



Policy Brief to control the movement of coconut germplasm in Grand-Lahou

Project	IDRC-DFATD 107789 ‘Fighting lethal disease for coconut farmers’.
Policy Brief Title	Establishment of coconut nurseries to control coconut germplasm movement in Grand-Lahou
Location	Grand-Lahou, Côte d’Ivoire
Directed to	Policy makers and stakeholders (Major, Authorities, farmers, Traders, Processors, NGOs)
Define the context and the issue	<p>There are reports on the PCR detection of the LY phytoplasma (Mexico), and the CSPWD phytoplasma (Ghana) in coconut embryos from seednuts harvested from infected coconut palms. If the CILY phytoplasma is seed transmissible, progenies of any breeding program could not be planted in disease-free regions, since it would amount to introducing the phytoplasma into these areas. This would force the production of pure seeds from varieties located in CILY-affected areas, which would impact the safe movement of germplasm for farmers. The uncontrolled movement of coconut germplasm among farmers would speed up the spread of the disease into other coconut-growing areas, and would eventually lead to the collapse of the coconut industry in Grand-Lahou and the country. This would dramatically reduce the exports of coconut and coconut oil from copra and would severely impact the national economy and the livelihood of the smallholder coconut farming sector of Cote d’Ivoire.</p>
Findings	<p>No phytoplasmas have been detected in any of the resulting seedlings and plantlets obtained through embryo <i>in-vitro</i> culture at CNRA. So, there is as yet no evidence that the CILY phytoplasma is seed transmitted through to the seedling to cause disease in progeny palms. Nevertheless, farmers in Grand-Lahou have been trained on how to establish on-farm nurseries through field schools. Such nurseries will be the source of seedlings for farmers, and will help preventing unnecessary exchange of seedlings. The protocol for the establishment of nurseries in Grand-Lahou is provided by CNRA.</p>
Implications	<p>Although no phytoplasma has been detected in progenies from infected coconut embryos, it is still possible that the phytoplasma can be transferred to new progenies as for the confirmed cases of tomato and sweetpotato phytoplasmas in Europe and Middle East. Therefore it is crucial that policy makers and stakeholders, including Women Groups support the farmers in Grand-Lahou to adopt and implement the present policy brief.</p>

Limitations and further research

Monitoring of the germinated seedlings will continue for a period of 2 years at CNRA, after the IDRC-DFATD project finalizes. This will be one of the post-project activities of the post-project plan to be developed and discussed with stakeholders and policy makers before the project ends. The goal of the pos-project monitoring is to assess the seed-borne transmission of the CILY phytoplasma, whose confirmation would lead to a re-structuring of the plant quarantine system for the coconut crop in Côte d'Ivoire.

Declaration

CNRA and UNA confirm that the policy brief has been issued in accordance with the budget and research proposal under the IDRC-DFATD research project 107789.

Signature

Date

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Name and Title

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