TARO RESEARCH IN PALAU SINCE 1990

MEREBANG NGIRALMAU

Agriculture Extension Agent, Division of Agriculture
Bureau of Resources and Development, Ministry of National Resources
Republic of Palau

Since the Rapid Rural Appraisal of taro production systems was conducted in Palau in 1990, some minor research has been done. The Family Food Production and Nutrition Project applied for a project to research and document the traditional techniques of taro production. The proposal was accepted by the German institution Arbeits - und Studienaufenthalte in Afrika, Asien, Lateinamerika (ASA), which sponsored two students to undertake the project. The project was carried out by Hans-Willi Wey, a cultural anthropology student, and Heiko Bammann, an agriculture student, over a three-month period (March to June, 1990).

The researchers worked with the Palau Community Action Agency (PCAA), Palau Division of Agriculture, Belau National Museum, and the Palau Division of Cultural Affairs. They recorded aspects of traditional cultivation of taro and documented transitional systems of taro production.

These German researchers concluded that:

1. Both pesticides and commercial fertilizer have no major significance in taro production;
2. Traditional knowledge is rapidly being lost and needs to be preserved due to its ecological soundness; and
3. *Colocasia* taro is still culturally important and taro production is decreasing.

The researchers expressed difficulty in understanding why huge sums of money are being spent on importing staples instead of supporting and stimulating local taro production. Their report is available at the University of Hawai'i and at the Belau National Museum Library.

In addition to the taro research, Heiko Bammann translated into English some sections of the old German documents by S. Kubary (1895) and A. Kramer (1925) on taro.

Another German student, Laurie Jo Lucking, also sponsored by ASA worked with PCAA and the Palau Division of Agri-culture and studied various aspects of local food production, including taro production. She concluded that the acreage devoted to taro production has declined significantly since European contact; however the demand for taro has been rising recently.

For her dissertation, Lucking conducted an archeological investigation of the prehistoric Palauan terraces. Her investigation yielded no primary evidence to show a use for the terraces. Secondary evidence suggests agricultural usage. Defensive elements also seem to be present. It is speculated that perhaps taro was grown on some of the terraces. A proposal to reconstruct a taro-producing terrace has been submitted to the United States Department of Interior for sponsorship and additional sponsors are also being sought.

PCAA applied for and received a grant from the Australian Embassy to revitalize taro production in three traditional villages. Two villages are still continuing their revitalization. The project concluded that the teacher-student approach was not as effective as the coach-team players approach to transfer skills and restore taro patches. An elderly woman trained six young women in taro production.

In the PCAA Revitalize Taro Production project, it appeared that an incentive is needed to overcome the young women's reluctance to prepare and maintain taro patches. The project also seems to indicate much individuality in taro production. The young women also seem to have an improved self image and cultural identity.

Presently, there are plans to do research on the taro patch system as an agroforestry system with special emphasis on multipurpose and green manure trees and shrubs. Alley crop trials and azolla trials are in process in some taro patches.

Selected Varieties of *Colocasia*

There are over twenty varieties of *Colocasia* taro in Palau. The following were selected on the basis of low input/high yield and high resistance to common taro diseases (Table 1). The average yield per acre is 25 to 30 tons. The average weight per corm is 1.5 lbs. These taro varieties are highly preferred by women farmers in Palau for their texture and taste when cooked.
One characteristic that is identical in all the following taro varieties is that when planted on dryland, the corm becomes white in color even when cooked. On the other hand, when planted in taro patch, the corm becomes dark gray in color when cooked.

Table 1. Description of taro cultivars in Palau.

<table>
<thead>
<tr>
<th>Name</th>
<th>Petiole</th>
<th>Vein</th>
<th>Corm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ochab White</td>
<td>Yellowish green</td>
<td>Yellowish green</td>
<td>White</td>
</tr>
<tr>
<td>Homestead</td>
<td>Pink</td>
<td>PinkWhite</td>
<td>White</td>
</tr>
<tr>
<td>Terrekakl</td>
<td>Green</td>
<td>Light pinkWhite</td>
<td>White</td>
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<tr>
<td>Ngeruuch</td>
<td>Violet</td>
<td>VioletWhite</td>
<td>White</td>
</tr>
<tr>
<td>Ngetmadei</td>
<td>Dark green</td>
<td>WhiteWhite</td>
<td>White</td>
</tr>
</tbody>
</table>

Palauan Taro Patch and Specifications

Palauan mesei, or wet taro patches, are traditionally divided into different sections. Descriptions of four of these are outlined below:

1. **Ulecharo** (Approximately 40-50 sq. ft.)
   a. Front of mesei where irrigation drains out.
   b. Growing area for daily consumption for the family.
   c. Contains about 50 taro plants.

2. **Bluu**
   a. Twice the size of Ulecharo.
   b. Reserved for the chief of the clan.
   c. Also reserved for special custom or occasions such as weddings, funerals, etc.
   d. Reserved for family when no other source of taro is available.

3. **Urars**
   a. Usually areas around the edges of a huge taro patch which usually are horseshoe shaped. Not all taro patches have urars.
   b. Planted in similar manner as the Bluu.
   c. Harvest is sold at market.

4. **Ulleboel**
   a. This area is traditionally planted and reserved to be harvested only for exceptional events. Since 1960, this special reservation is no longer followed and the harvests are sold at the market.
The Editor

L. Ferentinos is the Project Coordinator of the Taro Production Systems Project at the University of Hawai‘i at Manoa.

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