

Production of Malabar Gourd (*Cucurbita ficifolia*) without Seeds in Fruits

C. Baixauli¹, A. Giner¹, J. M. Aguilar¹, I. Nájera¹, J. V. Maroto², A. San Bautista², S. López² and B. Pascual²

1. Fundación Ruralcaja. Apdo. 194. 46200 Paiporta (Valencia) Spain.
2. Departamento de Producción Vegetal, ETSIA. Universidad Politécnica de Valencia.



INTRODUCTION

In order to obtain jam from Malabar Gourd it is necessary to remove manually the seeds of the flesh (pulp) of the pumpkins. This operation is costly and the crop is moving to countries where the cost of labour is less expensive. Consequently, the parthenocarpic fruits would result economically interesting.

MATERIALS AND METHODS



This study tries to achieve seedless Malabar Gourd, cv 'Cabello de ángel Castalla'.

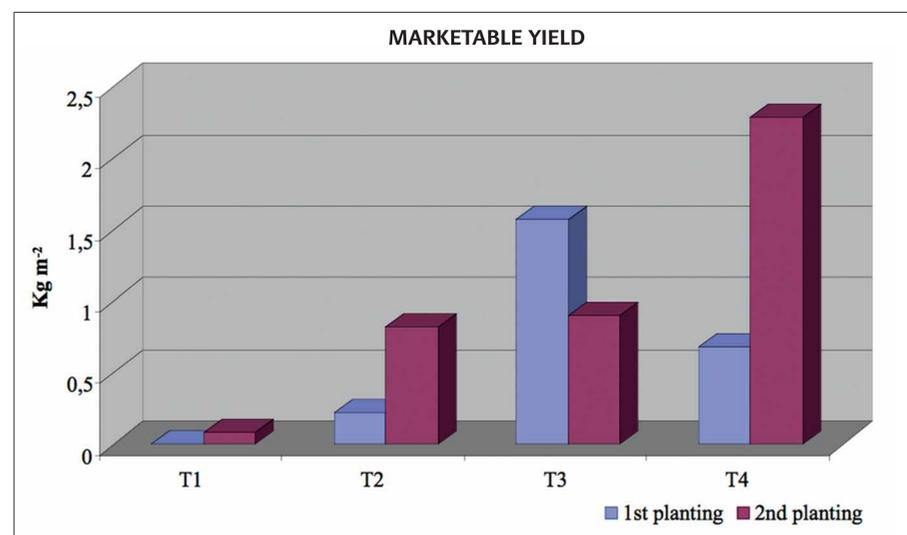


The experiment took place in two planting dates: April 30 and 5 June 2008 at the Experimental Station of Fundación Ruralcaja in Paiporta, Valencia, Spain. The plantation frame was 4 m between rows and 1 m between plants. We performed an experimental design of randomized blocks with 3 replications of 3 plants per elementary plot.



Treatments were:
* Plants grown under permanent floating cover (T1)
* Plants grown without any cover (T2)
* Plants with permanent floating cover sprayed with Ethephon at 150 ppm and female flowers, where the stigma had been removed manually, were sprayed with CPPU at 200 ppm (Sitofex) (T3)
* Plants grown under permanent floating cover whose female flowers also were manipulated and sprayed with CPPU at 200 ppm. (T4)

RESULTS



In the first planting date plants sprayed with Ethephon in and CPPU obtained the best yield.

In the second planting date, plants sprayed only with CPPU achieved the best yield. In contrast, in this planting date the yields of plants sprayed with Ethephon in and CPPU did not show statistically differences compared to the controls. Therefore, we don't appreciate a clear response of the application of Ethephon. Furthermore, in both planting dates, plants that kept the floating deck permanently without spraying the flowers didn't give production



Fruits of the control outdoors presented seeds. Nevertheless, flowers sprayed with CPPU produced fruits without seeds.



There were no statistically differences in the average weight.

CONCLUSIONS

It is possible to obtain fruits without seeds covering the plants and spraying the female flower with CPPU.