

Report of new cultivar

SOYIG-20 and SOYIG-22: new varieties of soya (*Glycine max* L. Merrill) introduced to the climatic conditions of Cuba

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ABSTRACT

Some phenological, morphological and agronomic characteristics of the soy varieties SOYIG-20 and SOYIG-22, two new soybean cultivars, obtained by selection at the Grain Research Institute, from cultivars introduced from Vietnam are presented in summary. These materials have short crop cycle characteristics, good height for mechanized cutting and good yield potential, in addition to their adaptability in various areas of Cuba. They were the most prominent during the validation process.

Key words: Characteristics, cultivars, introduction

INTRODUCTION

The production of (*Glycine max* L. Merrill), soybeans in Cuba requires new cultivars adapted to the conditions of the tropical climate, with short cycles, mechanized cutting possibilities and high yield potential. The availability by the producers of varieties with these characteristics will guarantee high productions with low inputs, so it is feasible for Cuban agriculture. For this reason,

two SOYIG-20 and SOYIG-22 materials were obtained by selection and were incorporated into the country's varietal strategy.

DESCRIPTION

The SOYIG-20 and SOYIG-22 cultivars come from the selection program made from two lines introduced to the country through cooperation with Vietnam. The seed expansion was carried out by self-fertilization during three campaigns in the different experimental stations, (Granma, Camagüey and Sancti Spiritus) and areas of the Grain Research Institute.

The main morphological, phenological and agronomic characteristics of the SOYIG-20 and SOYIG-22 soy varieties are presented in (Table 1) in a summarized way.

Table 1. Physiological, morphological and productive characteristics of SOY-20 and SOYIG-22

General characters	Variety	
	SOYIG-20	SOYIG-22
Growth type	Determined	Determined
Bearing plant	Erect to semirect	Erect to semirect
Pubescence color of the main stem	Gray	Brown
Plant. Height	It goes down to 50 cm in winter and High + 80 cm in summer	It goes down to 50 cm in Winter and High + 80 cm in summer
Leaf, intensity of green color	Medium	Medium
Flower color	Violet	White
Intensity of the sheath brown color	Dark	Medium
Seed. Size	Large	Median
Seed. Form	Sub-spherical	Sub-spherical
Grain background color	Yellow	Yellow
Seed. Thread color	Light brown	Light brown
Plant: date of beginning of flowering (50 % plants with at least one flower open)	Early in winter and Average in summer	Early in winter and Average in summer
Plant: date of the beginning of maturity	Medium	Medium
Cycle of the variety.		
Biological	Flowering at 31-37 days. Physiological maturity 90 days.	Flowering at 28-30 days. Physiological maturity 90 days.
Productive	90-95 days.	Productive: 90-95 days.
Number of pods per plant	45 in summer and 42 in winter	45 in summer and 33 in winter
Number of seeds per pod	2-3	2-3
Weight of 100 grains at 14 % humidity.	19.3 grams	16.3 grams
Potential performance	2.5-3.0 t ha ⁻¹	2.5-3.5 t ha ⁻¹
Planting time	Winter and summer.	Winter and summer.
Sowing frame	0.5; 0.6 and 0.7 cm x 0.5-0.10cm, between 20-25 plants per linear meter for a population of 330.000-400.000 plants/ha.	0.5; 0.6 and 0.7 cm x 0.5-0.10cm, between 20-25 plants per linear meter for a population of 330.000-400.000 plants/ha.
Affectations by flattening and shelling	It is affected by shelling	It is affected by shelling