

Project Summary

Title	Production of disease-free papaya (<i>Carica papaya</i> L.) planting materials of known sex for commercial fruit production
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Purpose	The main objective of this research is to produce disease free papaya seedlings for improved agronomic performance, fruit yield and quality, to meet the prevailing demand for fresh fruits in both local and export markets.
Project Summary	Papaya is a medium sized fruit crop with a potential to produce fruits throughout the year. The ripe fruits, which are very rich in vitamins A and C, are popularly used for dessert or processed into jam or wine. Due to its nature as a single stemmed tree it can be economically produced in any size of land from kitchen gardens to large plantations. Papaya producers and researchers encounter some very serious challenges. These include unreliable methods of picking the required sex of seedlings at planting time, lack of disease-free planting materials, lack of improved varieties and devastating diseases that are difficult to control. Some immediate and long term remedies need to be sought to save this crop from extinction. The goal of this research is to eradicate poverty and hunger in papaya producing regions through improvement of fruit yield and quality. It will address some current production constraints through production of disease-free papaya seedlings through in vitro culture of merisematic tissues and micro grafting. The major activities will

	involve construction of a lathe house (nursery) with an acclimatization unit, establishment of superior stock plants using plant materials from an on-going research project and introduced cultivars and production of virus-free planting materials for commercial production.
Country and Specific Location(s)	Thika, Kenya
Participating Institutions	JKUAT and Kenya Agriculture Research Institute (KARI)-Thika, Kenya
Start Date	September 2010
End date	September 2012
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