

Ethnobotany. Lecture 25

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Outline

- 1 Nuts
 - Diversity of nuts
- 2 Gourd plants
 - Diversity of gourd plants



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Nuts

Diversity of nuts



Brazil nut, *Bertholletia excelsa*

- Large tropical tree of Lecythidaceae family
- Among others, it is the richest dietary source of selenium



Brazil nut flowers



Brazil nut fruit



Macadamia, *Macadamia integrifolia*

- Member of Proteaceae family; Australian plant
- Rich of fats and microelements; toxic to dogs



Macadamia



Chestnut, *Castanea sativa*

- Member of oak family, Fagaceae
- Old European culture, traditional to France, England and Germany
- Rich of tannins and therefore usually fried



Chestnut



Gourd plants

Diversity of gourd plants



Gourds, Cucurbitaceae family

- \approx 900 species, mostly tropical and subtropical plants
- Prefer dry regions, important component of different deserts
- Hairy herbs or vines with tendrils (modified shoots)
- Flowers unisexual
- Petals and stamens fused
- Pistil with 3 carpels, ovary inferior
- Fruit is a berry

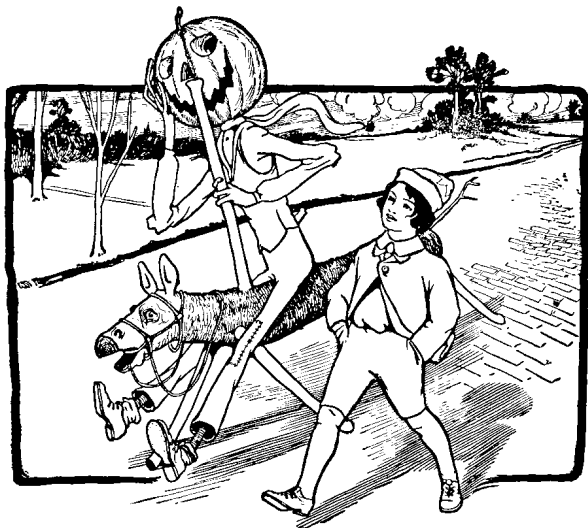


Pumpkins and squashes, *Cucurbita* spp.

- Central American origin
- Plants of multiple uses; it is normal to harvest the underripped



Pumpkinhead, Sawhorse and Tip (Ozma)



Watermelon, *Citrullus lanatus*

- African origin
- The source of water, multiple medicine uses (e.g., for kidney diseases)



Watermelon flower

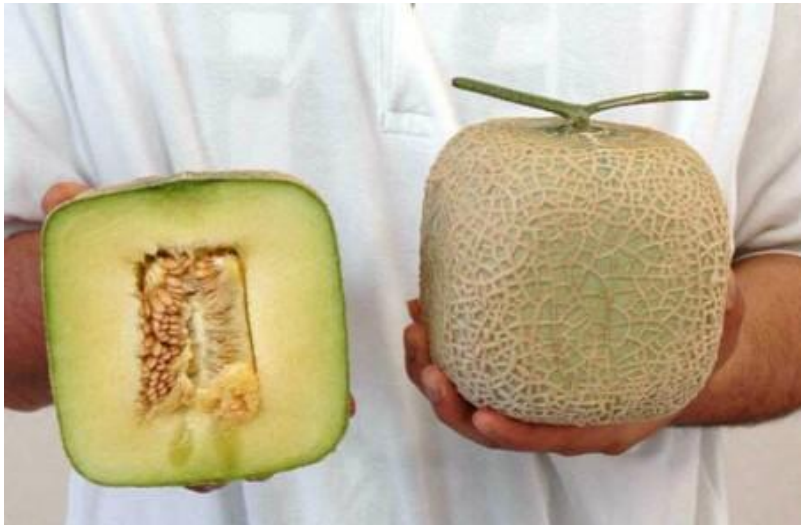


Melon, *Cucumis melo*

- Central Asian origin
- Rich of sugars (some cultivars up to 20%), used as sugar source in Central Asia



Japanese square melon



Cucumber, *Cucumis sativus*

- Annual herbaceous vine from India forests, wild relatives not found
- May grow as water culture, widely cultivated in greenhouses, some cultivars have one week for fruit development



Indian Dosakai round cucumber



Chayote, *Sechium edule*

- One of relatively “new” cultures from Mexico
- High yield culture, one plant may give up to 40 kg of fruits



Chayote



Summary

- Nuts are plants accumulating oils and proteins in their seeds, they mostly dispersed by “bad memory” animals
- Gourd plants are intermediates between fruits and vegetables



For Further Reading



A. Shipunov.

Ethnobotany [Electronic resource].

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Mode of access:

http://ashipunov.info/shipunov/school/biol_310



P. M. Zhukovskij.

Cultivated plants and their wild relatives [Electronic resource].

Commonwealth Agricultural Bureaux, 1962. Abridged translation from Russian.

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