

NOTES ON THE PRODUCTION OF SOME HORTICULTURAL CROPS IN CUBA

Mayte Piñón Gómez and Olimpia Gómez Consuegra

The purpose of this note is to describe the agricultural production of tomatoes and peppers in Cuba using modern cultivation methods. The production model described in this note has been developed, tested and put into action with very satisfactory results. It has met limited internal demand. Its potential development on a larger scale will be able to satisfy domestic demand at a national scale.

Cuba has the climatic conditions to produce a range of widely consumed vegetables, such as tomato *Solanum esculentum* and peppers *Capsicum annum*. Year-round production can meet domestic market demands, cultivating the produce in open field conditions in the moderate temperature and dry season or under sheltered cultivation in the hot and rainy season. Most of the horticultural soils are productive, flat and easy to cultivate, with water availability. Individual growers who are engaged in horticultural crops know the art of this specialty, have ownership of the property, make good use of inputs when they have timely access to them and can attain high productive results.

The private sector owns 95% of the harvested area for tomatoes and 89% of peppers; it is responsible for 92% of tomato production and 88% of pepper production.¹

Many individual growers have exchanged knowledge for years with specialists and scientists to meet the food demands. That is, they have served as produc-

tion leaders, testing in their plots multiple genetic materials, seed production technologies and general agricultural technologies, with very successful results.

However, affecting production are a series of difficulties such as the lack of an effective management system in the cycle of food sustainability, the delivery of inputs on time in the biological process and a limited impact of interventions to ensure the success of the productive process from the field to the consumer. All of these difficulties have adversely affected a sector in process of development and contributed to not meeting product demand.

TECHNOLOGICAL INSTRUMENTS AVAILABLE TO THE GROWERS

High temperatures and the incidence of diseases are important technical pitfalls to overcome in the production of tomato and pepper in Cuba. The solution to address these problems is to use plant breeding techniques or a set of biological methods designed genetically to create grown varieties, each time better adapted to the needs of a tropical agricultural production.

The use of the modern breeding techniques allows the grower to choose between different varieties and F1 hybrids for tomatoes and peppers, as appropriate. These can be planted in open field conditions or under sheltered systems and can adapt to extreme biotic factors existing in the tropics including resistance to viral and fungal diseases and having nutritional and

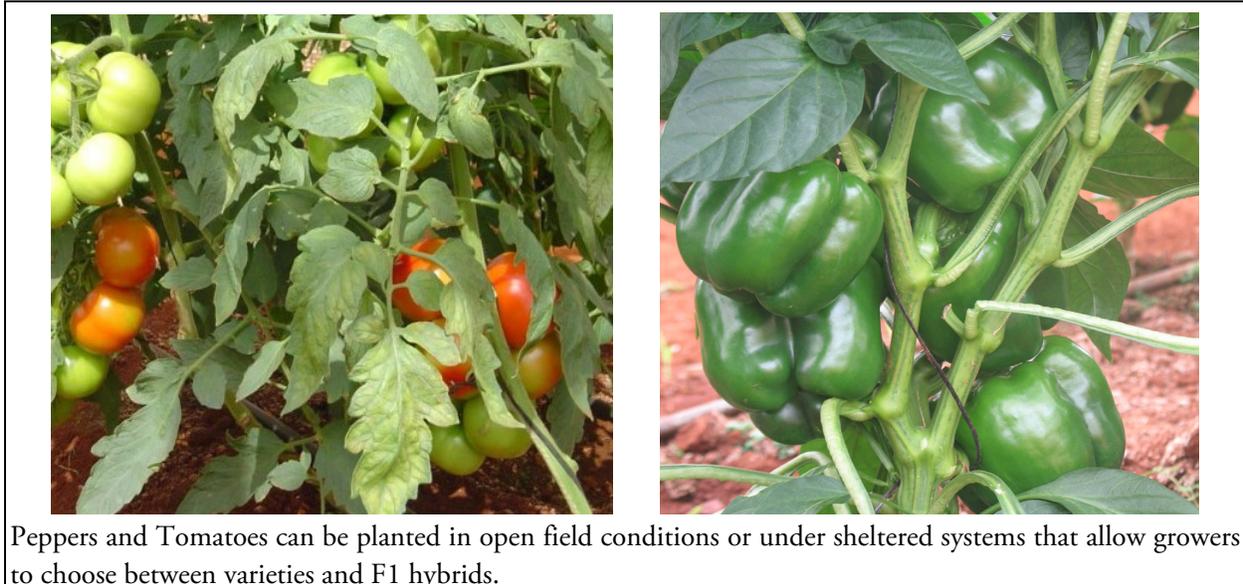
1. ONEI 2015. *Anuario Estadístico de Cuba 2014*. Edición 2015. Oficina Nacional de Estadística e Información.

functional quality. The molecular monitoring of the introgressions of new genes in the cultivars obtained guarantees their productive sustainability.

As previously described, there are indications of a potential industry that can provide tomatoes and pep-

pers for domestic consumption, increasing the available basket of food for the consumer, but also one that could be developed as an export industry to the international market.

Figure 1.



SOURCES

ONEI. 2015. Anuario Estadístico de Cuba 2014. Edición 2015. Oficina Nacional de Estadística e Información.

Piñón Gómez, Mayte, et al. 2013. DEVAG Project. “Les nouvelles variétés de Tomate sont-elles

tolérantes au flétrissement bactérien?” devag.tropical-agroecology.org

UNDP. 2014. E studio de factores críticos que inciden en el ciclo de la sostenibilidad alimentaria en Cuba. www.undp.org