



# English for Plant Biologist

*Autumn 2013, lesson No. 7*

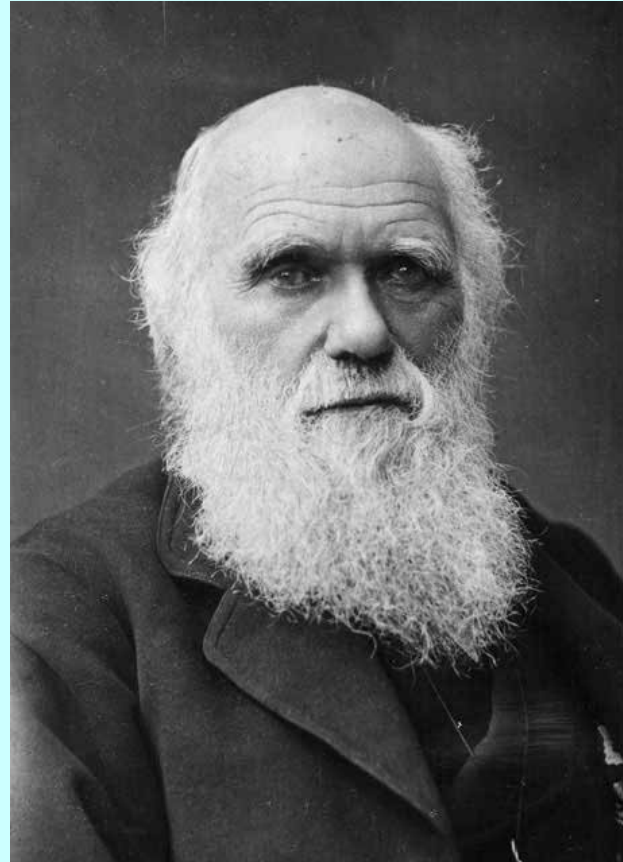
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Department of Experimental Biology  
Laboratory of photosynthetic processes

# Overview of the Lesson

- Warm up exercise (Who is the person ?)
- Conversation – Who are the two young gentlemen attending the course today?
- Interactive exercise
- Vocabulary related to phytosociology
- Specific flora of temporarily unknown European Country.

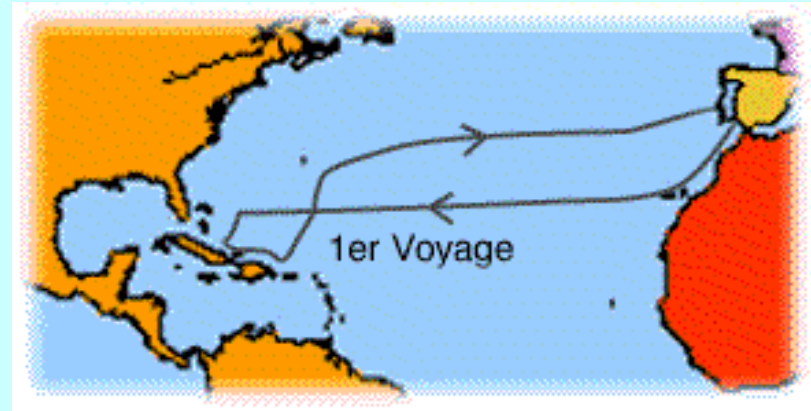
# Who is the below person ?



<http://pterosauria.wordpress.com/2011/02/12/charles-darwins-202nd-birthday/>, <http://sallyjcarpenter.blogspot.com/2010/05/intro-to-experiment-3.html>

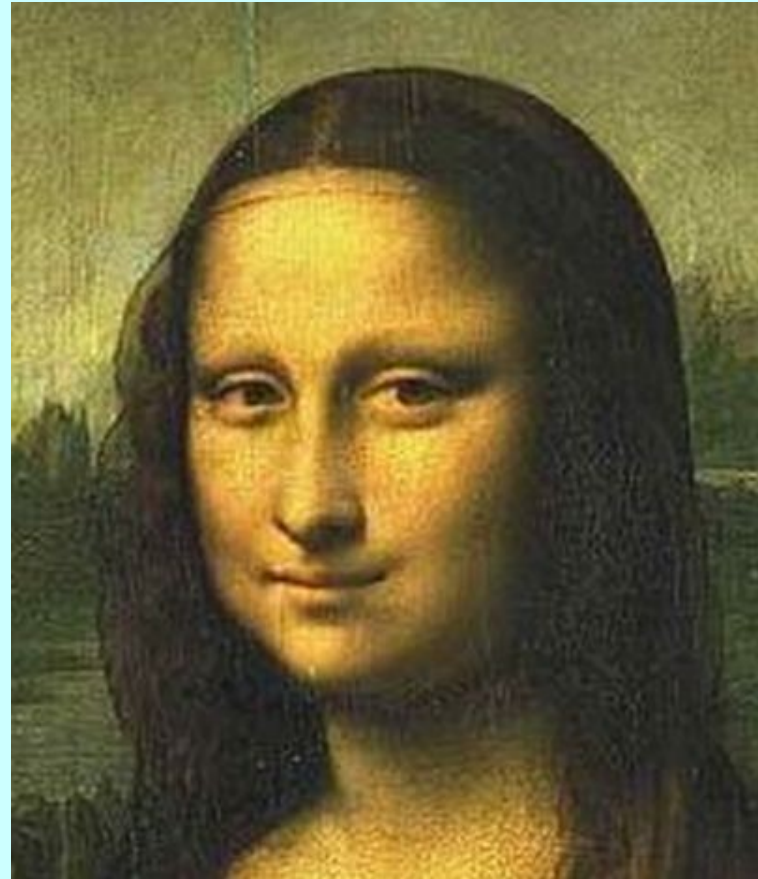
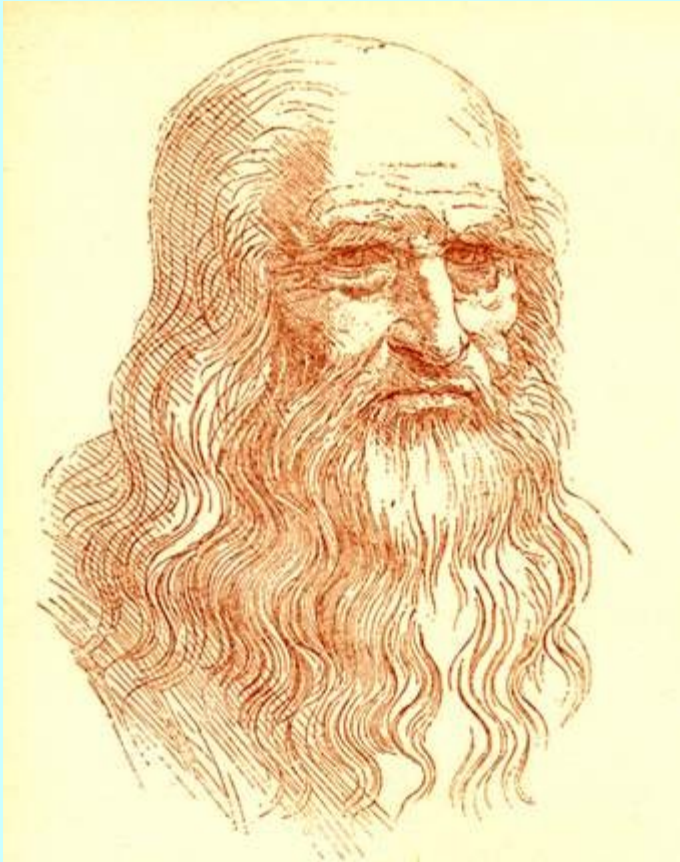
Do you know what English city is related to Charles Darwin ?

# Who is the below person ?



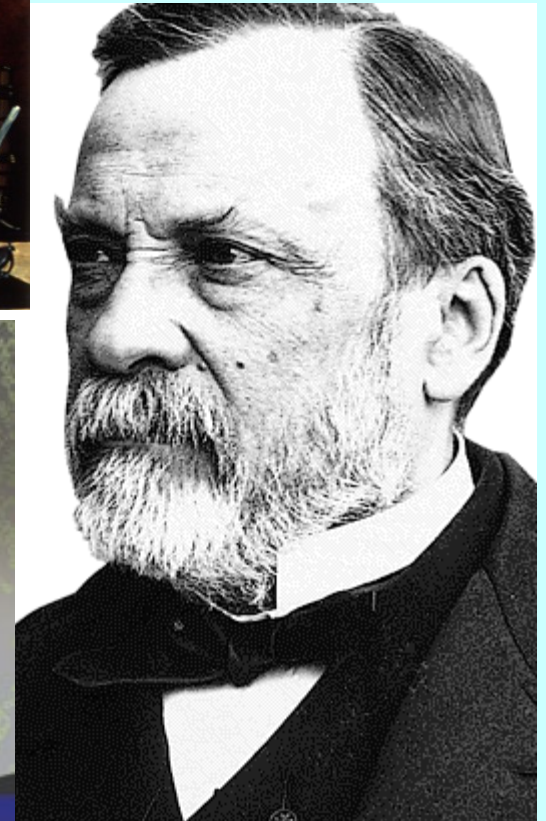
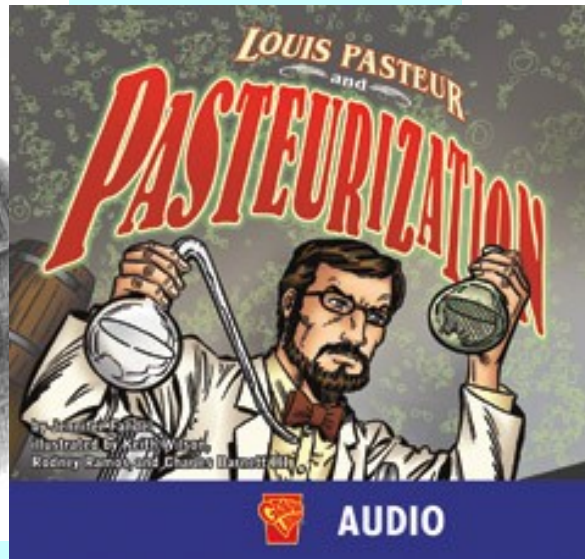
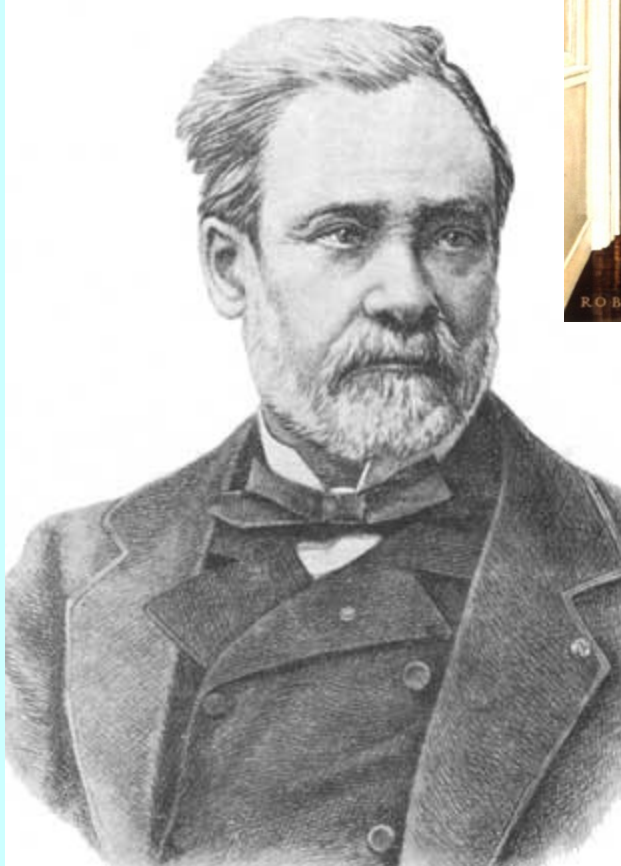
- <http://www.latinamericanstudies.org/columbus.htm>,

# Who are the below persons ?



- <http://purpleopurple.com/biography/Short-Biography/Leonardo-da-Vinci.html>, <http://www.developpement-durable-lavenir.com/Art>

# Who is the below person ?



- <http://www.teknoloji.tc/1916/louis-pasteur-pastor/>
- <http://www.biografiasyvidas.com/biografia/p/pasteur.htm>
- <http://www.heinemannclassroom.com/product/9781429611176>
- <http://www.clccharter.org/joseph2/louispasteur.html>





- <http://www.kipnews.org/2011/08/16/the-committee-of-300/>
- <http://www.topnews.in/people/queen-elizabeth-ii>



# The winners are given a ring of ....



# What is the plant species ?



[http://www.123rf.com/photo\\_7803360\\_tea-garden-in-mountain.html](http://www.123rf.com/photo_7803360_tea-garden-in-mountain.html),

This is a plant species  
associated with tea.



<http://www.herbalremedice.com/herbal-treatment/herbal-remedies-for-sore-eyes.html>,

<http://www.allherbaltea.com/jasmine/>,

<http://mgonline.com/articles/jasmine.aspx>



Is it bamboo ?

## plant species ?

he fastest growing plants in  
are capable of growing  
day due to a unique rhizome-  
er, the growth rate is partially  
climatic conditions.

ple economic and cultural  
South East Asia and East  
g materials, as a food source,  
uct.

# Can you define the term Plant Ecology ?



2011

**Plant ecology** is a subdiscipline of ecology which studies the distribution and abundance of plants, the interactions among and between members of plant species, and their interactions with their environment. their respective environments.

# Find Czech equivalents

Life form

Plant strategies

- competitor (C),
- stress tolerator (S),
- and ruderal (R).

Plant reproduction

- Sexual reproduction
- Asexual reproduction

Biological interactions

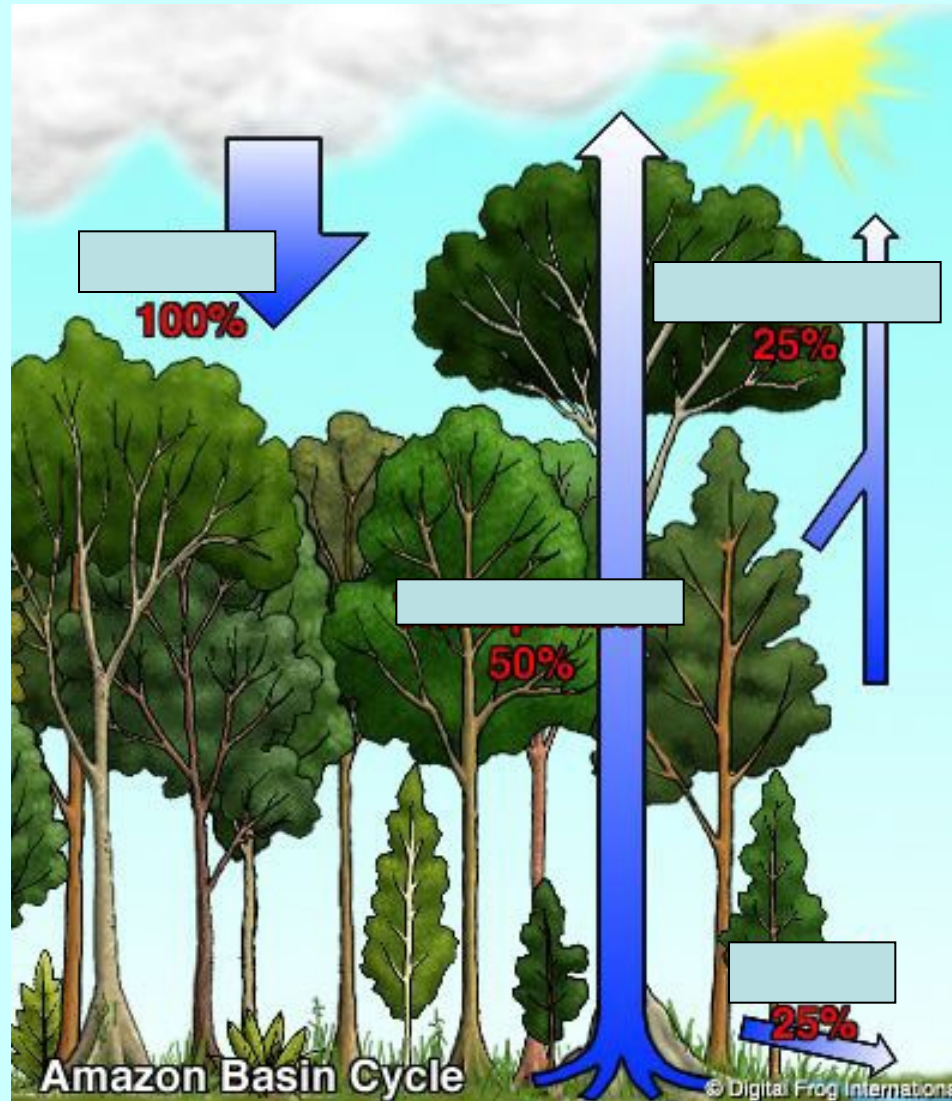
- Competition
- Facilitation
- Herbivory

Distribution

Abundance

Extinction

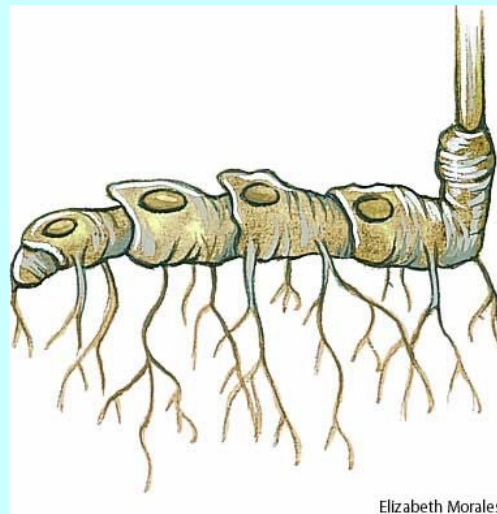
# Water relations in plants



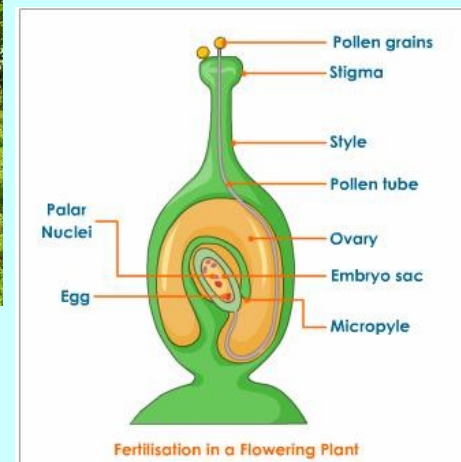
- Source of image: <http://www.tropical-forests.com/2008/09/build-a-mini-rainforest/>

# Which picture relates to....?

pollination  
polution  
extinction  
plantations  
reproduction  
rhizomes



Elizabeth Morales



Source of photos: <http://thegreenstep.com/green-steps/reduce-carbon-emissions-atmosphere>,  
[http://www.china.org.cn/environment/2011-03/11/content\\_22108735.htm](http://www.china.org.cn/environment/2011-03/11/content_22108735.htm), <http://images.yourdictionary.com/rhizome>  
[http://www.fincaleola.com/visit\\_the\\_plantation.htm](http://www.fincaleola.com/visit_the_plantation.htm), [http://www.proprofs.com/quiz-school/story.php?title=plant-reproduction\\_2](http://www.proprofs.com/quiz-school/story.php?title=plant-reproduction_2)



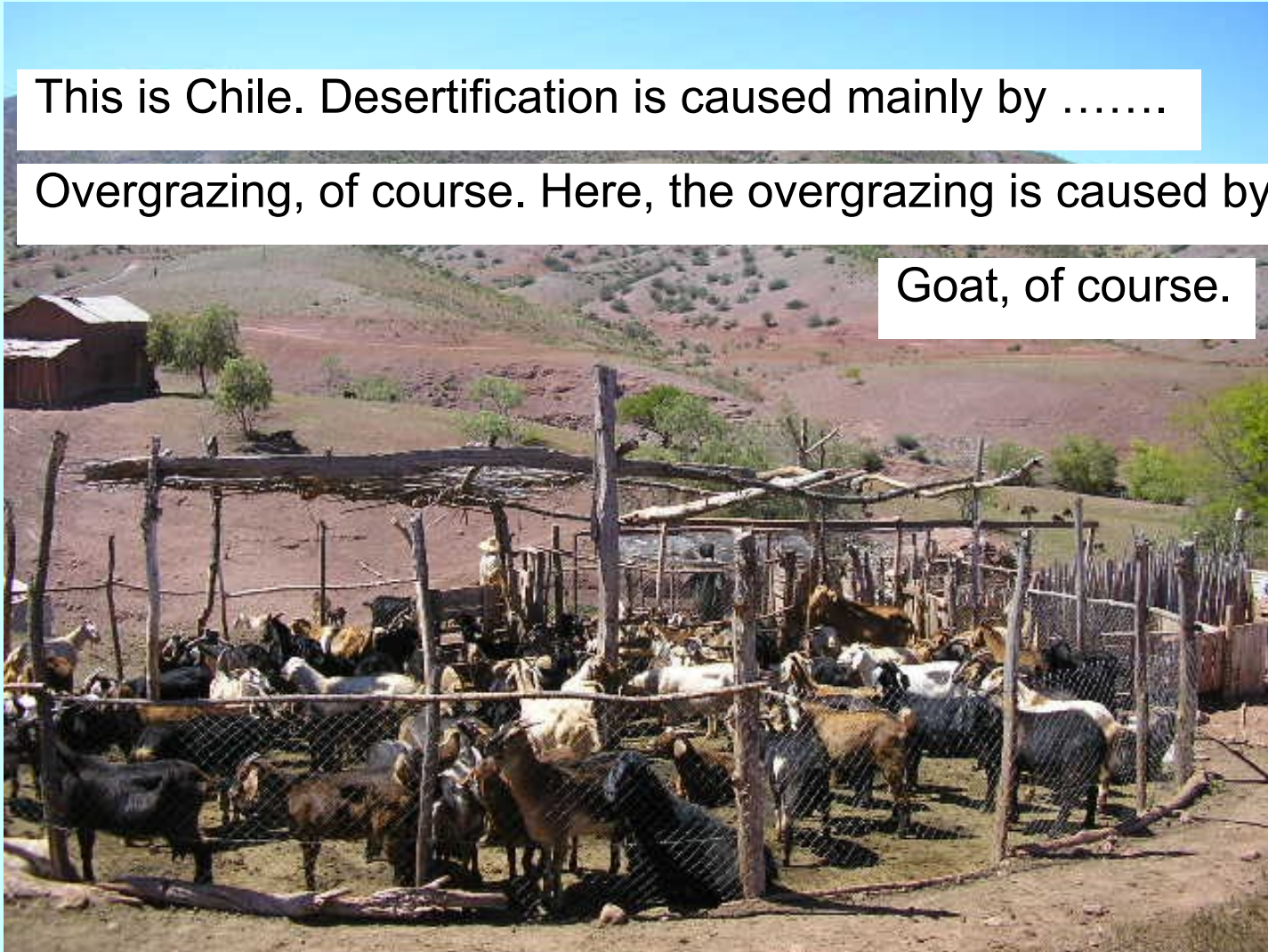
# Desertification

Explain, what desertification is, please.

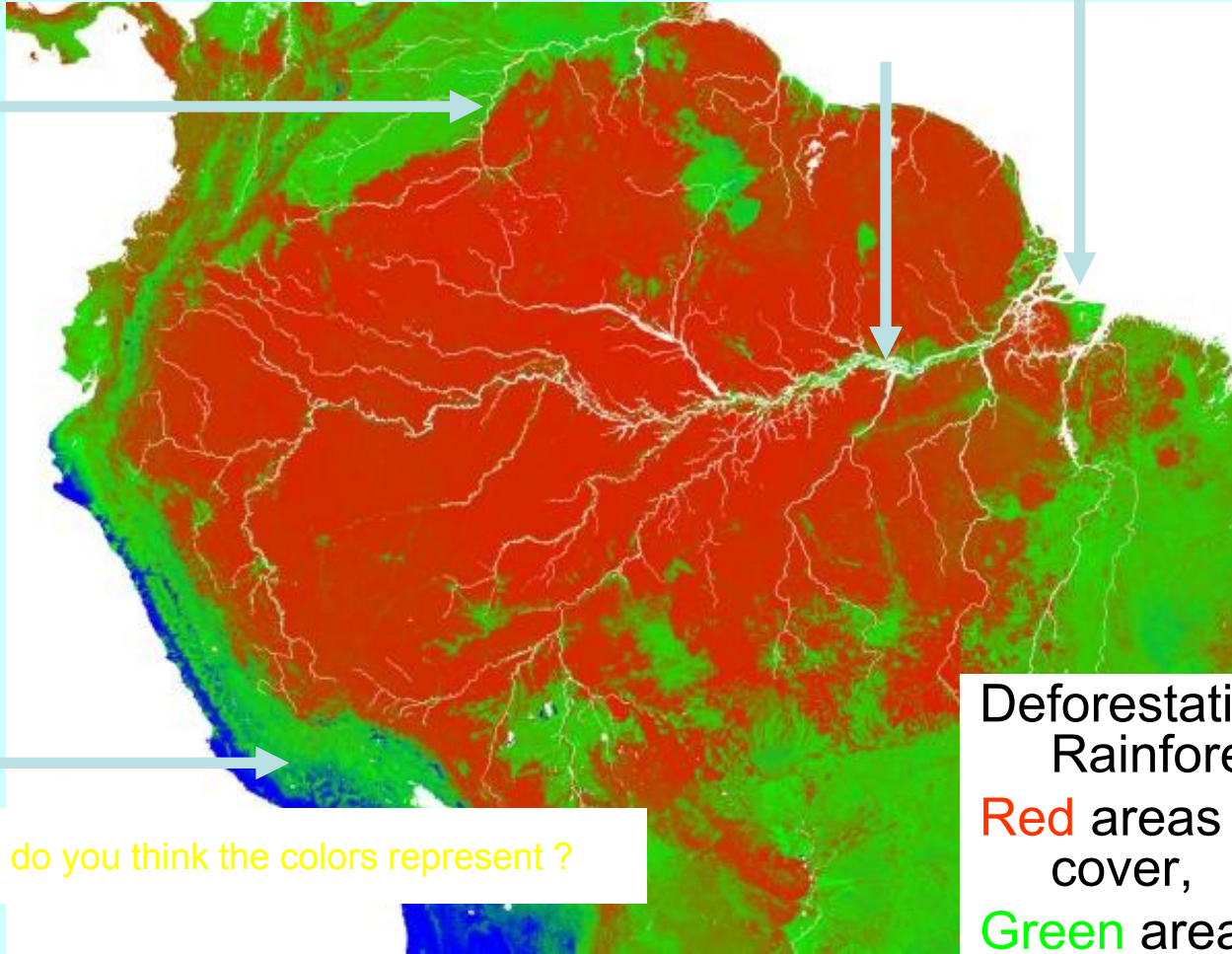
This is Chile. Desertification is caused mainly by .....

Overgrazing, of course. Here, the overgrazing is caused by....

Goat, of course.



# Is this false color picture ?



What do you think the colors represent ?

Deforestation in the Amazon Rainforest.

**Red** areas correspond to tree cover,

**Green** areas are of herbaceous cover, and

**Blue** areas indicate bare ground. Credit: NASA Earth Observatory.

# Translate into Czech, Polish, Spanish, Italian

- phytocoenosis = community of the second level
- plants = ecological indicators
- biodiversity indices
- wooded meadows
- wetlands
- swamps
- plant community structure
- Primeval forest

# What are the pictures documenting ?

Field trip

Palaeophytogeography

Parasitology

Practical course

Botanical nomenclature



Human physiology

Students excursion

Glaciology

taxonomy

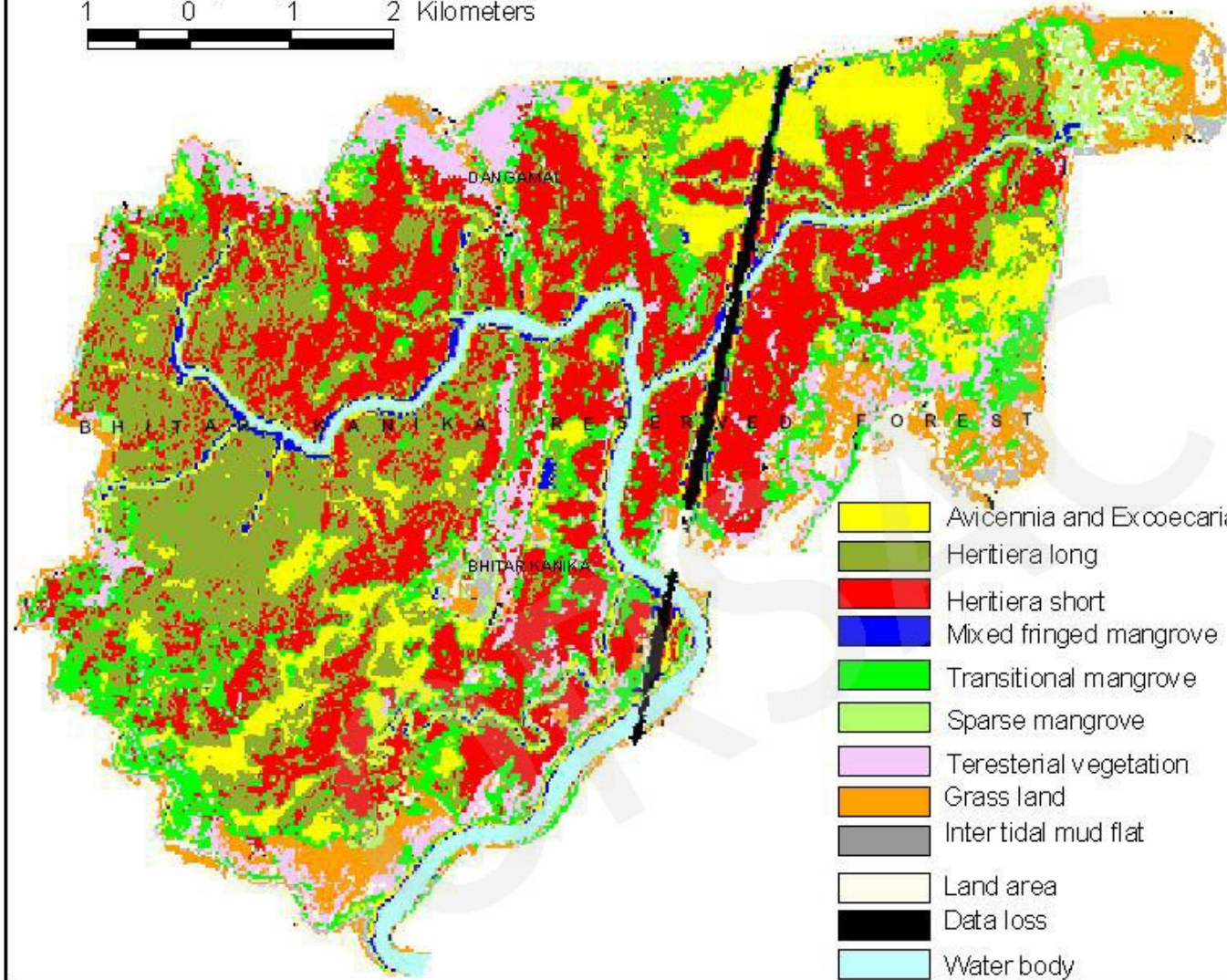
Geobotany



# What is that ?



1 0 1 2 Kilometers



- Avicennia and Excoecaria community (Dense)
- Heritiera long
- Heritiera short
- Mixed fringed mangrove
- Transitional mangrove
- Sparse mangrove
- Terrestrial vegetation
- Grass land
- Intertidal mud flat
- Land area
- Data loss
- Water body

# Is that a GIS ?

**PROVINCIA DI ROMA** Assessorato alle Politiche del Territorio

## banche dati vegetazionali

LISTA LAYER mercoledì 30/05/2007

- CTR
- Terra Italy 2000NR
- Aree protette
- Siti di importanza comunitari
- Zone a protezione speciale
- USO SUOLO
- VEGETAZIONE (VEGETAZI

- Salicornieti annuali dei suol
- Giuncheti dei suoli salmastri
- Popolamenti di ambienti dur
- Vegetazione dominata da P
- Prati e pascoli mesofili dell'
- Prati e pascoli su terreni pe
- Prati antropici umidi a Loliu
- Vegetazione erbacea delle
- Prati mesofili pianiziali
- Praterie collinare acidofile a
- Brachipodieti collinari e sub
- Pascoli appenninici su calco
- Pascoli montani e submonta
- Praterie aridi mediterranee
- Praterie submediterranee acic
- Brachipodieti collinari sub
- Ampelodesmeti mesomediterr
- Vegetazione a ceppi di Aste
- Garighe mediterranee dei su
- Garighe acidofile mediterran
- Ginepri costieri mediterran
- Macchia mediterranea ad Al

The Vegetation Data bases of the Province of Rome

Vegetation mapping

Phytosociological records

Macchia vegetation type

dryland

Vegetation cover

Application of remote sensing

1.0 km X: 2335750 Y: 4647753 Zoom window mode

© Compagnia Generale Ripreseeree S.p.A.

# Translate into Czech

A mapping methodology allows the practical implementation of synphytosociological and geosynphytosociological surveys. The proposed methodology consists in carrying out synrelevés from vegetation maps produced through the use of geographic information system (GIS). Such mapping has the great advantage of allowing the overlaying of the study area map with many thematic maps that are particularly useful in the definition of the areas of potential vegetation.

# Translate to English

- podrost
- bylinné patro
- početnost druhu
- invazivní druh cévnatých rostlin
- Braun Blanquetova klasifikace
- popínavé rostliny
- masožravé rostliny
- dominantní druhy dřevin v korunovém patře

Už od raného mládí jsem se chtěl(a) stát  
fytocenologem/fytocenoložkou.