



Informe de nuevas variedades 'BURLEY PINAR 2010': PRIMER CULTIVAR CUBANO DE TABACO BURLEY RESISTENTE AL MARCHITAMIENTO POR FUSARIUM (*Fusarium oxysporum*) Y A OTRAS ENFERMEDADES DE IMPORTANCIA EN EL CULTIVO

Report of new varieties

'Burley Pinar 2010': First cultivar of Burley Tobacco Cuban. Resistant to fusarium wilt (*Fusarium oxysporum*) and other diseases of importance in the crop

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ABSTRACT. In order to obtain a Burley tobacco cultivar resistant to the fusarium wilt, blue mold (*Peronospora hyocyami* de Bary) and black shank (*Phytophthora parasitica* Dast. var. *Nicotianae* Breda de Haan) a cross at the Tobacco Experimental Station in San Juan y Martínez, Pinar del Río province was made during the tobacco crop 2004-2005 between the cultivars 'NC 1151' y 'Ky 910'. The first one was resistant to the blue mold and fusarium wilt, the second one was resistant to the black shank. After five generations of self-pollination and selection by the pedigree method, 'Burley Pinar 2010' was obtained and it showed resistance to fusarium, blue mold and black shank. In soil infected by fusarium wilt, 'Burley Pinar 2010' surpassed in yields 'Burley Havana 13'.

Key words: tabacco, cultivar, cross, fusarium

INTRODUCTION

Soils dedicated to the cultivation of burley tobacco in the province of Pinar del Río are heavily infected with *fusarium* and as used cultivars are susceptible to fungus, losses between 35 and 40 % of plantations occur. Worldwide disease resistant cultivars are reported, but are susceptible to blue mold and black shank, so uneconomical use as grown in Cuba, due to losses caused. The objective was to obtain a burley tobacco cultivar resistant to all three pathogens.

DESCRIPTION

Burley Pinar cultivar '2010' ('NC 1151' / Ky '910'), is resistant to *fusarium*, to blue mold and black shank. This cultivar with the same number of leaves than Burley Havana '13' has a lower height, because its internodes are shorter and have more hyponasty leaves. Studies in production conditions for two consecutive tobacco campaigns the new cultivar showed resistance to disease studied and overtook 'Burley Havana 13' at 426 kg ha⁻¹ performance

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RESUMEN. Con el objetivo de obtener un cultivar de tabaco burley resistente al marchitamiento por fusarium, al moho azul (*Peronospora hyocyami* de Bary) y a la pata prieta (*Phytophthora parasitica* Dast. var. *Nicotianae* Breda de Haan) se hizo un cruzamiento en la Estación Experimental del Tabaco de San Juan y Martínez, Pinar del Río, durante la campaña tabacalera 2004-2005 entre los cultivares 'NC 1151' y 'Ky 910'. La primera resistente al moho azul y al marchitamiento por fusarium, la segunda resistente a la pata prieta. Después de cinco generaciones de autofecundación y selección por el método genealógico se obtuvo la 'Burley Pinar 2010' que mostró resistencia al fusarium, al moho azul y a la pata prieta. En suelo infectado por fusarium la 'Burley Pinar 2010' superó a 'Burley Habana 13' en rendimiento.

Palabras clave: tabacco, cultivar, cruzamiento, fusarium

in export classes and 392 kg ha⁻¹ of total yield. The new cultivar is recommended in the current Technical Instructions Crop. Burley Pinar '2010' presents genetically stable characters, which are listed in the table.

Table- Description of 'Burley Pinar 2010' characters

Total length of the plant (cm)	165,0
Number of botanical leaves	25,0
Number of usable leaves	20,0
Distance between nodes (cm)	4,0
Length of the central leaf (cm)	67,8
Width of the central leaf (cm)	40,6
Length-width ratio of the leaf	1,6
Time to blossom (days)	67,0
Stem diameter (cm)	3,1
Venation (%)	33,3
Limbus (%)	66,7
Limbus/vein ratio	2,0
Length of the capsule (cm)	2,0
Width of the capsule (cm)	1,4
Length-width ratio of the capsule	1,4
Potential yield (kg ha ⁻¹)	2 250
Commercial use	Cigar store

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