

Report of new cultivar

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

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### ABSTRACT

Seeds of soybean variety DT-22 were irradiated with <sup>60</sup>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, yield

### 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 <sup>60</sup>Co gamma rays in a MPX-25 machine with a dose power of 5.8 Gy sec<sup>-1</sup>. 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<sup>-1</sup>. 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