

In the Scientific Technological Base Unit Los Palacios (UCTB) belonging to the National Institute of Agricultural Sciences (INCA) breeding program, whose main objective was to diversify the varietal composition of rice cultivation was conducted. Cultivar half cycle José LP-20 was obtained by employing simple hybridizations of Friendship-82/J-112 progenitors and further evaluation in higher yield trials. Studies in different parts of the Farmers Cooperative sector have shown a good performance of this cultivar. Among its most important features, tolerance to low supplies of water and nitrogen fertilizer stands.

Vigor	Very vigorous
Stem height (cm)	77
Predominant color of the leaf	Dark green
Pod color	Dark green
Erection of the flag leaf	Erect
Predominant color of the ligule	Whitish yellow
Ligule length (mm)	25
Ligule form	Cloven
Auricle color	Whitish yellow
Pubescence of the auricle	Pubescent
Glumes color	Light green
Glumes Length (mm)	2.5
Lemma and palea pubescence	Downy
Lemma and palea color	Haulm
Panicle density	Intermediate
Panicle length (cm)	28,5
Length of grains with shell (mm)	Long (10,4)
Width of grains with shell (mm)	Semispherical (2,8)
Weight of 1000 grains with shells (g)	Very high (31)
Filled grains per panicle	89
Lodging resistance	Resistant
Shattering resistance	Resistant
Potential yield of paddy rice (t ha ⁻¹)	Dry- 7,8 and Rain- 6,6
Integral rice %	89
Integer percentage	60
Fertile suckers m ²	420
Resistance to <i>Pyricularia grisea</i>	Resistant
Resistance to <i>Tagosodes orizicolus</i>	Resistant
Tillering capacity	Strong

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