

Advanced English for Plant Biologist autumn 2012

Lesson No. 8

M. Barták

Department of Experimental Biology

Division of Plant Physiology



Overview of the Lesson 1

- What is the plant species ?
 - Plant biology related vocabulary
 - *An interactive exercise*
 - Fill-in exercise
 - Conversation
 - *Writing a Bc., Diploma, doctor thesis*
 - Where are the plant species from?
 - Conversation *(free topic)*
-

Do you know the country?



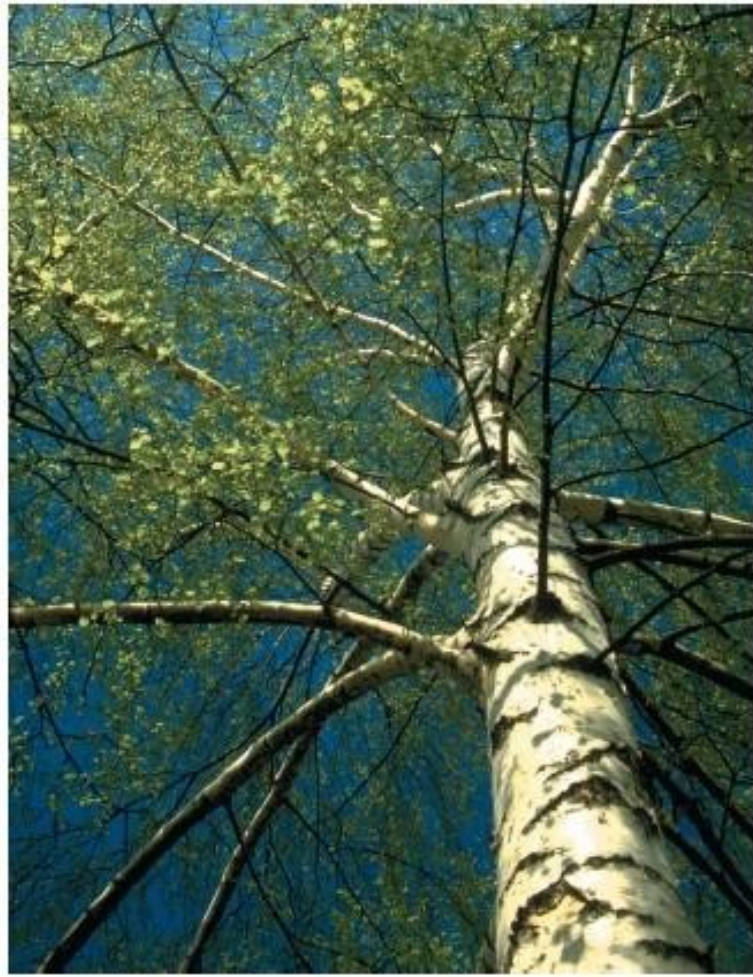


What is the species name ?

- The species is generally small to medium-size tree or shrub, mostly of temperate climates. The simple leaves may be toothed or pointed. The fruit is a small samara, although the wings may be obscure in some species. The bark of the tree species is characteristically marked with long horizontal lenticels, and often separates into thin papery plates. The bark burns very well even when wet, frozen or freshy because of the oils it contains. Extracts of the species are used for flavoring or leather oil, and in cosmetics such as soap and shampoo. The tree is considered a national tree of Russia.
-

Is is a birch?

Yes, it is

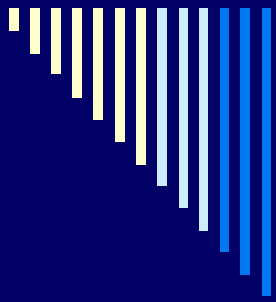


□ What is this?



□ horizontal lenticels

Sources: http://myflock2.com/orgs_pub/church1689/caldb/images/,
sugarmtnfarm.com/blog/2006/02/,



What
is
this ?



□ A fruit called samara

What is a biologist (you can see his/her hands) doing ?



- Describe what you see, please.
- What words do fit to the photo?

- Sampling
- Sapling
- Germinating plant
- Potting
- Plotting
- Heating
- Healing
- Rooting
- Rolling

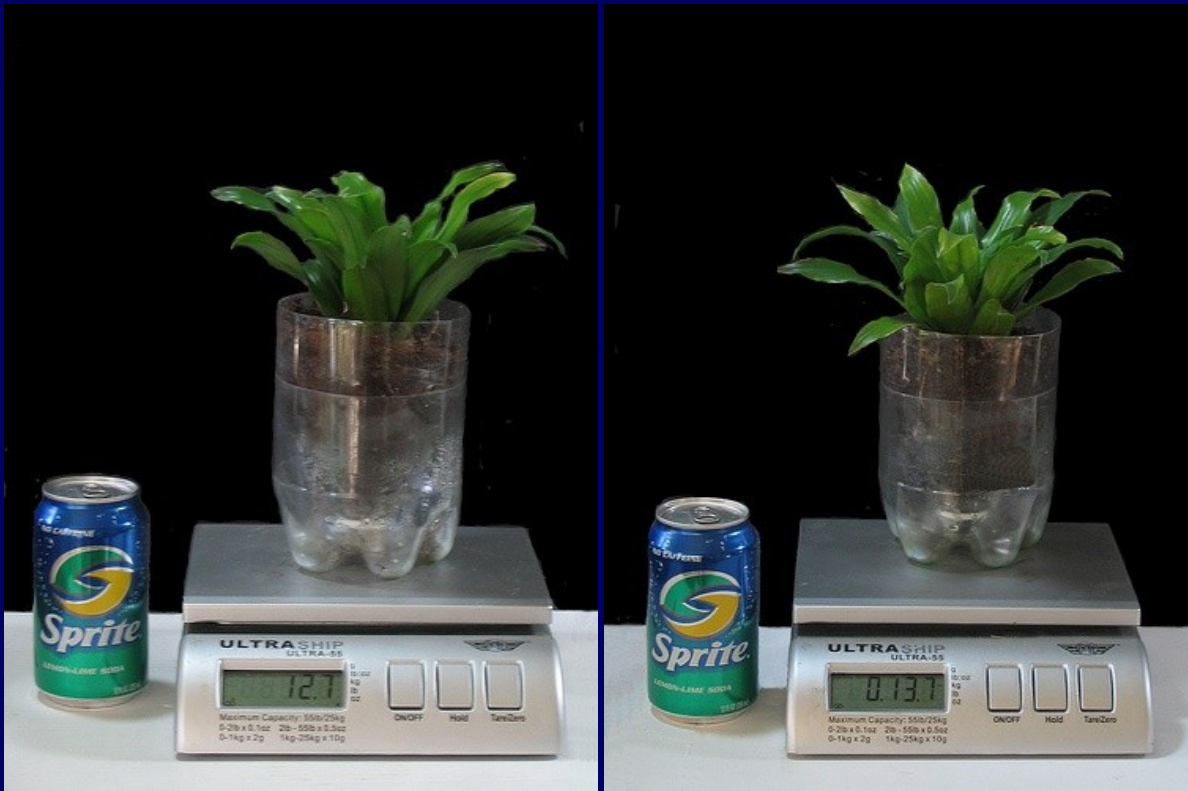
What does he do ?

- Describe activity(-ies) he preforms
- What words do fit to the photo?



- Centrifuge
- Laboratory oven
- Erlenmayer flasks
- Light suit
- Light tubes
- peat
- pest
- Liquid media
- Advertising media

What do you think the setup is used for ?




- Pest control
- Evaporation
- Crop harvest
- Leaf anatomy
- Water relations
- Root development
- Plant-insect interaction
- Transpiration
- Leaf spectral reflectance
- Light absorption



What is she doing?

- Describe what you see, please.
- What words do fit to the photo?
 - Plant cultivation
 - Plant storage
 - Plant germination
 - Plant remediation
 - Herbarium
 - Species
 - Specimen
 - Folders
 - Soldiers
 - Holders



What is the process ?

The **process** is programmed in plants and has a lot to do with aging of tissues, leaves, and whole plants. **The process** seems to be heavily influenced by plant hormones. The hormones abscisic acid and ethylene are accepted by most scientists as the main causes, but at least one source believes gibberellins and brassinosteroids are equally responsible. Cytokinins help to maintain the plant cell but when they are withdrawn or if the cell can not receive the cytokinin it may then undergo apoptosis or death.

What is the process ?



Leaf emergence

leaf greening

leaf senescence

leaf shading

Where should you go to see the below plant in the field ?



Florida

Where should you go to see the below lichen in the field ?



Norway
Alaska



What animal feeds on *Cladonia rangiferina* ?

Seal

Walrus

Pigeon

Raindeer

Deer

Earthworm

Beluga

Fallow deer



Where should you go to see the below plant in the field ?



Austria, of course.
Hlístník hnízdák (*Neottia nidus-avis*)



What is a plant disease ?

An impairment of health or a condition of abnormal functioning of a plant.

Inpairment = zhoršení, defekt

houseplantsreviews.com/Rubber-Plants-Disease/



<http://www.ces.ncsu.edu/depts/pp/notes/Fruit/fdin002/blkrot.jpg>

Next 2 slides: Source: http://www.audioenglish.net/dictionary/plant_disease.htm



Hawaiian red ginger



Source: www.surfsong.com/images/garden/RedGingerBunch.jpg

Ladies and gentlemen, thank you for your attention
Looking forward to meeting you next week.