

Ethnobotany. Lecture 16

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Outline

- 1 Rosaceae fruits
 - Rosaceae with stone fruits



Rubus chamaemorus, cloudberry

- One of the northernmost berry plants
- Semi-shrub; the only dioecious *Rubus*
- Food of many Arctic mammals and birds, e.g. reindeer
- When ripe (yellow), have a creamy texture and tart taste
- Contains benzoic acid content acting as a natural preservative:: stays all winter without additional preparations
- Rich of vitamin C: used against scurvy



Rubus chamaemorus



Rosaceae fruits

Rosaceae with stone fruits



Rosaceae with stone fruits, *Prunus*

- Multiple (≈ 430) species often separated in different genera on the base of fruit morphology
- Often hairy exocarp, juicy mesocarp and stone endocarp
- Distributed almost equally among Eurasia and North America
- Flower before appearance of leaves, inflorescences are umbels

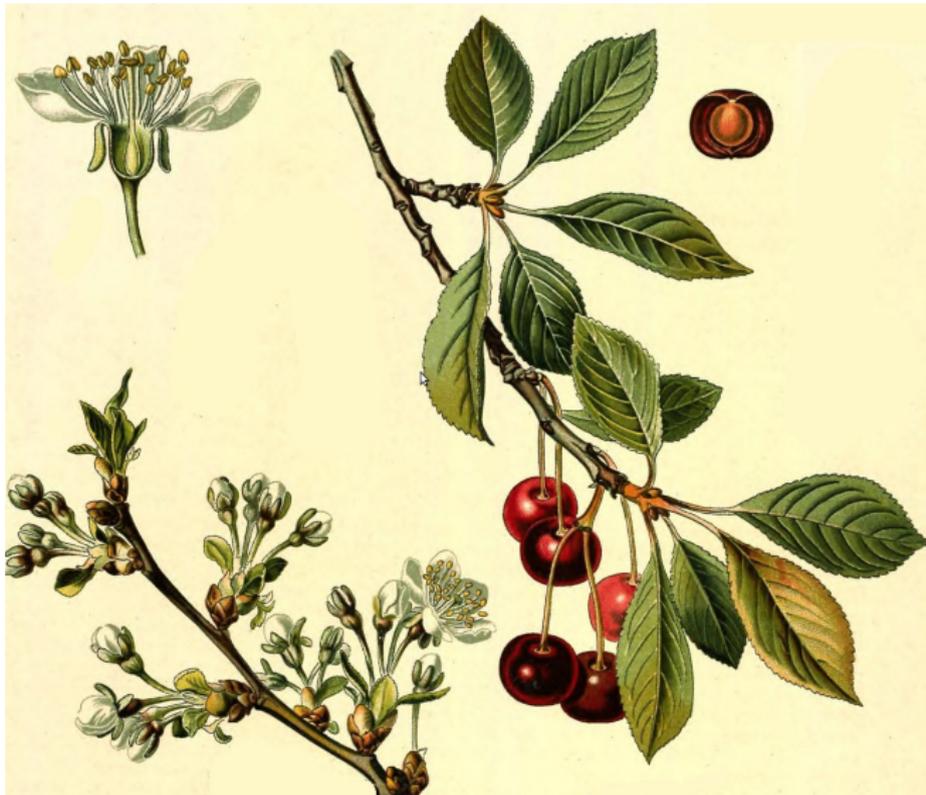


Prunus avium, cherry

- Mediterranean tree, cultivated from Roman times
- Used also as timber and ornamental plant
- All parts except “berries” (drupes) contain cyanogenic glycosides
- Sweet/early and sour/late groups of cultivars.



Prunus



Cherry



Other cherries

- Black cherry (*Prunus serotina*) and choke cherry (*Prunus virginiana*) are two frequently cultivated North American species
- Choke cherry is a state fruit of North Dakota
- It is also a hosts of tent caterpillar, *Malacosoma* sp.



Choke cherry



“Nest” of tent caterpillars



Prunus armeniaca, apricot

- Old culture of Central Asian origin, later spread into China and Europe
- Dry fruits were traditionally used as sugar source (along with melon)
- Fruits contain oil of cooking quality
- Biggest producer is Turkey



Drying apricots in Cappadocia, Turkey



Prunus × *domestica*, plum

- Hybrid hexaploid ($2n = 48$) species, originated from cherry plum *Prunus divaricata* ($2n = 16$) and blackthorn *P. spinosa* ($2n = 32$)
- Probably of Caucasian origin, contemporary cultivars are even more complicated hybrids
- Well-known laxative fruit
- Chinese “plum” is a separate species, *Prunus mume*—kind of intermediate between apricot and plum



Plums



Blackthorn



Cherry plum



Chinese plum drawing



Prunus mume



Prunus persica, peach

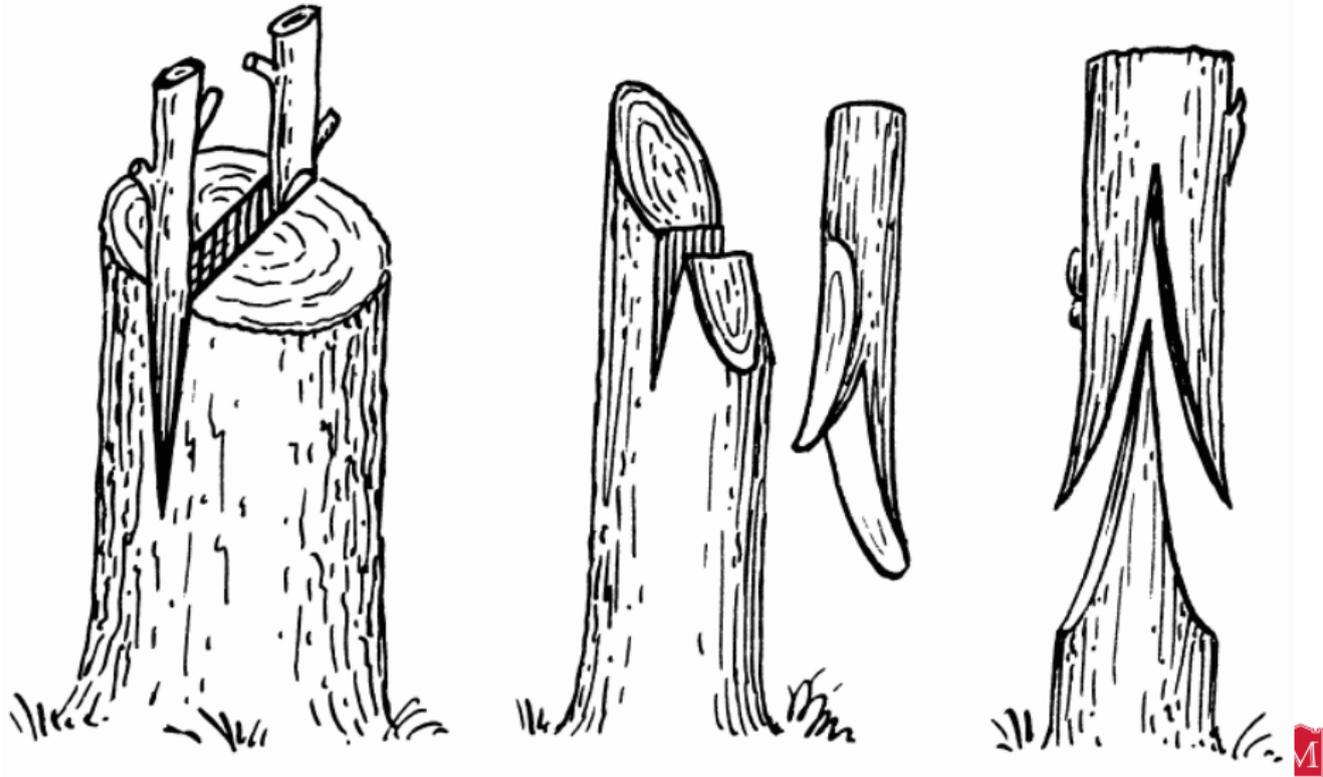
- Tree of Chinese origin, cultivated from 1,100 BC and spread to Europe with Alexander the Great army
- Multiple cultivars including nectarines (result of bud sport mutation) and Chinese flat peaches
- Propagated mostly by grafting on adequate rootstocks (many other *Prunus* species)
- China is still a biggest producer



Chinese flat peach



Grafting



Summary

- Rosaceae is one of the most important temperate fruit families
- Most of Rosaceae cultivated fruits are result of long selection involved multiple hybridization
- Most of Rosaceae cultivated fruits are propagated by grafting on appropriate rootstocks



For Further Reading



A. Shipunov.

Ethnobotany [Electronic resource].

2011—onwards.

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.

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[http://ashipunov.info/shipunov/school/biol_310/
zhukovskij1962_cultivated_plants.pdf](http://ashipunov.info/shipunov/school/biol_310/zhukovskij1962_cultivated_plants.pdf)

Pages 28–74.

