



Report of new cultivar INCA TH-4. NEW CUBAN CULTIVAR OF WHEAT (*Triticum aestivum* L.)

Reporte de nuevo cultivar

INCA TH-4. Nuevo cultivar cubano de trigo harinero (*Triticum aestivum* L.)

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ABSTRACT. In this work the characteristics of a wheat cultivar selected (INCA TH-4) from a collection of lines from the International Maize and Wheat Center (CIMMYT). This new cultivar tolerates *Helminthosporium sativum*, resists to *Septoria* (*S. tritici*) and leaf rust (*P. triticina*). The Cuban wheat INCA TH-4, is suitable for the production of baked goods, it also presented high agricultural yields in grain productions if grain and dry mass. Their behavior of this cultivars was validated in western locations of the country.

RESUMEN. En este trabajo se informan las características de un nuevo cultivar de trigo seleccionado (INCA TH-4), a partir de una colección de líneas procedentes del Centro Internacional de Mejoramiento de Maíz y Trigo (CIMMYT). Este nuevo cultivar tolera al *Helminthosporium sativum*, es resistente a la *Septoria* (*S. tritici*) y tolerante a la roya de la hoja (*P. triticina*). El trigo cubano INCA TH-4, registra un alto contenido de proteínas (12,5 %). Es apto para la producción de productos horneados. Se destacó por altos rendimientos agrícolas en producción de masa seca para forraje y granos. Su comportamiento se validó en diferentes localidades del occidente y centro del país.

Key words: grain, fodder, human feeding, animal feeding

Palabras clave: granos, forrajes alimentación humana, alimentación animal

INTRODUCTION

Wheat is one of the basic grains for human consumption. There is evidence that it was grown in Cuba since 1797 in the west and center.

In this paper, the characteristics of a new cultivar of flour wheat selected at the National Institute of Agricultural Sciences (INCA), Mayabeque, Cuba and evaluated in different soil and climatic conditions of the central and western parts of the country are reported.

ORIGIN

It was received at the National Institute of Agricultural Sciences (INCA) in May 2002, a group of lines of flour wheat, from the trial 11 HT HTWYT (High Temperature Wheat YT), International Network for the Improvement of Wheat CIMMYT group lines (of various origin) of the 2002 cycle.

A selection process lines was carried out for five years (2004-2008). INCA cultivar TH-4 was formed. From that point, comparative tests were developed for six years (2009-2011) in institutions of western and central Cuba. Local control was used as the Cuban flour wheat cultivar CC-204.

DESCRIPTION OF CULTIVAR

Vigor: Vigorous.
Tillering capacity: 7-9 tillers per plant.
Stalk height: 93-100 cm.
Leaf color: Green
Leaf flag spike: Lying.
Spike length: 11 to 14 cm
Emergence of spike: Erect.
Mass of 1000 grains: 37,5 to 40,2 g.
Filled grains per spike: 45-56.
Resistance to lodging: Resistant.
Resistance to desgrane: Resistant.
Potential grain yield (t ha⁻¹): 2.5 to 3.5.
Resistance to *Helminthosporium*: Tolerant (*H. sativum*)
Resistance to *Septoria* (*S. tritici*): Resistant
Resistance to leaf rust (*P. triticina*): Tolerant
Protein content: 12,5 %
Starch: 62,8 %
Wet gluten flour: 26 %
Dry flour gluten: 7 %

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