

INFORMATION
BULLETIN

COLLEGE OF MICRONESIA-FSM

YAP CAMPUS

AGRICULTURAL EXPERIMENT STATION

Traditional Noni Cultivation

Yap Island boasts a lush tropical environment with an average 140 inches of rain per annum. This humid tropical island climate along with well drained volcanic and rocky soils is excellent for noni cultivation. Yap's traditional farming method intersperses different crops together in an agroforestry set up. Noni is an ideal crop to go with agroforestry system, or in backyards and waste(d) lands. Planting indigenous plants such as noni among other crops in an agroforestry system has several added benefits. Nelson and Elevitch (2006) compared advantages and disadvantages of different cropping systems in Yap (see page 2).

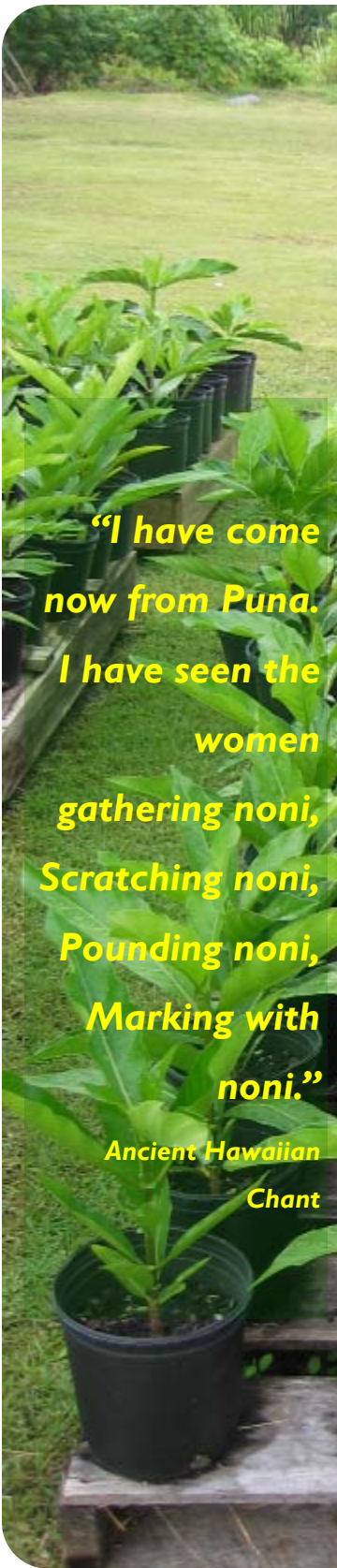
Students in action at the traditional/medicinal plants garden at Pohnpei Campus, College of Micronesia-FSM. Botanic gardens play a major role in the conservation of indigenous plants

Medicinal Plants for Life

Medicinal plants remain of immense importance for the well-being of millions of people around the world. Providing both a relief from illness and a source of income, over 70,000 plant species are thought to be medicinal. Medicinal plants such as noni are clearly an important global resource in terms of healthcare but they are also an important economic resource, traded extensively on scales ranging from the local to the international. Internationally, the trade in medicinal plants is estimated to be worth \$60 billion per year, increasing at a rate of 7% a year. Loss of habitat combined with over-harvesting threatens the survival of many of these plant species. Botanic gardens are important agencies for ensuring their conservation. College of Micronesia-FSM boasts credit for such a unique botanic garden in Micronesia, established at Pohnpei Campus under the aegis of curator Toota Fetalai-Currie. This garden is home to nearly 100 traditional/medicinal plants.

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(FOCUS ON NONI)





“I have come now from Puna. I have seen the women gathering noni, Scratching noni, Pounding noni, Marking with noni.”
Ancient Hawaiian Chant

| CROPPING SYSTEM | ADVANTAGES | DISADVANTAGES |
|---|--|---|
| <p>Monocultures</p> <p><i>Monoculture is the cultivation of a single crop on a farm or in a region of the country. The crops are usually planted in rows or at regular spacing. Usually these are large-scale industrial farming systems that focus on one crop. The goal is usually to achieve the highest profit</i></p> | <ul style="list-style-type: none"> • Higher yields per unit land area • Less labor to produce crop • Can mechanize horticultural and pest control activities • Most economically profitable in the short term • Can use crop rotation | <ul style="list-style-type: none"> • Soil erosion • Soil depletion • Destruction of native forests • Sedimentation of reefs • Destruction of ocean life forms • Reduction or elimination of biodiversity of plant life • Loss of soil structure and organic matter • Desertification • Loss of biological balance between pests and predators • Weeds become established • Intensified pest pressures, more plant disease • Increased use of pesticides • Higher crop protection costs • High human population growth rate • Not sustainable • Balance diet not possible from that land • Poor habitat for animals |
| <p>Polycultures</p> <p><i>Polycultures are mixed planting of two or more compatible crops. They can be planted in alternating rows or interspersed</i></p> | <ul style="list-style-type: none"> • Can resist of pests and diseases to a degree • Reasonable good yields • Amenable to crop rotation | <ul style="list-style-type: none"> • Pest outbreaks and epidemics can occur • Does not provide natural habitat for animals • Soil erosion possible |
| <p>Agroforestry</p> <p><i>Agroforestry is the production of crops in a forest setting. Plants are a balanced combination of understory and overstory plants, providing food, fuel, medicine, fiber and construction materials</i></p> | <ul style="list-style-type: none"> • Sustainable for thousands of years • Balanced diets possible • Ecological balance • Protection and enhancement of soils, little erosion • Low pest pressure • Excellent habitat for all animals • Protects the reefs and sea animals • Helps planet earth remain healthy • Consistent, reliable yields | <ul style="list-style-type: none"> • Lower yields in short term, as compared with monocultures |
| <p><i>From: Nelson, S.C., and C.R. Elevitch. 2007. Workshop manual to supplement Noni: The Complete Guide for Consumers and Growers for Noni Processing, Marketing, and Field Training Workshop for Yap, June 25-29, 2007. Permanent Agriculture Resources, Holualoa, Hawaii.</i></p> | | |

Disclaimer: The information provided in this information sheet is meant for educational purpose only. For any medical conditions, always consult a qualified medical practitioner.

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