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Report of new cultivar

CUVIN-22. Soybean (*Glycine max* Merril) black bean cultivar

CUVIN-22. Cultivar de soya (*Glycine max* Merril) de grano negro

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ABSTRACT: Seeds of soybean variety DT-22 were irradiated with ^{60}Co gamma rays at the National Institute of Agricultural Sciences. A black-grain, high-yielding cultivar was selected for spring-summer planting.

Key words: selection, mutant, grain color, variety, yield.

RESUMEN: En el Instituto Nacional de Ciencias Agrícolas se irradiaron semillas de la variedad de soya DT-22 con rayos gamma de ^{60}Co. Se seleccionó un cultivar de grano negro y de elevado rendimiento en siembras de primavera-verano.

Palabras clave: selección, mutante, color grano, variedad, rendimiento.

INTRODUCTION

Although the hybridization breeding method has been widely used in soybean, mutation induction has proven to be effective because it is easier, reduces the time required to obtain a new variety and it is capable of generating variations that do not exist in the available germplasm, and soybean mutants have been reported in several countries around the world.

METHODOLOGY USED

Seeds of variety DT-22 from the Agricultural Genetics Institute of Vietnam (AGI) were irradiated with ^{60}C0 gamma rays in a MPX-25 machine with a dose power of 5.8 Gy sec-1. A mutant with black grain and good agronomic performance was identified in the M3 generation.

DESCRIPTION OF CULTIVAR

The CUVIN-22 cultivar is characterized by black grains as opposed to the donor variety with cream-colored grains (Figure 1), reaches a height of 100 to 120 cm, and has five to seven branches per plant, a cycle of 80 to 85 days with white flowers. The number of pods per plant ranges from 150 to 290, with a yield of 2.8-3.6 t ha^{-1}. This cultivar has a good cutting height, so it can be used for mechanized harvesting. This mutant has been evaluated in Mayabeque and Matanzas with good acceptance by producers.

Figure 1. Differences in the color of mutant grains in relation to the parents.

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