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MAPPING EDIBLE AROIDS

GLIDE’12
FOOD, NUTRITION, AND HEALTH
EDIBLE AROIDS

(L. Araceae)
The world’s most ancient food crops
2 billion small farmers produce 60% of the world’s food.
The vast majority lives in extreme poverty.
Small farmers produce 70% of the food of 1.4 billion poor people.
2 billion people worldwide are malnourished.
ROOTS & TUBERS
STAPLE FOOD & CASH CROP
FOR MILLIONS OF PEOPLE
Aroids important staple food for the rural and urban poor
Aroids a source of income for small farmers in the tropics and the developing world
Aroids

a cash crops and important source of employment and income for men and women in the developing world
Europe and the United States home to over 100 million migrants; many come from poor tropical areas of the world.
Migrants have a strong appetite for familiar foods, ingredients and dishes from their homelands and cultures.
The transnational food trade enables migrants to procure important traditional foods, and maintain their foodculture.
NUTRITIONAL VALUE

All plant parts of aroids are edible
Aroids are rich sources of carbohydrates, protein, minerals and vitamins.
The corms and cormels provide for carbohydrates and have a similar nutritional value as potatoes.
If compared with potatoes, their protein content is slightly higher.
NUTRITIONAL VALUE

Corms & cormels
Hypoallergenic, easily digested
They contain micronutrients e.g. minerals, Vitamin C, and B1 and B2, and niacin
NUTRITIONAL VALUE

Aroids leaves
nickname ‘tropical spinach’
Rich in protein, an excellent source of micronutrients
e.g. Vitamin A, C, calcium, potassium, phosphorus, iron and folic acid
AROIDS IN CUISINES & CULTURES
As a plant and food, aroids are embedded in many western and non-western cultures where they are often perceived as intrinsic to cultural identity.
Aroids and plant parts, but also aroid dishes, often carry a deep symbolic meaning and cultural value in the (sub-)tropics and developing world.
THE AROID PLANT FAMILY: 120 GENERA & 3750 SPECIES
Aroids
food, medicine, animal fodder, cut flowers and ornamental plants
AROIDS IN THE WESTERN WORLD
ORNAMENTALS
Aroids are among the world’s most popular ornamentals.
Annually around 50 million aroids are sold worldwide.
Popular ornamental aroids: Alocasia, Anthurium, Caladium, Dieffenbachia, Philodendron, Spathiphyllum, Zamioculcas & Zantedeschia
AROIDS
ART & DESIGN
Never grow up 8 - Yu Xiao
'Voyage Botanique' - Paul den Hollander
‘Between romantic and rebellious’ - Pieter Claessen
MAPPING EDIBLE AROIDS
Primarily cultivated by subsistence–oriented farmers in the tropics
Mapping Edible Aroids

& little known outside of non-western food systems
In the tropics, small farming is directly and indirectly related to 75% of the poverty in rural areas.
EDIBLE AROIDS
MAIN CENTRES OF ORIGIN & DIVERSITY
EDIBLE AROIDS
MAIN CENTRES OF ORIGIN & DIVERSITY

Southeast Asia:
Elephant Ear, Elephant Foot Yam, Swamp Taro & Taro
EDIBLE AROIDS
MAIN CENTRES OF ORIGIN & DIVERSITY

Latin America: Tannia
AROIDS FOOD CROPS

Elephant Ear

[L. Alocasia]
Elephant Foot Yam
(L. Amorphophallus)
AROIDS FOOD CROPS

Taro
(L. Colocasia)
Swamp Taro

(L. Cyrtosperma)
AROIDS FOOD CROPS

Tannia
(L. Xanthosoma)
AROIDS HAVE NO OVERLAPPING NAMES
AROIDS HAVE NO OVERLAPPING NAMES

BUT MANY NAMES
but many names

CARAIBE

BUT MANY NAMES

CALAUI
but many names

calaui
caraibe

TALO PAPALAGI

BUT MANY NAMES
CALAUI
Taro & Tannia are the most widely grown and consumed aroids
Tannia is the only indigenous American aroid widely used for food.
EDIBLE AROIDS

Where in the World is Taro Grown?

THE EXISTING MAPS
EDIBLE AROIDS: THE EXISTING MAPS

[Wikipedia]
MAPPING EDIBLE AROIDS & LOW-INCOME FOOD DEFICIT COUNTRIES
MAPPING EDIBLE AROIDS
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
[FAO]

Low-Income Food-Deficit Countries (as of April 1997)
At present, 86 nations are defined as Low-Income Food-Deficit Countries (LIFDCs) - 43 in Africa, 24 in Asia, 9 in Latin America and the Caribbean, 7 in Oceania and 3 in Europe. These countries are home to the vast majority of the world’s 800 million chronically undernourished people. Many LIFDCs, particularly in Africa, do not grow enough food to meet all their needs and lack sufficient foreign exchange to fill the gap by purchasing food on the international market.

Source: UN Food and Agriculture Organization

* Non FAO Member Nations
LOW-INCOME FOOD-DEFICIT COUNTRIES

2012

66 countries (source FAO)
2012 Edible aroids are cultivated in 50 Low-Income Food-Deficit countries
MAPPING EDIBLE AROIDS & LOW-INCOME FOOD-DEFICIT COUNTRIES

Elephant Ear
MAPPING EDIBLE AROIDS & LOW-INCOME FOOD-DEFICIT COUNTRIES

Elephant Foot Yam
OL-Chingrir Dalna
(Elephant yam & Prawn curry)
MAPPING EDIBLE AROIDS & LOW-INCOME FOOD-DEFICIT COUNTRIES

Taro
MAPPING EDIBLE AROIDS & LOW-INCOME FOOD-DEFICIT COUNTRIES

Tannia
“¡se ha olvidado la malanga!, a pesar de las veces que hemos dicho que si no hay nada que comer comermos malanga.”

[APLAUSOS]

“¡the malanga has been forgotten!, despite the time we have said that if there is nothing to eat we will eat malanga.”

[Applause]

Fidel Castro (1961)
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Thank you

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Thank you

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