



NWC Research and Extension News

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NWC Research & Extension Partnership Committee established

The Nature's Way Cooperative Research and Extension Partnership Committee essentially involves an amalgamation of the Fiji Papaya Project (FPP) and Pacific Breadfruit Project (PBP) Technical Advisory Boards (TAB) but will also cover research and extension issues dealing with other HTFA quarantine treated crops.

The objectives of the NWC REP Committee are as follows:

- To provide a platform for industry partners to discuss issues related to Fiji's four HTFA commodities – papaya, breadfruit, eggplant and mango, and in the near future hopefully wi.
- To provide a regular feedback to industry partners on research findings, project accomplishments and emerging issues.
- To guide industry partners in prioritizing research and extension activities related to HTFA crops.
- To provide technical expertise to the project team in implementation of research activities.
- To provide assistance in the analysis and validation of research outcomes.

2013 exports below targets — active NWC exporters receive incentive

Total exports of NWC's four commodities for 2013 was 700 tonnes. This represents a small increase over 2012 exports but a substantial decline from the 2011 exports that stood at 1300 tones. The significant decline in export volumes is a direct result of the two floods and one cyclone in 2012 that affected the main production areas.

In addition to the assistance programmes provided by various organizations to support farmers in rehabilitation works, NWC has partnered with NZ Aid and AusAid to provide exporters with a stimulus scheme to help them return to exports. A total of 15 exporters were offered a \$0.40/kg rebate on NWC treatment charges up to 30 tonnes each for the period July 1st 2013 – Dec 31st 2013. At the end of the period, 6 exporters had used all of their allocation, another 6 had used part of their allocation and 3 had not used any of their allocation. Total value of stimulus to exporters = \$94,356.

The stimulus was extended for a further 6 months to June 30th 2014. The exporters who did not use their allocation lost it and it was distributed equally to the exporters who had used all of their allocation. The exporters who used part of their allocation will continue with the rebate until the allocation finishes. The incentive scheme is seen to have made an important contribution to maintaining export levels.





Research Update

Nature's Way Cooperative launches Certified 'Fiji Red' Papaya Seed

The Fiji Papaya industry will now have access to locally produced, high quality papaya seed at a more affordable rate. NWC in close collaboration with the Fiji Ministry of Agriculture Research Division has developed a certification scheme for the production and sale of 'Fiji Red' papaya seed. This locally produced 'Fiji Red' seed replaces seed that was previously imported at a very high cost from the University of Hawaii.

The launch of the new seed scheme is a result of several years of research to re-introduce the package of practices for local tree selection, flower bagging, quality assessment and processing. This research was funded through the ACIAR Fiji Papaya Project. The current seed production standard provides the industry with a guarantee that only the best genetics, selected under Fiji's conditions are available for export.

Without the additional costs of freight and quarantine fees, the locally produced seed is available to nurserymen and farmers at a cheaper rate than seed from the University of Hawaii. This cost savings is in line with the primary goal of the Fiji Papaya Project, which is to make more papaya production and exporting more profitable for all actors in the supply chain.



After field selection and bagging, all fruit must pass the minimum quality standards including: weight, shape, flesh colour and sweetness (brix). NWC R&E Officer; Ronal Chand and FPP staff member; Ana Tuivanuavou assessing fruit.

Fiji Papaya Project research findings to be published at the ISHS 4th International Papaya Symposium

Research partners from NWC, Ministry of Agriculture Research Division and Koko Siga Fiji (KSF) will participate in the ISHS 4th International Papaya Symposium to be held in Brisbane in August 2014. Three research papers have been accepted by the ISHS scientific committee for both oral and poster presentations including:

- Integration of Climate Change and Disaster Risk Management in the Agriculture Sector – Case study from the Fiji Papaya Industry
- Developing local seed production systems for 'Fiji Red' papaya
- Developing a commercial hot water treatment to control post-harvest rots on 'Fiji Red' papaya.



The 4th International Papaya Symposium is just one of a wide range of symposia and workshops organized as part of the International Horticulture Congress (IHC). The IHC is a one week event and is expected to attract several thousand researchers from around the world.

Organic papaya production expands—plans underway to export PGS certified organic papaya into New Zealand

There is approximately 20 acres of organic papaya currently established in the Nadi area spread across 25 farmers. These farmers are using the package of practices developed by the FPP for organic papaya production. These organic papaya growers are being organized under an organic Participatory Guarantee System (PGS) which will provide a locally based 'certification'. The PGS programme is an initiative driven by the Pacific Organic & Ethical Trade Community (POETCom) through funding from IFAD.

An initial market for the PGS certified organic papaya has been identified in New Zealand and it is anticipated that commercial exports will commence at the end of 2014.



Organic papaya production in the Sabeto Valley, Nadi.

Project Overview

The Fiji Papaya Project (FPP) is an applied research project aimed at improving the competitiveness of our industry for the benefit of its members and the broader community. The FPP began in July 2009 and is scheduled for completion in July 2014. Funding for the Fiji Papaya Project is provided through the Australian Centre for International Agricultural Research (ACIAR) in partnership with the Secretariat of the Pacific Community (SPC), NWC, KSF and the Fiji Ministry Of Agriculture (MOA).





Research Update

SPC CePaCT research into breadfruit tissue culture creates new opportunities in the region

The Secretariat for the Pacific Community (SPC) through the Centre for Pacific Crops and Trees (CePaCT) has completed several research trials using the recently acquired liquid bioreactor system. This new system has helped speed up breadfruit micro propagation through tissue culture as well as reduce mortality rates. CePaCT has released a total of 689 tissue culture breadfruit plants of 12 varieties using the liquid bioreactor system. A total of 287 trees have been provided for field evaluation in Fiji at three Ministry of Agriculture research stations as well as to commercial farmers. The remainder of the trees have been sent to five other Pacific island countries including Marshall Islands, Nauru, Tokelau, American Samoa & Palau.

In July 2013, a formal research trial was established at the Legalega Research Station in Nadi to evaluate breadfruit trees derived from different propagation methods. The trial involves a total of 45 breadfruit trees of the Bale kana variety comprising of 15 marcotted trees, 15 root sucker trees and 15 tissue culture trees. Preliminary data collection is focused on comparing the vigor of the trees by measuring stem girth and tree height. Other data to be collected will include; height and occurrence of lateral branches, time to first fruiting, overall yield and performance of trees under strong winds.

The success of the mass propagation research have been such that CePaCT has been able to secure donor support for the purchase of two additional liquid bioreactor units.



SPC CePaCT staff, Valerie Tuia and Arshni Shandil, present preliminary findings from their breadfruit tissue culture work to the PBP TAB



A tissue cultured breadfruit tree at the SPC CePaCT facility, ready for hardening and planting out.

Fiji Breadfruit exports return to New Zealand after long lapse — opportunities to improve supply chain management

After a lapse of almost two years, breadfruit exports to New Zealand resumed in January 2014. A total of 2.5 tonnes of fresh breadfruit were exported in three consignments. The Pacific Breadfruit Project (PBP) worked closely with the supplying farmers and exporter to monitor the supply chain. A number of issues needing improvement were identified and the PBP is planning a formal trial to address these supply chain issues and make recommendations for improvement to the farmers and exporters.



Project officer Kaitu Erasito working with breadfruit farmer Ami Chand in Vaivai during harvesting for exports.



NWC staff doing final grading and packing of breadfruit before exports to New Zealand— Jan 2014

Project Overview

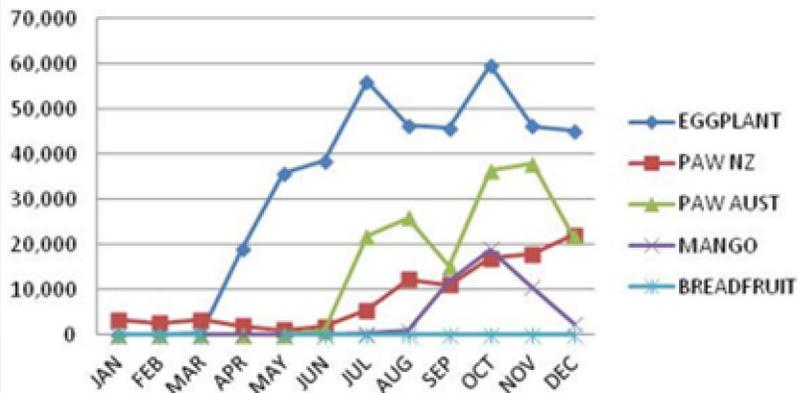
Established in May 2011, the four-year Pacific Agribusiness Research and Development Initiative (PARDI) project, “Developing commercial breadfruit production systems for the Pacific Islands”, aims to assist small-holder farmers to move to growing breadfruit as a commercial crop. The first stage of the project will deal with commercial orchard production and post-harvest handling for fresh exports. The second stage will deal with commercial processing of breadfruit. The project is funded by the Australian Centre for Agricultural Research (ACIAR).



Export Update

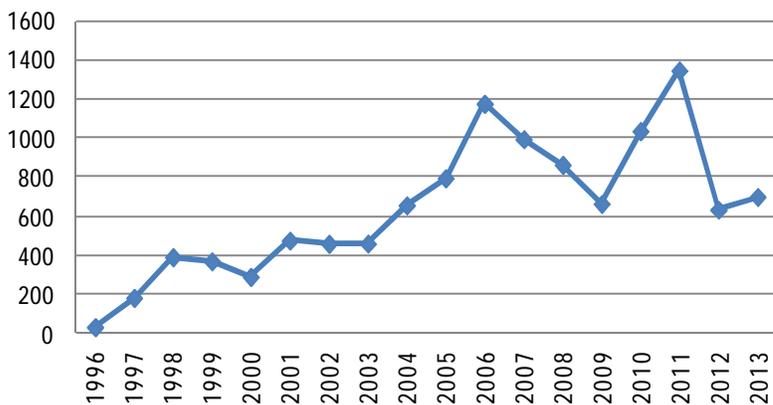


NWC Exports - 2013 (Kgs)



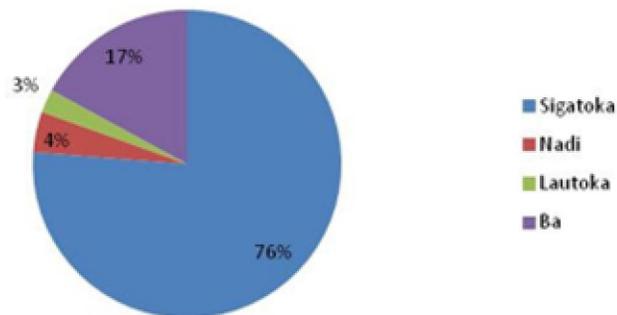
Source: NWC

NWC Exports 1996 - 2013 (tonnes)



Source: NWC

NWC Exports 2013 - Farmer Distribution



Source: BAF

NWC Research and Extension Partnership Committee:

