

# Papaya

Paw paw

Papaw

Family Caricaceae

Genus Carica

Species papaya



## Papaya Readings (On web page)

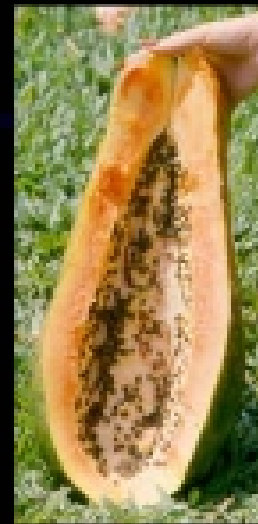
- Nishina et al., 2000.
  - Papaya Production in Hawaii.
  - CTAHR, F&N-3.
- Manshardt, 1999.
  - 'UH Rainbow' Papaya. A High-Quality Hybrid with Genetically Engineered Disease Resistance.
  - CTAHR, NPH-1
- Kompler and Kabaluk, 1996.
  - Babaco (*Carica papayosa* Hillb.): A possible crop for the greenhouse.
  - HortScience 31: 785-788.

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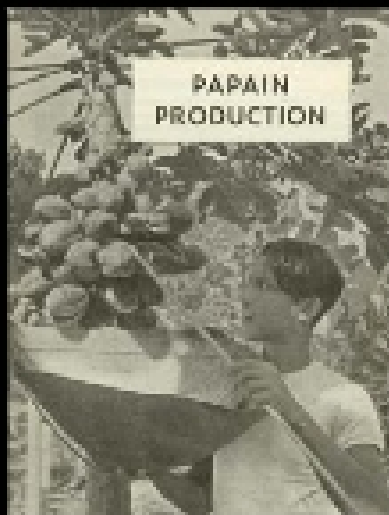
- Tall
- Herbaceous
- Short-lived
- Large leaves
- Flower in leaf axils
- Seed propagated

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- Up to 10 lb.
- Seed in cavity
- Yellow, orange, pink, or red flesh
- High vitamin A & C, and potassium

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Proteolytic enzyme extracted from latex

- Meat tenderizer
- Cosmetics
- Leather industry
- Medicinal uses

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## Carica

- 20 species
- papaya
  - Lowland cultivated spp
  - Not found outside cultivation
  - Perhaps hybrid form
  - Only polygamous spp
  - Most important commercially



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## Other Cultivated Carica

- **Highland species**
  - Common in upland Valleys of Ecuador and Colombia
  - Taste different, less sweet
  - Soups, stews, sweets, fresh
  - Genes for breeding (cold/disease resistance)

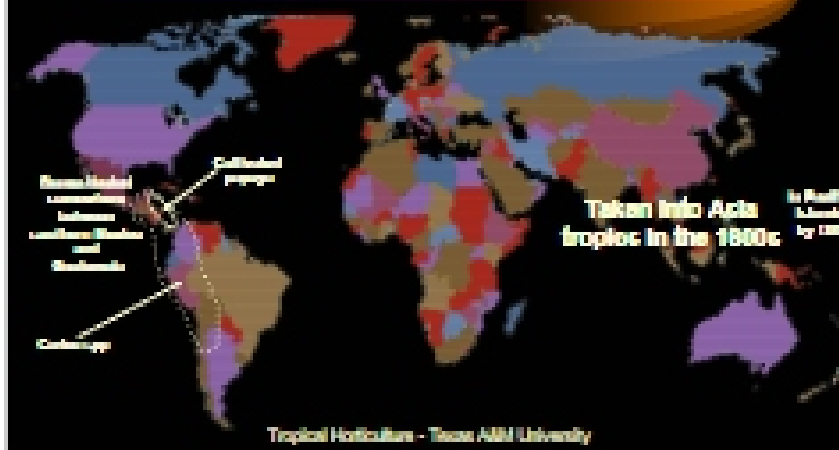
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## Other cultivated Carica

- **Hybrid types - Babaco**
  - Most commercially advanced
  - Seedless - parthenocarpic
  - Large fruit
  - Fresh or stewed
  - Vegetatively propagated

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## Origin of Papaya

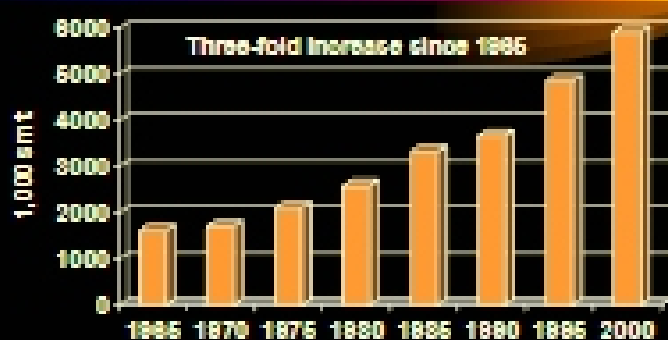


## Origin of Carica papaya

- **Tropical America**
  - Southern Mexico
  - West Indies
- **Other spp: Mexico - Argentina**
- **Spread via seed**
  - 1600s in Asian tropics
  - By 1800 common in Pacific

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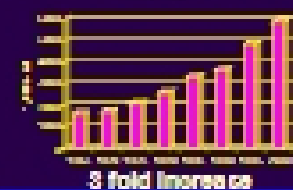
## Papaya Production in the World



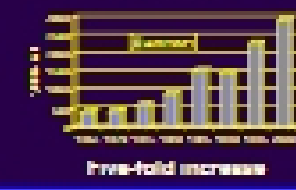
FAO/STAT database, 1965 - 2000

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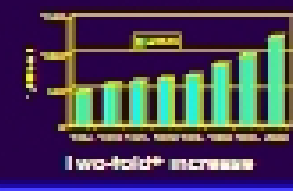
### Papaya Production in the World



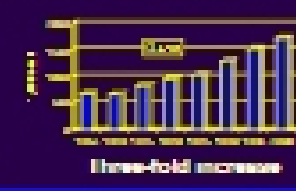
### Papaya Production in the Americas



### Papaya Production in Africa



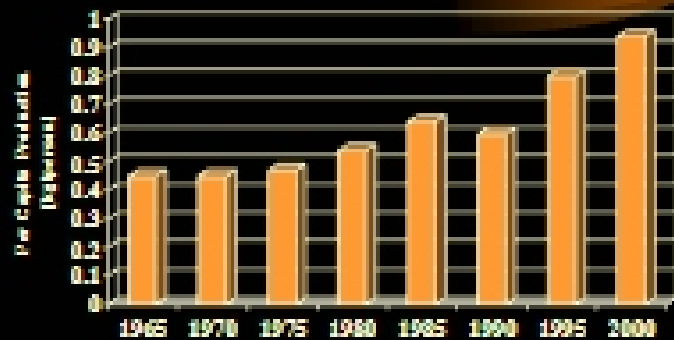
### Papaya Production in Asia



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## Papaya per Capita Production in the World

FAOSTAT database, 1965-2000



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## World Production of Papaya

Region	1,000 mt	%
Africa	1,228	21%
Asia	1,727	29%
Americas	2,923	50%
USA	23	< 0.5 %
Total	5,901	

FAOSTAT database, 1989-2002

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## World Production of Papaya

Region	Country (1,000 mt)
Africa	Nigeria (748), Ethiopia (215), Congo (210)
Asia	India (700), Indonesia (484)
Americas	Brazil (1,476), Mexico (745)

FAOSTAT database, 1989-2002

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## World Yields of Papaya

Region	Mt/ha
Africa	10.2
Asia	11.7
Americas	30.3
USA	32.9

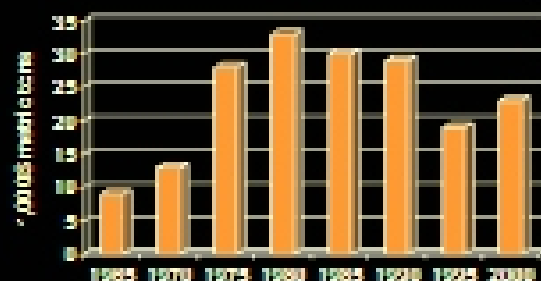
FAOSTAT database, 1989-2002

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### • Most in Hawaii

- ⇒ Produce 23,000 MT
- ⇒ Most exported to mainland USA, Canada, and Japan
- ⇒ Production decrease since 1989 due to Papaya ringspot

## USA Production



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## Fruiting of the Papaya

- Fruit hang along trunk
- Flower in leaf axils
  - Most are dioecious
  - Some are hermaphroditic or perfect flowered
  - Five classes of flowers



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