



Lecture 28
Other Tropical Starch Crops

Sweet potato: *Ipomoea batatas*, Convolvulaceae

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New World Origin, has become naturalized in the Pacific.

One theory is that it was carried by Polynesian travelers from Easter Island, but more likely it came from the Philippines where it was introduced by the Spanish conquistadors.

Adapted to tropical lowlands and an important food in Asia.

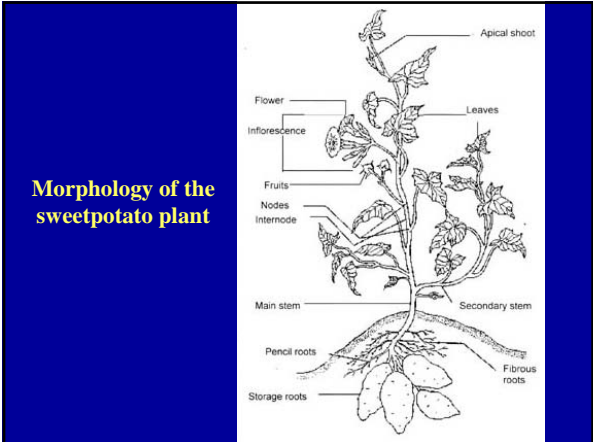
In tropics most cultivars are white fleshed.

Has now become an important temperate crop.

Sweet Potato Production (2001)

Continent	1000 tonnes	Chief countries
World	135,919	
Africa	10,203	Uganda (2,515), Nigeria (2,468), Rwanda (1,137)
North America	1,158	US (651), Cuba (200), Haiti (174)
South America	1,250	Brazil (485), Argentina (335), Peru (273)
Asia	122,645	China (115,122), Indonesia (1,686), Viet Nam (1,610)
Europe	59	Portugal (22), Spain (21), Italy (14)
Oceania	602	Papua New Guinea (485), Solomon (79), New Zealand (16)

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Potato: *Solanum tuberosum*, Solanaceae



Also known incorrectly as Irish potato (but is not from Ireland) and white potato (but there are yellow and red types).

A tropical highland crop but now the most important temperate tuber vegetable.

Still grown in tropical highlands.

Crop is very sensitive to daylength.

S. tuberosum (4x, a tetraploid) tubers in short days and long days = a long day selection of *S. andigenum*

S. andigenum (4x); tubers only in short days

S. demissum (6x); small and colorful potatoes of Peru

S. phureja (2x)

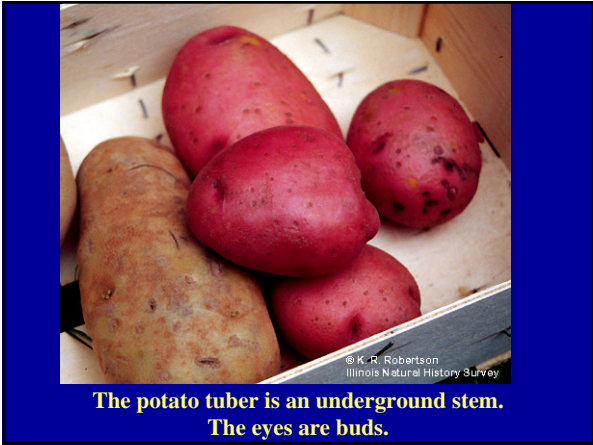
S. stenotomum (2x)

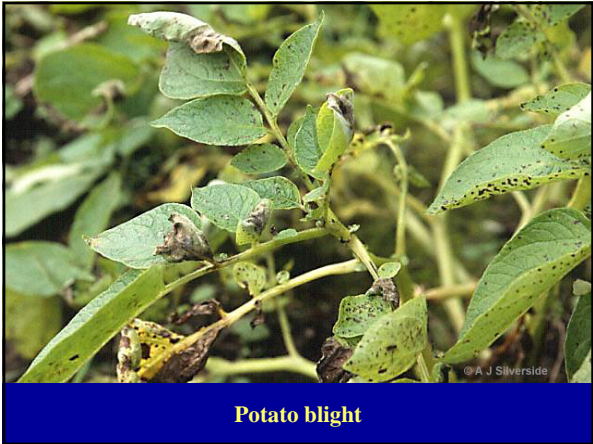
Potato Production (2001)

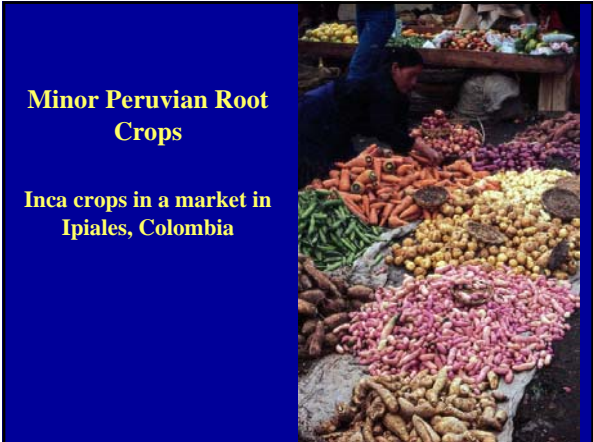
Continent	1000 tonnes	Chief countries
World	308,195	
Africa	11,776	Malawi (2,000), Egypt (1,800), South Africa (1,555)
North America	26,646	US (20,174), Canada (4,030), Mexico (1,610)
South America	13,902	Colombia (3,013), Peru (2,799), Brazil (2,787)
Asia	118,280	China (64,045), India (25,000), Turkey (5,350)
Europe	135,839	Russian Federation (34,500), Poland (20,401), Ukraine (13,500)
Oceania	1,753	Australia (1,250), New Zealand (500), New Caledonia (1)

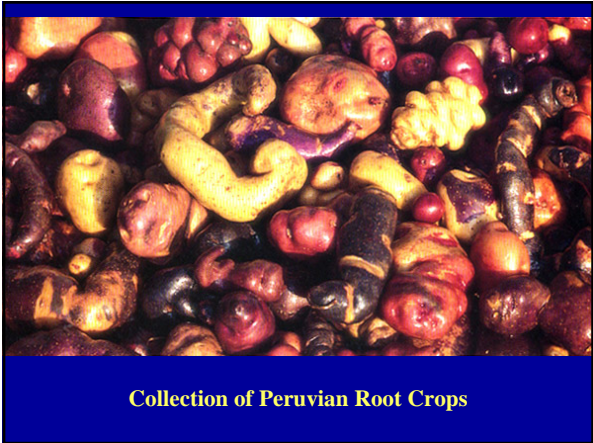
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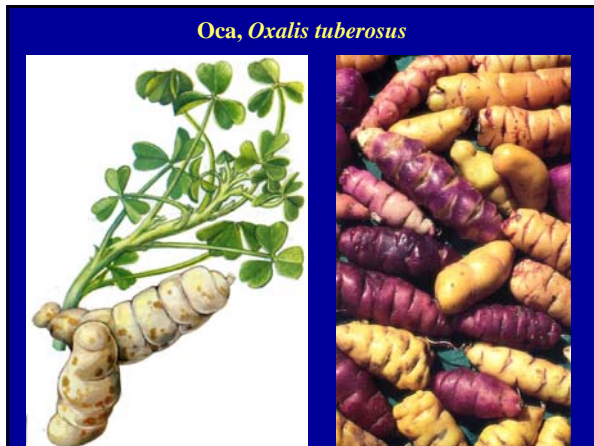












Palms and Cycads

The stems of Cycads and Palms are a source of carbohydrates inside the stem.

They are harvested by cutting down the tree and scraping the stem.

Sago: *Metroxylon sagu*, Palmaceae

An enormous palm, originated in Malaysia.

Grows 10 to 15 years before it flowers, during this period it accumulates starch.

It is not widespread but found now in New Guinea.



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