

FARMER TO FARMER - PRACTICES FOR RESILIENCE SERIES

FIXING NITROGEN

Nitrogen is a vital element for healthy soils and plants. An organic technique for building soil nitrogen levels is by planting gliricidia, a nitrogen fixing plant. Through its leaves, the gliricidia draws nitrogen from the atmosphere, which is then absorbed into the soil through the plants roots. Niueans also use the gliricidia to support creeping species of plants like the vanilla used for income generation.

Step 1: Prepare Planting Materials



Existing plant



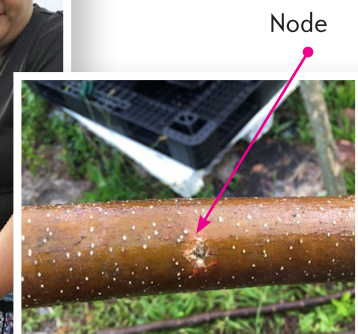
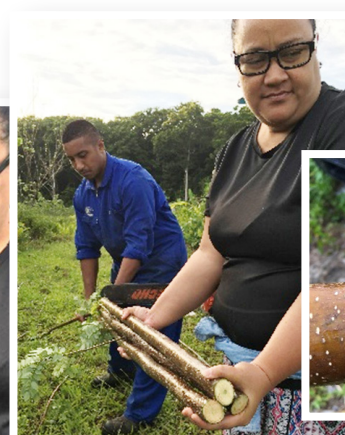
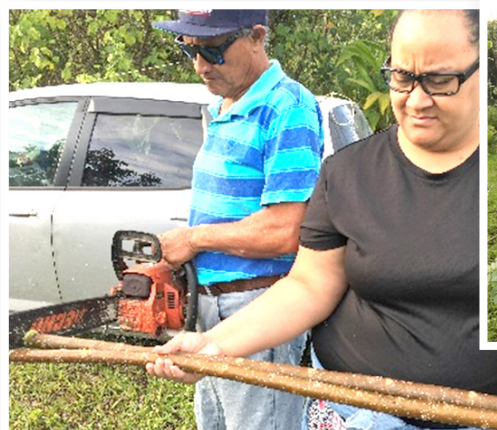
Clean cuts



Get *gliricidia* stalks ready for planting. This is done by using chainsaw to make cleanly cut *gliricidia* stalks of an existing tree. Or you can use a knife but the important thing to remember is that the cut must be clean to prevent diseases from getting into the plant and destroying it.

Step 2: Reducing Stalk Lengths

Shorten long *gliricidia* stalks to about one meter length, to have more than one stalk or *gliricidia* plants growing. Remember to cut at or just before a node. This is where the new *gliricidia* plant will sprout.



Node

Step 3: Slant Cuts

Use a knife to make cuts at both ends of the stalk. For the end above ground, the slant cut will ensure rain or water does not gather at the cut causing diseases to breed. Cuts made to the end of the stalk that goes into the soil encourages roots formation.



End above ground



End that goes into soil

Step 4: Planting

Dig holes about six inches deep. Plant stalks two meters apart along a straight line. This will allow for good ventilation of the farm as the air moves freely. Plant the first stalk and use it to mark out the positioning of the rest.



Use the first stalk to ensure rest are plant in a straight line

This info sheet has been produced with the support of the International Fund for Agricultural Development (IFAD) Capacity Building for Resilient Agriculture in the Pacific Project and the Technical Centre for Agricultural and Rural Cooperation (CTA) Youth Leading Learning in Resilience Agriculture Practices project in partnership with the Pacific Organic and Ethical Trade Community (PCETCom), the Land Resources Division of the Pacific Community (SPC) and the Niue Organic Farmers Association (NIOFA).