



Mango - effect of precooling and genset

In GreenCHAINge an innovative “smart chain” is being developed. Overall goal is to improve the intrinsic quality of the product on the shelf.

Objective

Obtain uniform and RTE (Ready to Eat) mangos on the shelf. Assess the effect of precooling mangos before transport, and the use of a genset during transport, on mango quality.

Results

When mango fruit is precooled fast (< 6 hours) the mangos remain firmer than fruit that is precooled slower. A significant firmness decrease from 81 to 77 on the acoustic firmness scale was observed when measuring firmness after transport to the Netherlands.

Using a genset (generator set) on the reefer container from the pack house to the port of Pecem in Brazil had no effect on firmness or any other quality parameter. This was found in two shipments in October and November 2016. A Prerequisite is that the mangos are precooled to transport temperature and the duration of transport to the port is not too long.

Conclusion

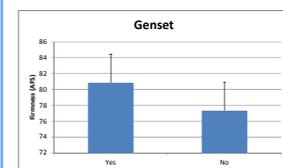
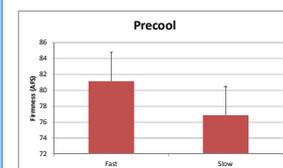
In order to maintain mango firmness before the ripening process mangos should be precooled within 6 hours.

Usage of a genset on the reefer container between pack house and port of Pecem has no direct influence on mango firmness.

Relevant for industry

Getting product to transport temperature is important to preserve initial quality.

“Using a Genset over relative short distances is not always necessary when mangos are proper precooled”



Average firmness of fast and slow precooled mangos (red) and average firmness of transported mangos using a genset (yes) or no genset (blue).

For detailed information about this project result please visit www.wur.eu/greenchainge.





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