



Lesson No. 10

English for Plant Biologists

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2013

Warm up exercise



- What is a name of the city ?

Warm up exercise



- Who did paint the above paintings ?

Is that

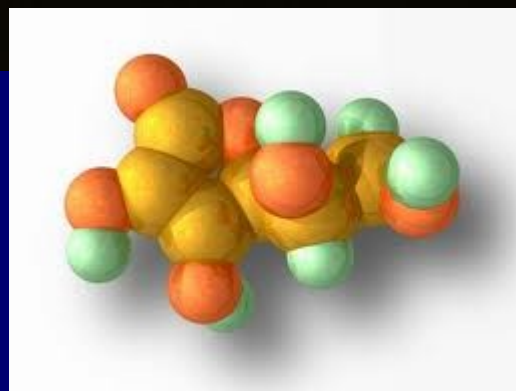
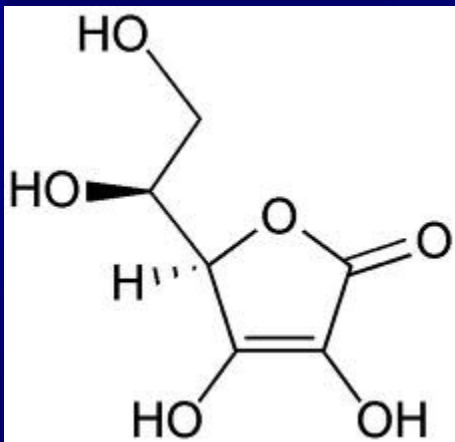
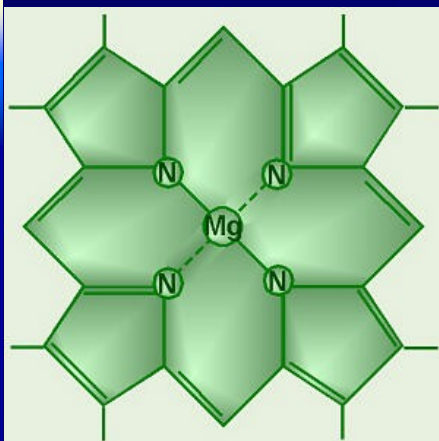
- Bucharra
- Bucuresti
- Budapest
- Novgorod
- New York
- New Hampshire



Plant biochemical compounds

- Be careful when pronouncing chemical names
- Are you sure you know all abbreviations of basic plant chemicals ?
- Are you able to classify compound produced by plants ?

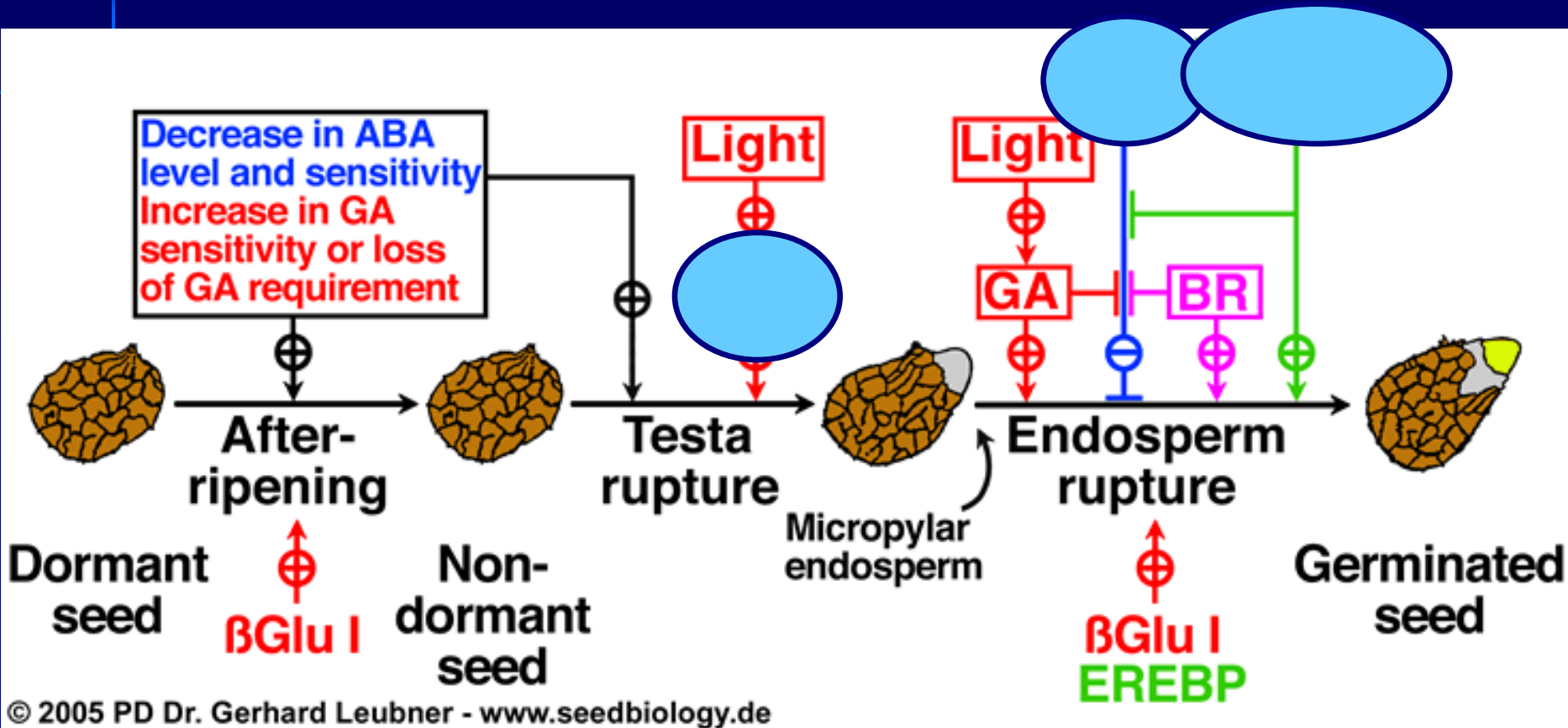
This is a typical part of molecule of ...



AA



Plant hormones

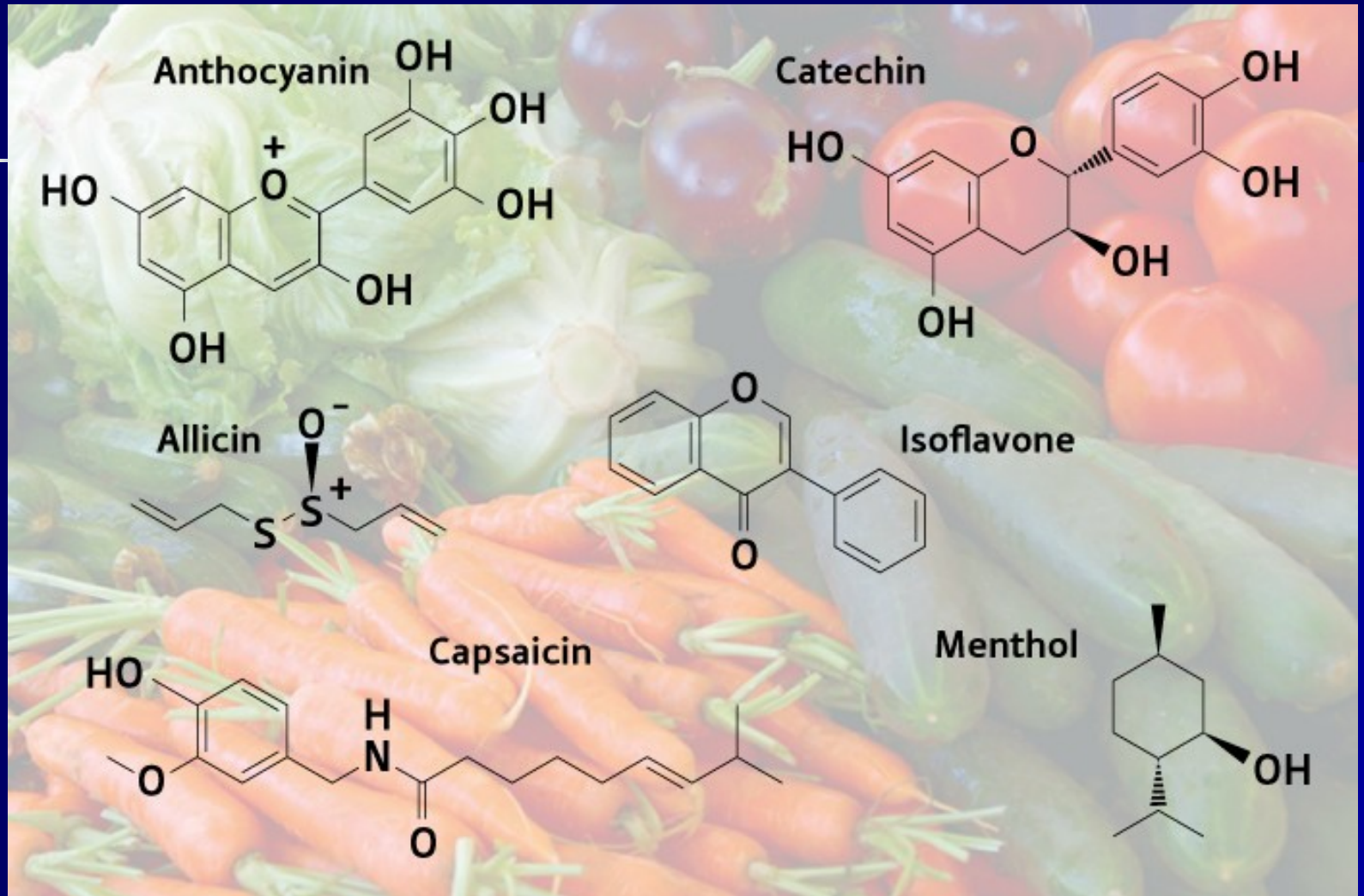


- Source of image: <http://www.seedbiology.de/hormones.asp>

Read and translate

The production of compounds such as amino acids, sugars and vitamins, which make up the body of a plant, from inorganic compounds is called 'primary metabolism', whereas the production of more complex compounds from primary metabolites is called 'secondary metabolism'.

Plant secondary compounds



Plant enzymes

superoxide dismutase,
catalase,
ascorbate peroxidase,
glutathione reductase

Are they:

Carboxylation enzymes ?

Proteolytic enzymes ?

Antioxidative enzymes ?

Are those compounds used in enzymes ?

- Phosphoenol pyruvate
- Ribulose bis-phosphate

What are the abbreviations of the enzymes ?

Is it PEPCO ? Is it RUBISCO ?

Are they hydrolitic enzymes ?

Of course, they are not. They are carboxylation ones.

What is the most important chemical product of ... ?



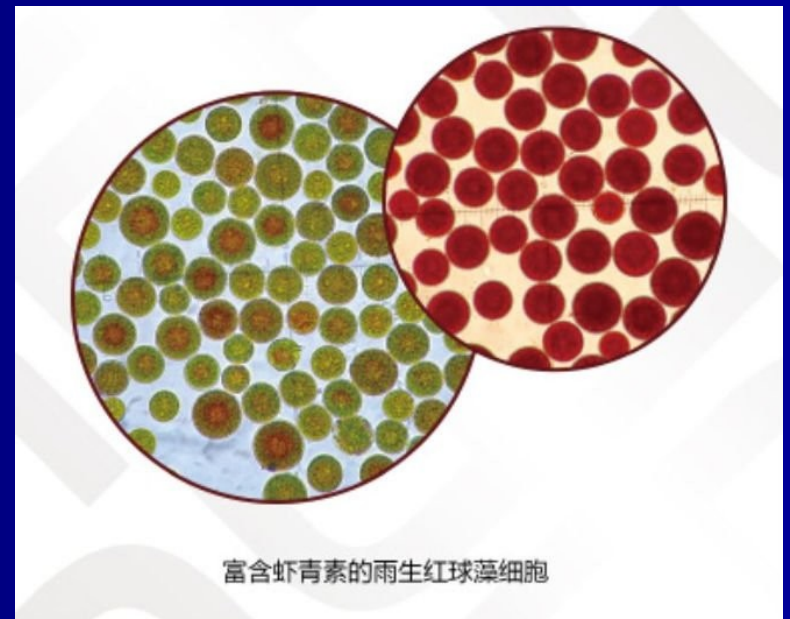
- <http://www.rnw.nl/english/article/polystyrene-surplus-sugarcane>

What is the most important chemical product of ... ?



- <http://www.tokyofoundation.org/en/topics/japanese-traditional-foods/vol.-6-rapeseed-oil>

This is a bioreactor with algal culture inside it.



- Sources: <http://www.algae2omega.com/gallery>,
- http://www.alibaba.com/product-gs/430577551/Natural_astaxanthin_oil_oleorisen.html
- <http://www.yamaha-motor.co.jp/global/news/2007/04/17/astivo.html>

Finally, some useful abbreviations

■ ABA

■ IAA

■ GA

■ ABBA

■ JA

■ MEJA

■ Ala

■ Asp

■ Leu

■ Gly

... and finally...

CONVERSATION is coming

- Plants in everyday s life
- May plants be harmful to a man ?
- Plants in science and technologies.
- Endangered plant species. Why do they extinct?