



New cultivar report 'HOV-1', AN INTRODUCED GARLIC CLONE OF VIETNAM AND ADAPTED TO CUBAN CLIMATE

Reporte de nuevo cultivar

'HOV-1', un clon de ajo introducido de vietnam y adaptado al clima cubano

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ABSTRACT. The main characteristics of 'HOV-1' clone are presented, which was introduced in Cuba precedent from Viet Nam, free-virus and rejuvenated through tissue culture technique. The yield and their components was evaluated and quality of the seed. It showed a good behavior to the main phytopathogen diseases, a nice seed quality and high yield.

Key words: *Allium sativum* L., seed quality, tissue culture, yield

RESUMEN. Se presentan las principales características del clon 'HOV-1', que se introdujo en Cuba procedente de Viet Nam, se saneó y rejuveneció mediante la técnica de cultivo de tejidos. Se evaluó el rendimiento y sus componentes, así como la calidad de la semilla. Mostró un buen comportamiento ante las principales enfermedades fitopatógenas, buena calidad de la semilla y alto rendimiento.

Palabras clave: *Allium sativum* L., calidad de la semilla, cultivo de tejidos, rendimiento

INTRODUCTION

Garlic (*Allium sativum* L.) is a strictly agamic species, affected by bacteria and fundamentally fungi and viruses, which contribute to the reduction of its yield. In Cuba it was introduced in the 19th century and it is currently cultivated throughout the country, due to its high demand by the population as a condiment as well as a medicinal one. The objective of this work is to present a clone of garlic introduced from Vietnam, sanitized and rejuvenated by the technique of *in vitro* cultivation, which due to its favorable characteristics and good quality of the seed has possibilities of being introduced into production.

ORIGIN AND DESCRIPTION

Different clones of garlic were evaluated comparatively (four of the type 'Criollo' and two 'Vietnamita') of the best producers of the old province of Havana (Mayabeque), Cuba. A selection was made taking into account their agronomic performance, among them the clone 'HOV-1' (Table), whose seed was infested by Onion yellow dwarf virus (OYDV) and leek yellow garlic striate virus (LYSV). The technique of meristem culture was applied and diagnosed by Electronic Immunomicroscopy (IME).

Subsequently, it was micropropagated. The microbulbs were planted in a Ferralitic Red compacted eucric soil, at a distance of 90+35+35x7 cm. The study covered nine generations.

Table. Main morphoagronomic characters of garlic clone 'HPV-1'

Caracteres	Descripción
Altura del follaje (cm)	28-29
Número de hojas	6-7
Sólidos solubles del bulbo (⁰ Brix)	18,0-22,5
Materia seca del bulbo (%)	38,5-41,0
Ciclo vegetativo (días)	110
Masa del bulbo (g)	27,5-31,8
Forma del bulbo	Irregular
Número de dientes	10-14
Masa del diente (g)	1,1-1,4
Resistencia a <i>Alternaria porri</i>	(resistente)
Resistencia a <i>Sclerotium cepivorum</i>	(resistente)
Resistencia a los virus OYDV y LYSV	(resistente)
Pérdida de masa fisiológica	Menos del 10 %
Pérdida de masa por vaciado de la semilla	Menos del 12 %
Rendimiento (t ha ⁻¹)	11,9

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