

# Report of new varieties

## A NEW SHORT CYCLE RICE VARIETY: INCA LP-5

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### INTRODUCTION

Rice has been considered one of the most ancient plants, but it is not known with accuracy the era when the man began its spreading (1); it is furthermore the most widely cultivated cereal in the world, constituting the principal food for more than half the human population.

The great difference existing between the slow increase of rice production and the rapid increase of human population in the rice-consuming countries constitutes one of the most urgent nutritional problems to be solved and it is a constant preoccupation for the researchers in their endless mission from obtaining better varieties and greater production (2).

Cuba is not exempt from this problem; therefore, large efforts are devoted to conduct the National Program of Rice Breeding, in which our center is inserted and this variety constitutes a result of it.

### ORIGIN AND DESCRIPTION

This work intends to release a new short cycle rice variety, Indica and semidwarf type, obtained in Cuba, in "Los Palacios" Rice Research Station belonging to the National Institute of Agricultural Sciences, using hybridization as breeding techniques accomplished in 1987 between the varieties 2077 and CP<sub>1</sub>C<sub>8</sub> and subsequent selections by panicles until the F<sub>8</sub> generation, in which the phenotypic homocytosis was reached, that permitted its introduction to yield studies: one-year observational test and two-year regional tests.

This new variety is characterized by a very vigorous material (Table I), that permits it to compete favorably with weeds; its leaves though light green maintain a slow senescence and the ligule is slit. Plants are erect with complete exert panicle, some grains present short beard and once husked they are crystalline. It has shown tolerance to leaf and neck blast evaluated in the field, as well as resistance to Tagosodes.

### REFERENCES

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Table I. Characterization of the variety

Vigor	Vigorous material
Total cycle (days)	Dry season (128) Rainy season (110)
Final height (cm)	88.6
Leaf flag length (cm)	28.4
Leaf flag width (cm)	1.6
Leaf length prior to leaf flag	40.9
Leaf width prior to leaf flag	1.2
Leaf pubescence	Smooth
Leaf color	Light green
Foliar sheath color	Entire green
Ligule form	Slit
Ligule color	White
Auricle color	Light green
Plant erection	Erect
Panicle	Exert
Lodging	Resistant
Shattering	Resistant
Grain length (mm)	11.5
Grain width (mm)	2.7
Lemma color	Straw
Beard	Short beard is present in some grains
Apicule color	Straw
Senescence	Slow
Endosperm opaqueness	Crystalline grains
Seed pericarp color	White

Table II. Means from the results of three-year yield trials in "Los Palacios" Rice Research Station and validation tests in the "Caribe" Rice Enterprise within dry season, 2000

Localities	Varieties	Yield		Fertile panicle/m <sup>2</sup>	Full grains/panicle	% Unfilled grains/panicle	1000 grain weight		
		Agricultural (t/ha <sup>1</sup> )	Industrial (% Entire)						
		I*	II	I	II				
Yield trials	INCALP-5	6.80	5.9	58.5	59.1	410	90	-	29.5
	Perla (T)	6.70	6.0	57.9	58.2	380	100	-	29.0
Validation test (4.03 ha)	INCALP-5	7.60	-	-	-	437	86	8.1	33.3
	Perla (T)	4.80	-	-	-	333	98	8.1	30.8

Localities	Varieties	Final height	Lodging	Shattering	Panicle length (cm)	Field Resistance	
						LB	NB
Yield trials	INCALP-5	90.0	R	R	21.0	-	-
	Perla (T)	85.0	R	R-I	23.5	-	-
Validation test (4.03 ha)	INCALP-5	83.3	R	R	20.8	R	R
	Perla (T)	73.3	R	R	22.8	R	R

\*I- Dry season II- Rainy season  
LB-Leaf blast and NB-Neck blast

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