

# Report of new cultivar 'ODILE', A NEW CULTIVAR OF RED BEANS ADAPTED TO THE CLIMATE OF CUBA

## Reporte de nuevo cultivar 'Odile', nuevo cultivar de frijol rojo adaptado al clima de Cuba

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**ABSTRACT.** The objective of this work is to present the new bean cultivar 'Odile', which was obtained from a selection of the SCR 15 line. This line was achieved through the conventional method of hybridization between SER 118xNCB 226 / -MC-4C-MC-14C -MC at the International Center for Tropical Agriculture (CIAT) and it was introduced in Cuba, in generation F<sub>8</sub>, in 2010. The selection in Cuba began in November 2010. 'Odile' has a reddish-brown color and presents very good culinary quality, it is medium cycle, resistant to yellow bean golden mosaic virus (BGYMV), common bean bacterium (*Xanthomonas axonopodis* pv *phaseoli*) and rust (*Uromyces appendiculatus*) and has shown a high and stable yield potential.

**Key word:** hybridization, line, virus resistance, selection

## INTRODUCTION

The common bean is a crop of great importance in Cuba, but it is necessary to implement strategies to increase its yields, since production is well below the national demand. Within these strategies the obtaining of new cultivars adapted to the agroclimatic conditions plays a crucial role. The objective of this work is to present and describe 'Odile', a new cultivar of common bean (*Phaseolus vulgaris* L.), with highly desirable agronomic characteristics.

## METHOD OF OBTAINING

The cultivar "Odile" was obtained from the selection of the SCR line 15. This line was achieved through the conventional method of hybridization between SER 118xNCB 226 / -MC-4C-MC-14C-MC. It was introduced in Cuba, in generation F<sub>8</sub>, of the breeding program of the Center for International Tropical Agriculture (CIAT) and was introduced with the purpose of evaluating its agronomic behavior in the agroclimatic conditions of Cuba.

**RESUMEN.** El objetivo de este trabajo es presentar el nuevo cultivar de frijol 'Odile', que fue obtenido de una selección de la línea SCR 15. Esta línea se logró a través del método convencional de hibridación entre SER 118xNCB 226/-MC-4C-MC-14C-MC en el Centro Internacional de Agricultura Tropical (CIAT) y fue introducida en Cuba, en la generación F<sub>8</sub>, el año 2010. La Selección en Cuba comenzó en noviembre de 2010. 'Odile' posee grano de color café rojizo y presenta muy buena calidad culinaria, es de ciclo medio, resistente al virus del mosaico dorado amarillo del frijol (BGYMV), Bacteriosis común del frijol (*Xanthomonas axonopodis* p.v. *phaseoli*) y a la roya (*Uromyces appendiculatus*) y ha mostrado un alto y estable potencial de rendimiento.

**Palabras clave:** hibridación, línea, resistencia a virus, selección

After a cycle of multiplication of seeds, plants that expressed desirable morphoagronomic characters were selected and harvested individually, evaluating their progeny in the eastern, central and western regions of the country. 'Odile' is the result of selection for high productive potential, stable behavior in different environments and good response to the natural incidence of the main pests: BGYMV, *Xanthomonas axonopodis* pv *phaseoli* and *Uromyces appendiculatus* that limit the production of this crop in Cuba.

## DESCRIPTION OF THE VARIETY

### Common characteristics of the variety 'Odile'

|  |   |
|--|---|
| Day of emergence: 3-5 días                       | Length of the pods: 11 cm                       |
| Color of the cotyledons: green with pink pigment | Color of the pods at the time of harvest: beige |
| Hypocotyl color: green                           | Pod profile: moderately curved                  |
| Days to antesis: 30                              | Pod apex type: pointed                          |
| Days to flowering: 39                            | Number of pods per plant: 27-32                 |
| Wing color: white                                | Number of seeds per pod: 5-7                    |
| Banner limb color: white with pink pigment       | Primary color of the seed: reddish brown        |
| Habit of stem growth: III                        | Reaction to golden mosaic virus: 2-3            |
| Length of the main stem: 90 cm                   | Reaction to common Bacteriosis: 2-4             |
| Main stem color: green                           | Reaction to rust: 1-2                           |
| Days to physiological maturity: 74               | Reaction to root pathogens: 4-5                 |
| Days to harvest: 85                              | Potential yield: 3.2 t ha <sup>-1</sup>         |

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