

La biodiversidad es inversamente proporcional al tamaño del país

Antonio Gazol Burgos
Presenta: María Felipe Lucia

 UNIVERSITY OF TARTU
1632

 MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD
75 AÑOS  CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

III Jornadas IPErinas
Instituto Pirenaico de Ecología (IPE-CSIC)
11 diciembre 2014


IPE
INSTITUTO PIRENAICO DE ECOLOGÍA
CSIC



Global view - macroecological approach - TartuNetwork

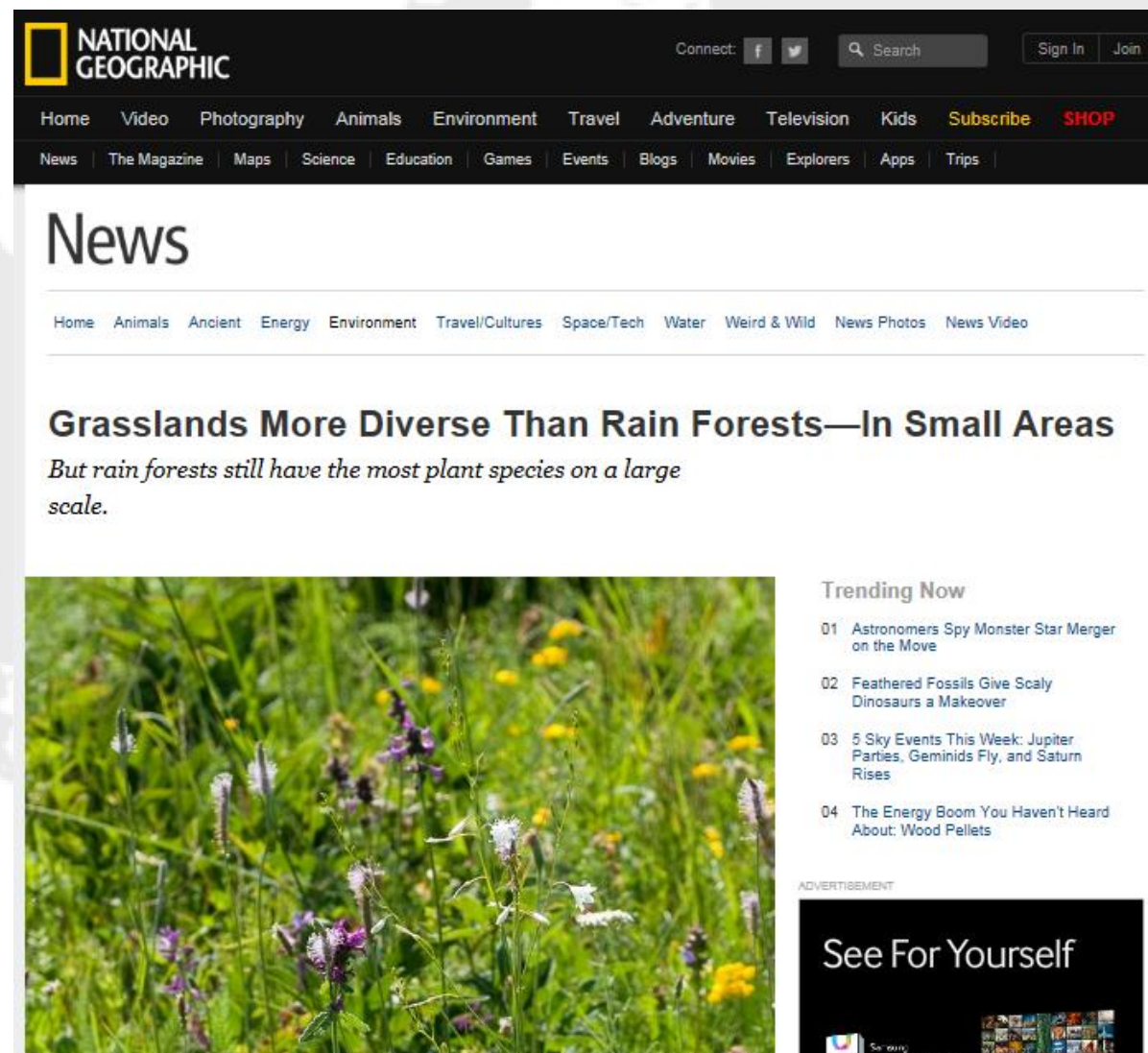
¿Existen reglas universales para explicar la diversidad?

Lugares similares pero con diferente origen e historia



Global view - macroecological approach - TartuNetwork

¿Existen reglas universales para explicar la diversidad?
Lugares similares pero con diferente origen e historia
“species rich grasslands” – diversos y globales



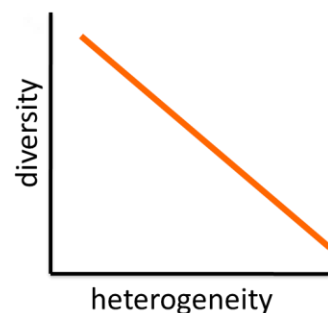
The screenshot shows the National Geographic News website. The main article is titled "Grasslands More Diverse Than Rain Forests—In Small Areas" with a sub-headline: "But rain forests still have the most plant species on a large scale." Below the text is a photograph of a lush green grassland with purple and yellow flowers. To the right, there is a "Trending Now" section with four items: "01 Astronomers Spy Monster Star Merger on the Move", "02 Feathered Fossils Give Scaly Dinosaurs a Makeover", "03 5 Sky Events This Week: Jupiter Parties, Geminids Fly, and Saturn Rises", and "04 The Energy Boom You Haven't Heard About: Wood Pellets". At the bottom right, there is an advertisement for "See For Yourself" featuring a grid of small images.

Global view - macroecological approach - TartuNetwork

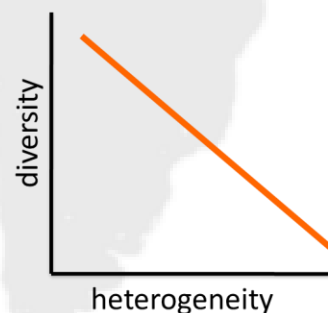
¿Existen reglas universales para explicar la diversidad?
Lugares similares pero con diferente origen e historia
“species rich grasslands” – diversos y globales

Heterogeneity at **really** small spatial scales

patches \leq plants



separate niche axis



microfragmentation

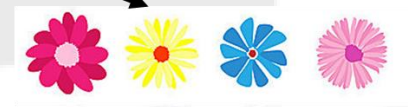
Tamme *et al* 2010 JVegetSci

Understanding patterns of species coexistence

Are co-existing species more similar or different than expected by chance?



Limiting similarity



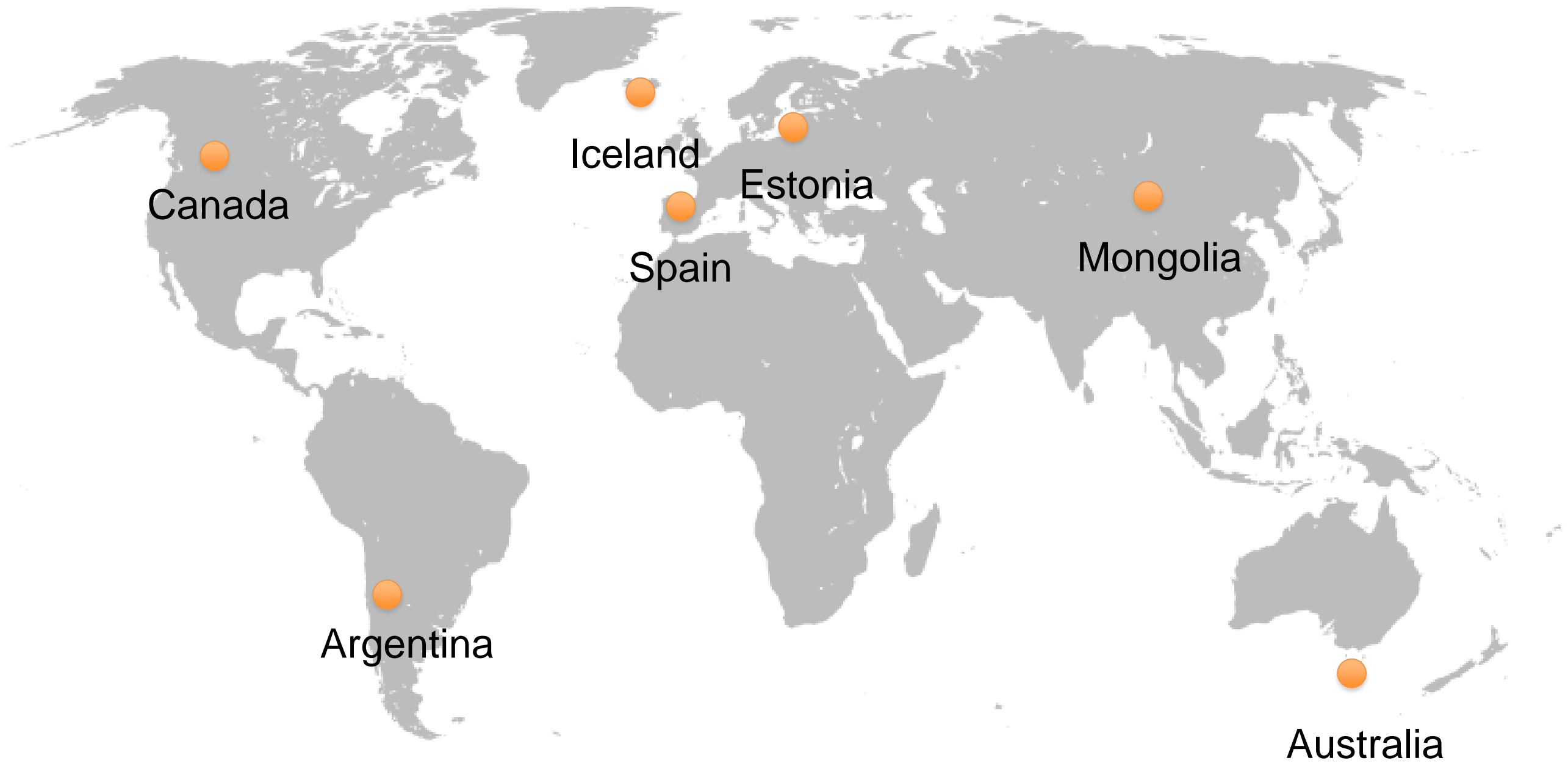
Habitat filtering or perhaps competition

Test this by examining functional diversity among co-occurring species compared to FD in the 'species pool'

Created by J. N. Price

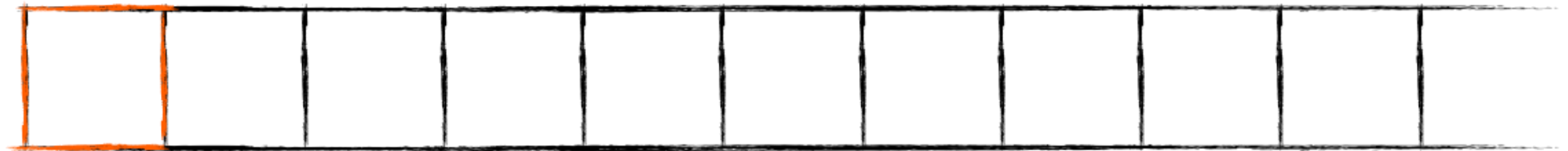
Global view - macroecological approach - TartuNetwork

7 – countries; 14 – sites; 38 transects; 3800 quadrats; *ca.* 585 species

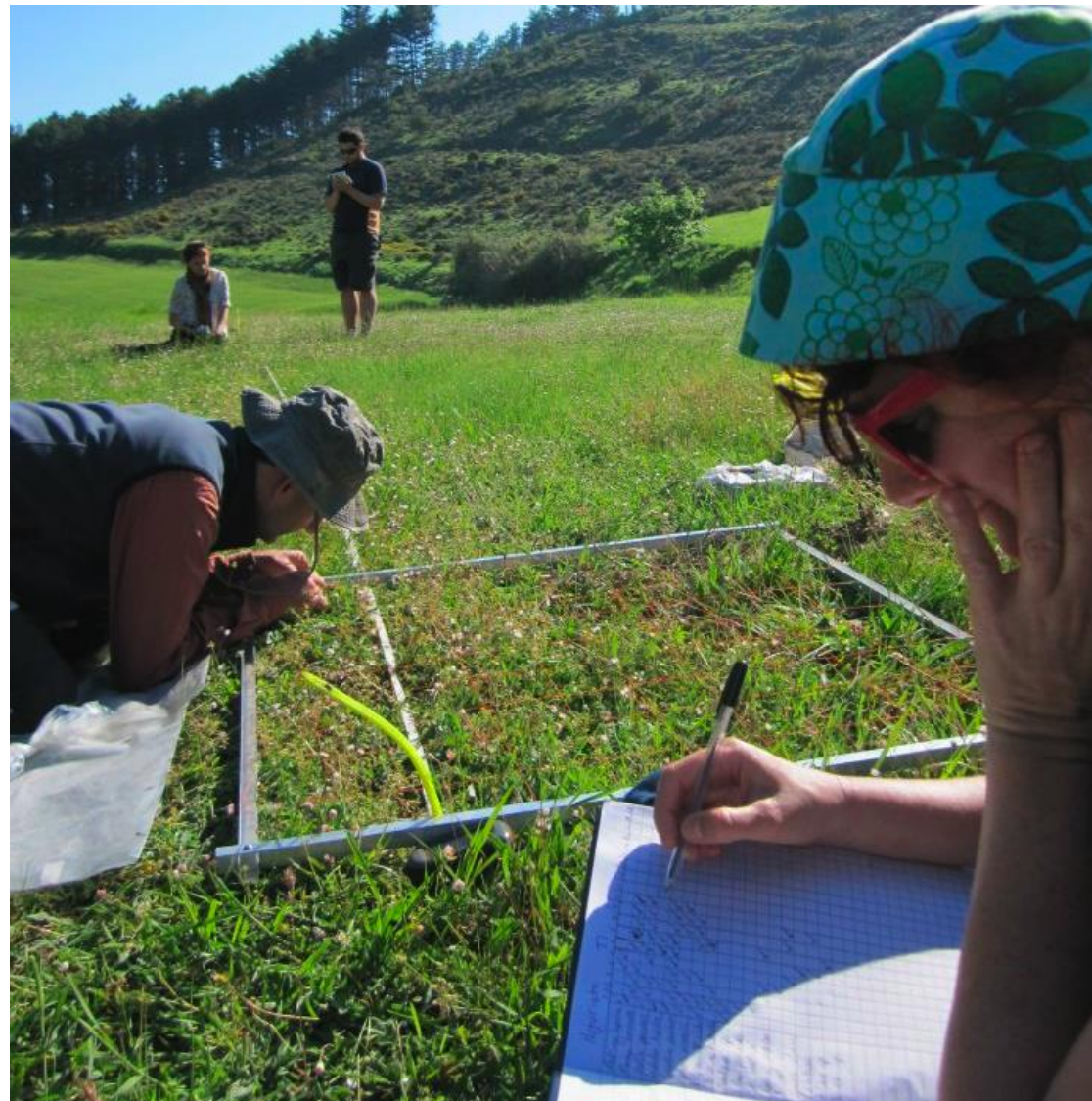


TartuNetwork

10 m 2 m in Iceland



10x10 cm



TartuNetwork

10 m 2 m in Iceland



10x10 cm

10 cm

10 cm



species richness

Plant traits:

SLA

plant height

biomass

SRL

...

light measurements

soil measurements

CANADA

average 7.4 species
max 13 species

ICELAND

average 7.4 species
max 13 species

ESTONIA

average 8.8 species
max 20 species

SPAIN

average 9.7 species
max 23 species

MONGOLIA

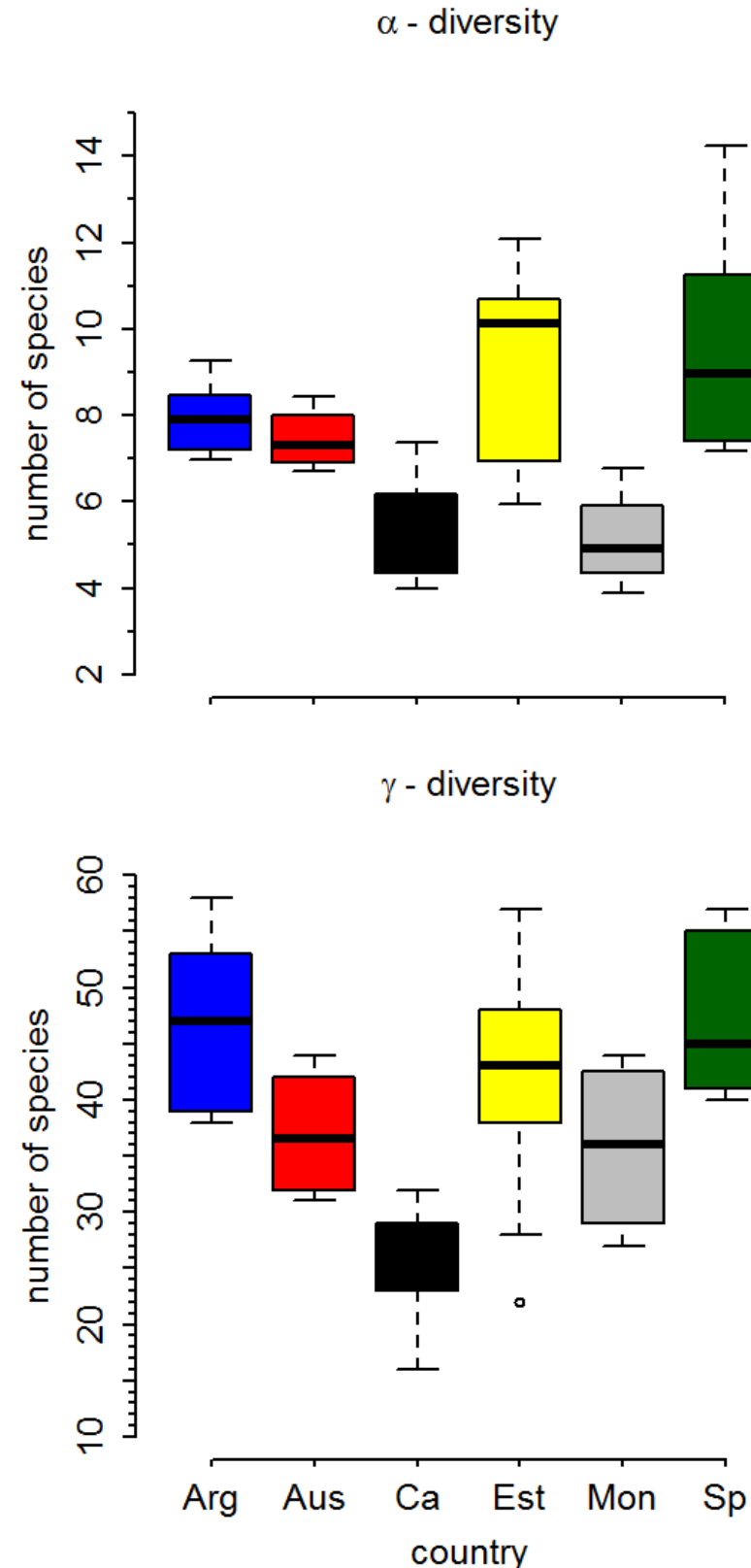
average 5.1 species
max 11 species

ARGENTINA

average 7,9 species
max 17 species

AUSTRALIA

average 7.2 species
max 14



CANADA

average 7.4 species
max 13 species

ICELAND

average 7.4 species
max 13 species

ESTONIA

average 8.8 species
max 20 species

SPAIN

average 9.7 species
max 23 species

MONGOLIA

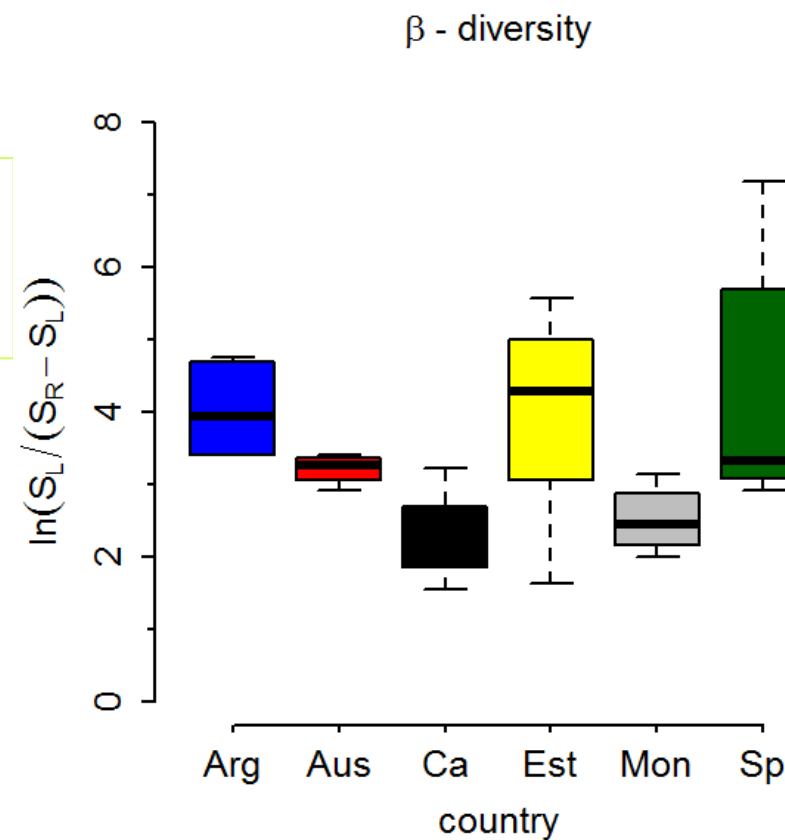
average 5.1 species
max 11 species

ARGENTINA

average 7,9 species
max 17 species

AUSTRALIA

average 7.2 species
max 14



CANADA

average 7.4 species
max 13 species

ICELAND

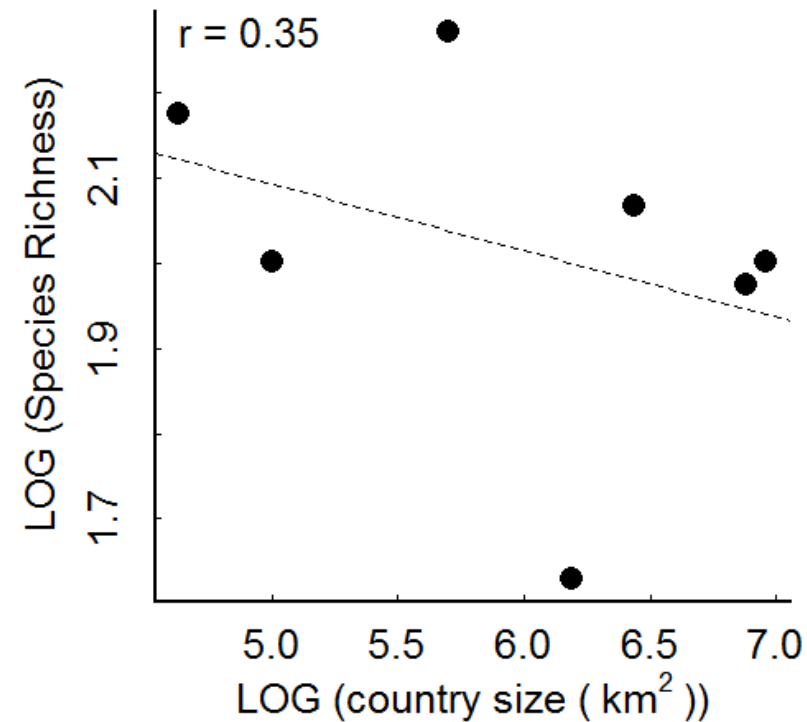
average 7.4 species
max 13 species

ESTONIA

average 8.8 species
max 20 species

SPAIN

average 9.7 species
max 23 species



MONGOLIA

average 5.1 species
max 11 species

ARGENTINA

average 7,9 species
max 17 species

AUSTRALIA

average 7.2 species
max 14

CANADA

average 7.4 species
max 13 species

ICELAND

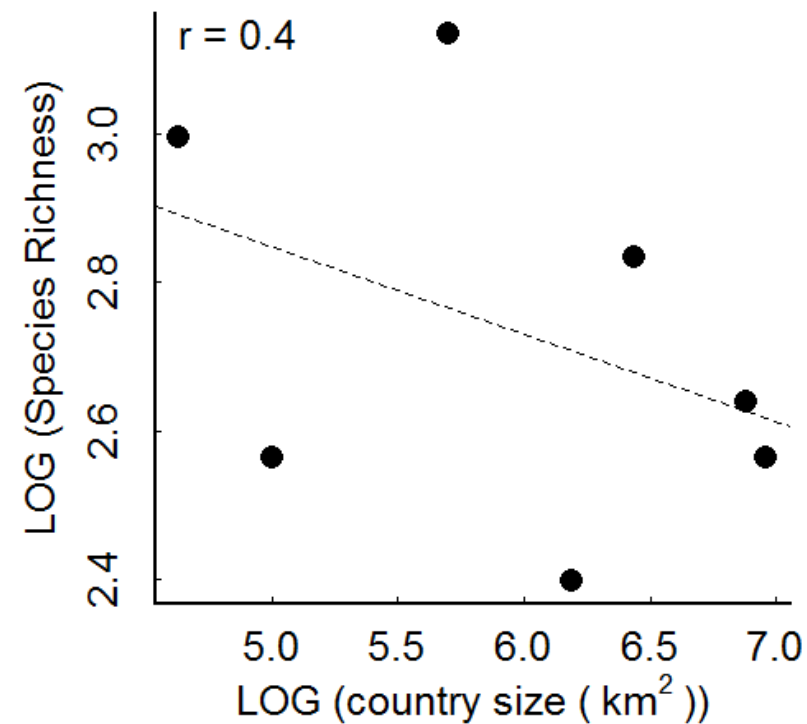
average 7.4 species
max 13 species

ESTONIA

average 8.8 species
max 20 species

SPAIN

average 9.7 species
max 23 species



MONGOLIA

average 5.1 species
max 11 species

ARGENTINA

average 7.9 species
max 17 species

AUSTRALIA

average 7.2 species
max 14

Hacemos un transecto en Andorra?

Seguiremos buscando preguntas...

... Quién sabe si respuestas



<http://www.botany.ut.ee/macroecology/en/>