

Conferenza Annuale di LifeWatch Italia
Roma, 25-27 giugno 2018



in collaborazione con il Segretariato Generale della Presidenza della Repubblica

Novel services for plant sciences in the LifeWatch Infrastructure

A. Chiarucci, F. Attorre, S. Martellos & R. Venanzoni



Taxonomic standardization



Primula auricula L.

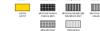
Sintesi I-Sympos: Primula auricula L. subsp. sibirica (L.) Hjelm. Primula auricula L. subsp. leontodontes (L.) Hjelm.
Albania: Campania, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Sardegna, Sicilia, Toscana. Regione: Segnalazione entomo / recorded by entomologist.

Veneto:

PRIMULACEAE Bercht. ex Borkh.
Emilia-Berl. A. (P)P
Emilia-Romagna B. (P)P
Liguria B. (P)P
Molise B. (P)P
Marche B. (P)P
Lombardia B. (P)P
Toscana B. (P)P
Veneto C. (P)P



Foto: Lucio G.B. Scaramella



Daphne mezereum L.

Abruzzo, Basilicata, Calabria, Campania, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Piemonte, Trentino-Alto Adige, Toscana, Umbria, Valle d'Aosta, Veneto.

THYMELAEACE Juss.
Daphne mezereum L. subsp. mezerium (L.) Holm
Resource: Tuting

APO IV (U) U (U)
Habitat code: L3



Artemisia glacialis L.

Uguria: segnalazione entomo / recorded by entomologist. Parma: Val d'Aveto. Veneto: segnalazione entomo / recorded by entomologist.

ARTEMIACEAE Benth. & Presl
Habitat code: L2
Armenia: Talysh
Uguria: Parco naturale dei Farfai
APO IV (U) U (U)
Habitat code: L2



Vegetation database

ID Database	Provider	Data
DATABASE VEGETAZIONE/HABITAT		
Vegetation Plot Database - Sapienza University of Rome	Sapienza Univ. of Rome	46.175
VegItaly	Perugia Univ.	34.462
Vegetation database of Habitats in the Italian Alps - HabitAlp	ISPRA	4.658
VegDunes	Rome III Univ.	3.785
Vegetation Database of the Cilento National Park	Univ. of Basilicata	2.289
Lucanian Vegetation Database	Univ. Of Basilicata	1.810
Macrophytes of Italian Volcanic Lakes Database	Sapienza Univ. of Rome	1.776
VIOLA	Univ. of Molise	1.726

Source: Global Index of Vegetation-plots Databases (<https://www.givd.info/>), accessed 06.2018

Nationwide Vegetation Plot Database – Sapienza University of Rome: state of the art, basic figures and future perspectives.

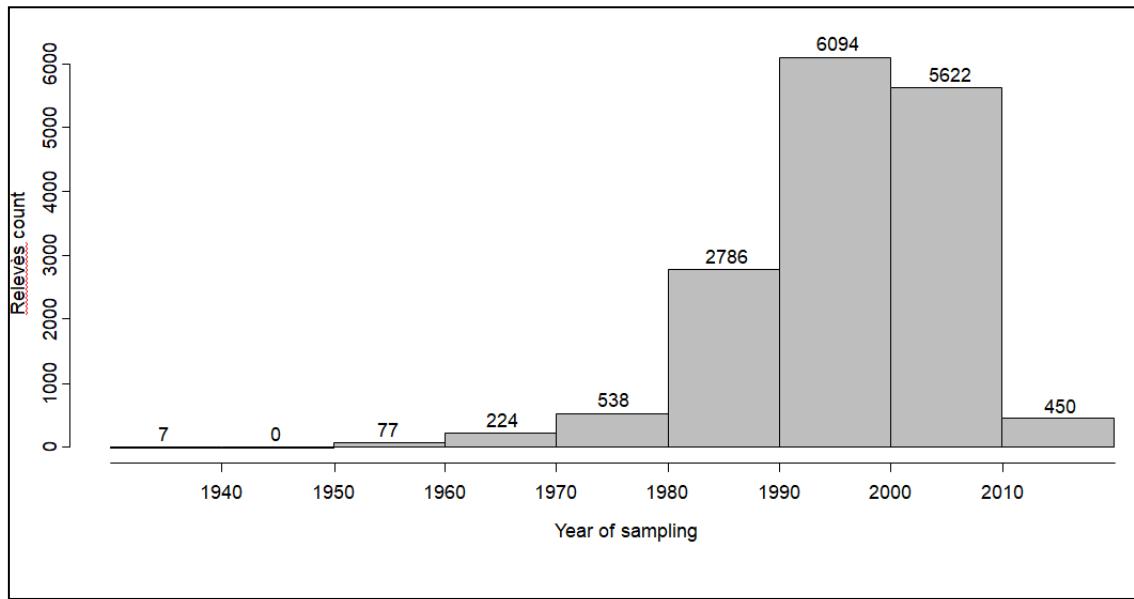


Table 1. Main information about published and unpublished vegetation plots of VPD-Sapienza.

	Published	Unpublished
Number of plots	15,430 (70.4%)	6487 (29.6%)
Newest plot (year)	2014	2015
Oldest plot (year)	1935	1963
Georeferenced plots (fine scale)	14,180	6,480
Georeferenced plots (coarse scale)	1,250	7

Table 3. Percentages of missing metadata not provided by the original authors in the sampled plots.

Header data	Missing data (%)
Year of sampling	16.4
Plot size	10.6
Altitude	25.6
Aspect	30.2
Slope	31.7
Total cover layer	31.2
Tree cover layer	81.1
Shrub cover layer	79.9
Herbaceous cover layer	84.5

Vegetation characterization

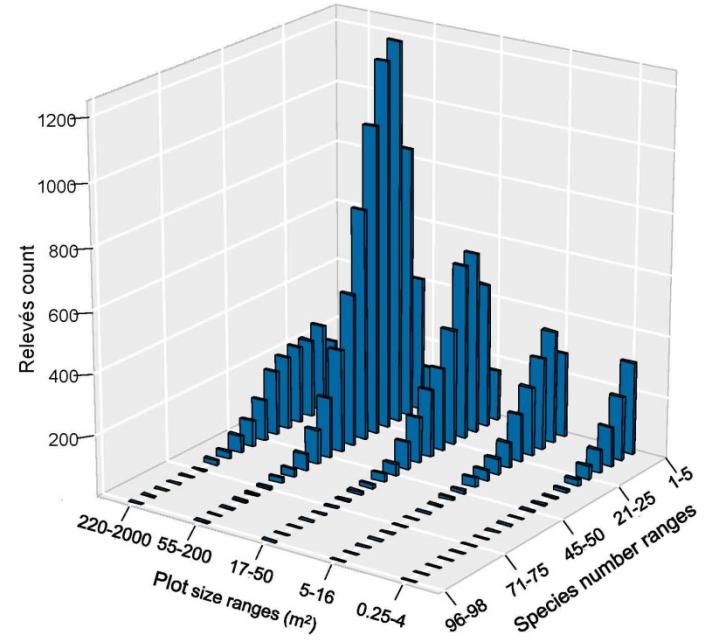
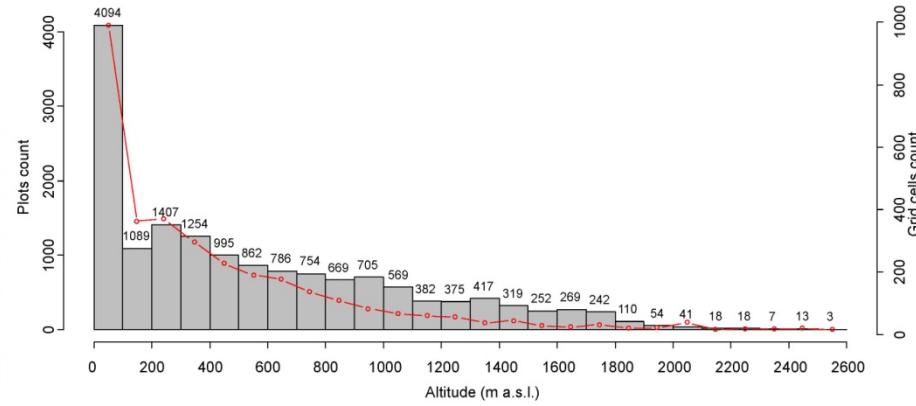
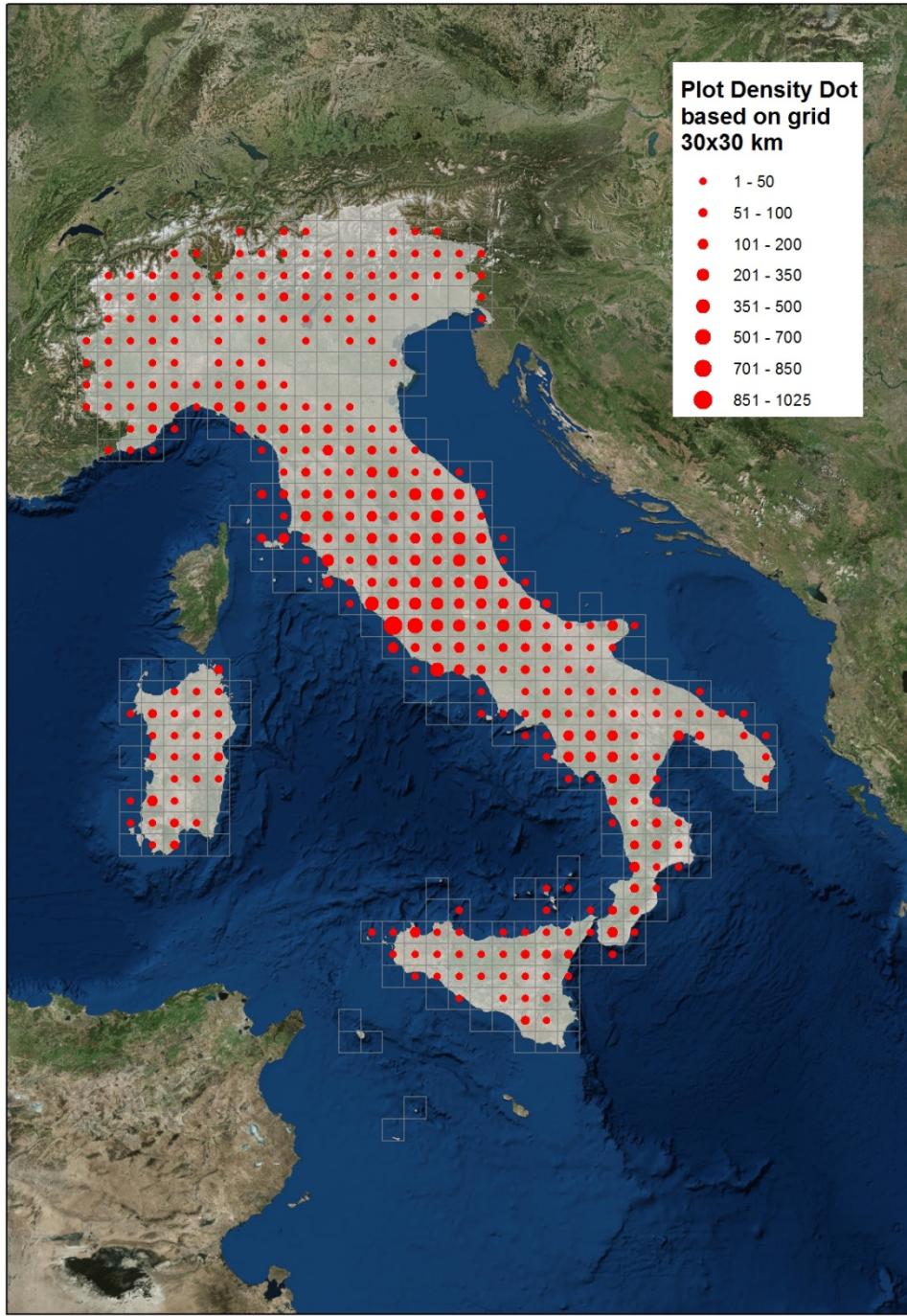
[HOME](#)[PRODROMO](#)[ELENCO
SYNTAXA](#)[ELENCO
SPECIE](#)[SERIE
DI VEGETAZIONE](#)[HABITAT
NATURA 2000](#)[EUNIS
HABITAT TYPES](#)[PARCHI
NAZIONALI](#)

PRODROMO DELLA VEGETAZIONE ITALIANA

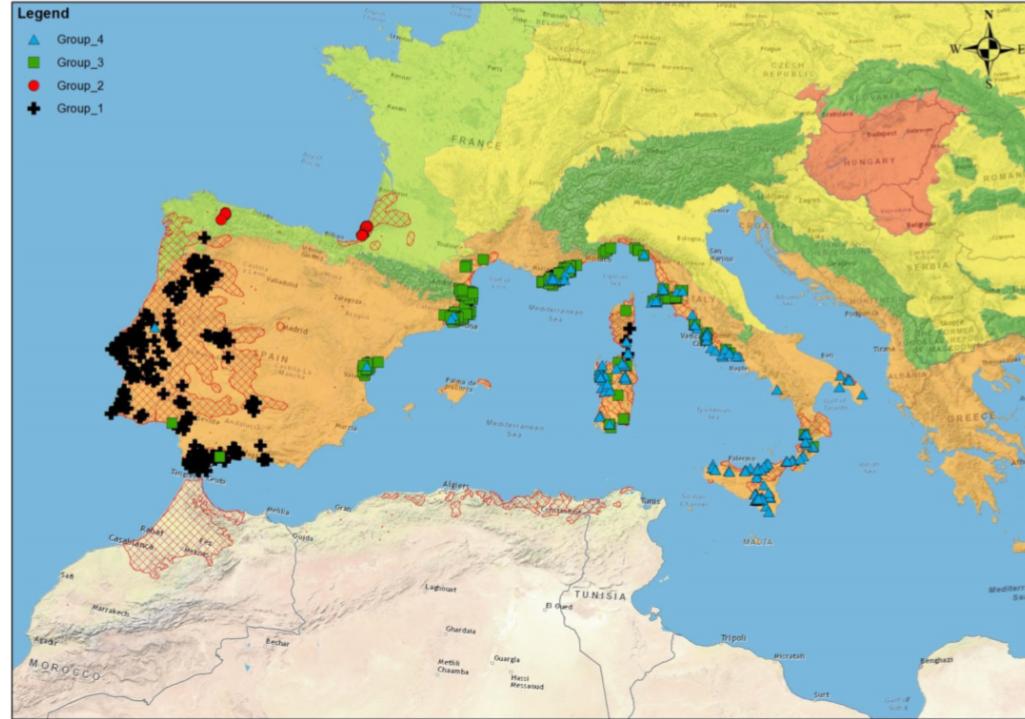
Cerca syntaxa, specie, autori, etc

[Introduzione](#) | [Guida](#) | [Bibliografia](#) | [Glossario](#) | [Schema sintassonomico](#)

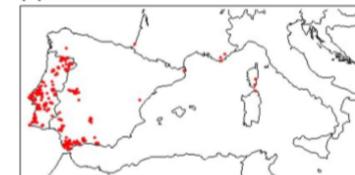
In attuazione della Strategia Nazionale per la Biodiversità 2011-2020, il Ministero dell'Ambiente e della Tutela del Territorio e del Mare intende divulgare e rendere fruibile il "Prodromo della vegetazione italiana" coniugando, in tal modo, le conoscenze della ricerca scientifica con le esigenze applicative della conservazione, gestione e uso sostenibile della biodiversità. Il Prodromo della Vegetazione d'Italia è uno strumento di lavoro per ricercatori, professionisti, pubblici amministratori e, nello stesso tempo, rappresenta una opportunità di conoscenza per appassionati della natura e cittadini "curiosi" di conoscere come si studia la vegetazione e quali sono le caratteristiche vegetazionali del nostro Paese.



Improving habitat classification



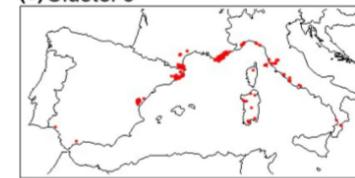
(a) Cluster 1



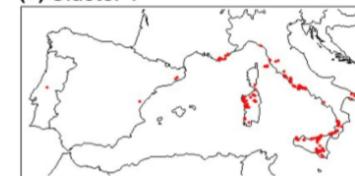
(b) Cluster 2



(c) Cluster 3

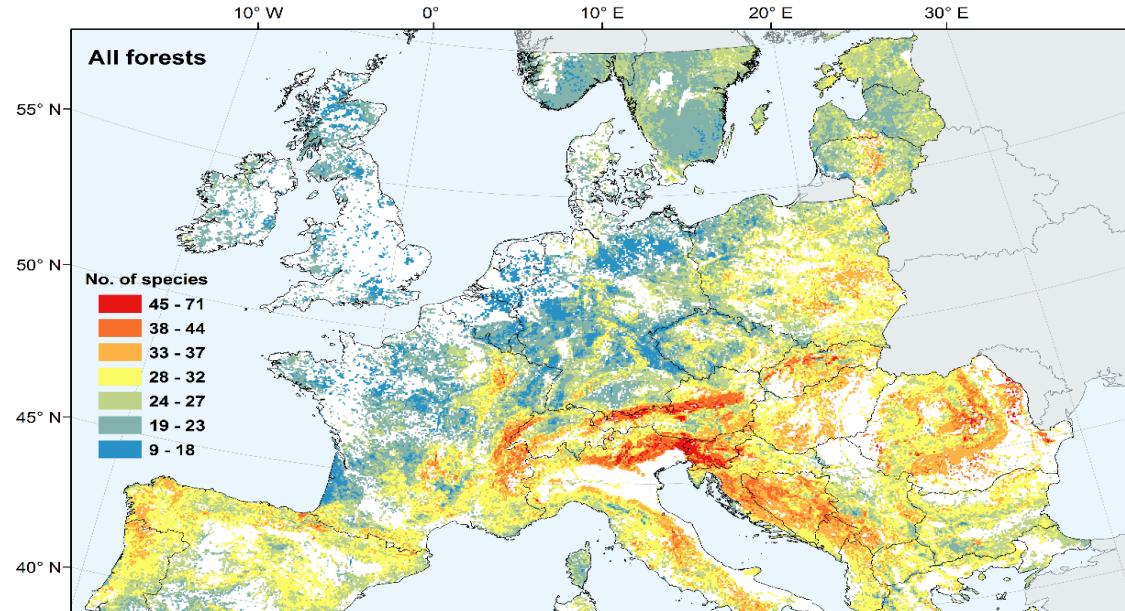


(d) Cluster 4



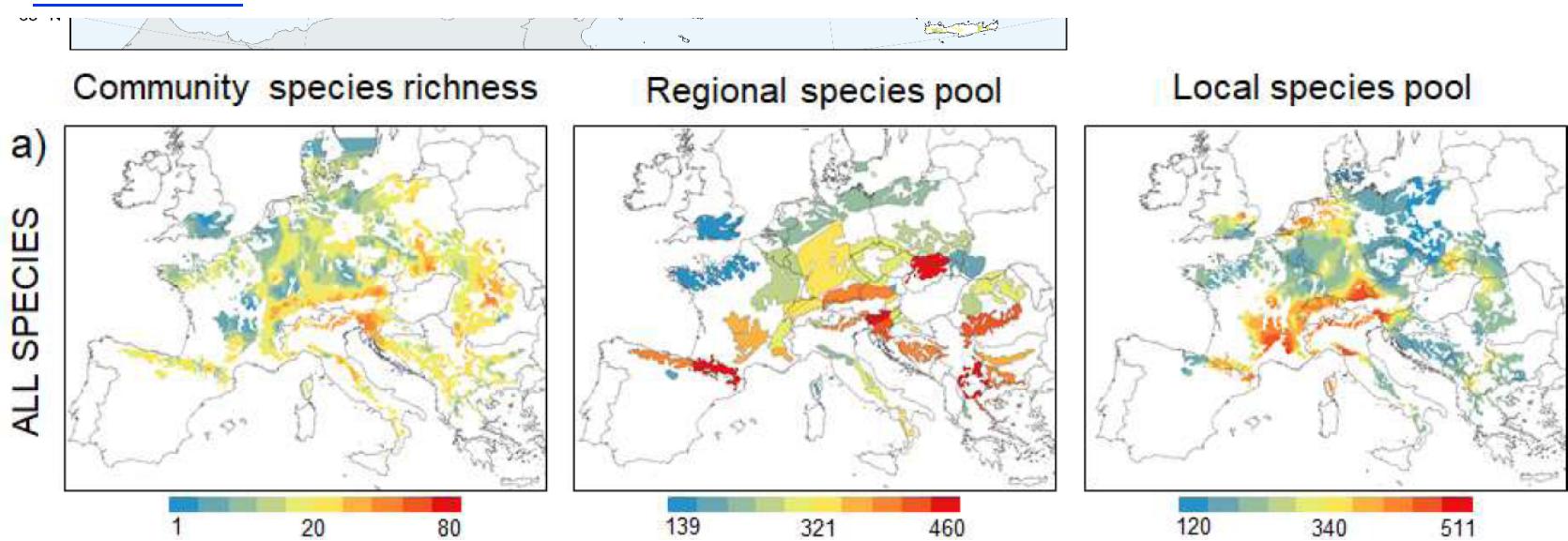
Agrillo et al. (2018). The use of large databases to characterize habitat types: the case of *Quercus suber* woodlands in Europe. Rendiconti Lincei, 29:283–293

Computing power

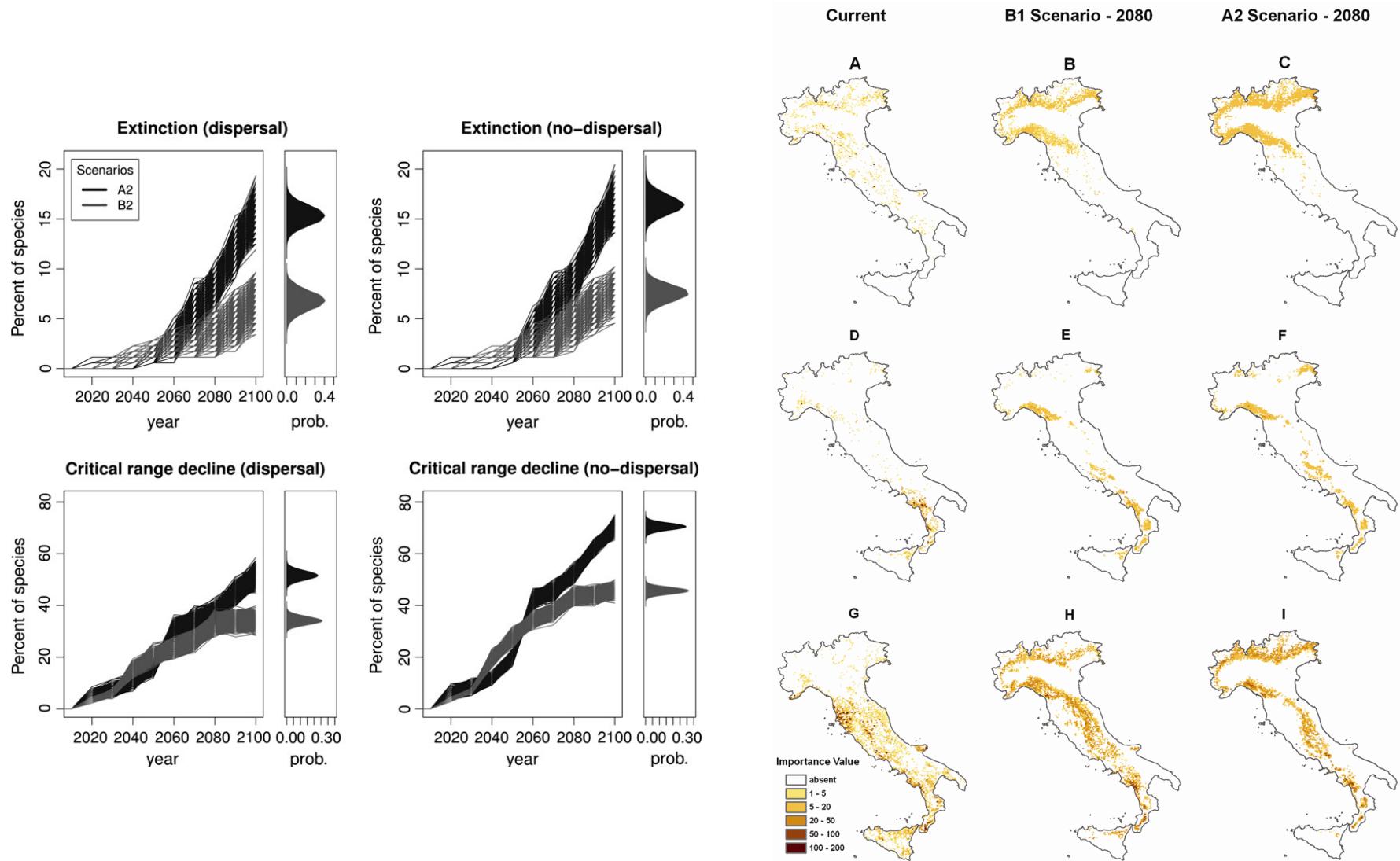


Jiménez-Alfaro

Jimenéz-Alfaro et al. 2017. History and environment shape species pools and community diversity in European beech forests. *Nature, Ecology & Evolution*.



Computing power

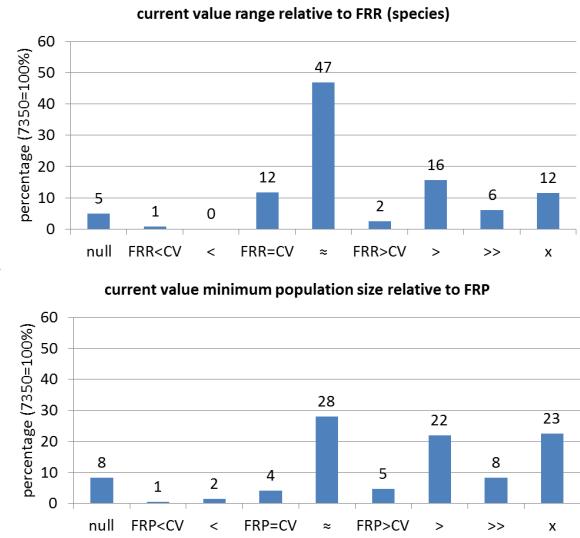
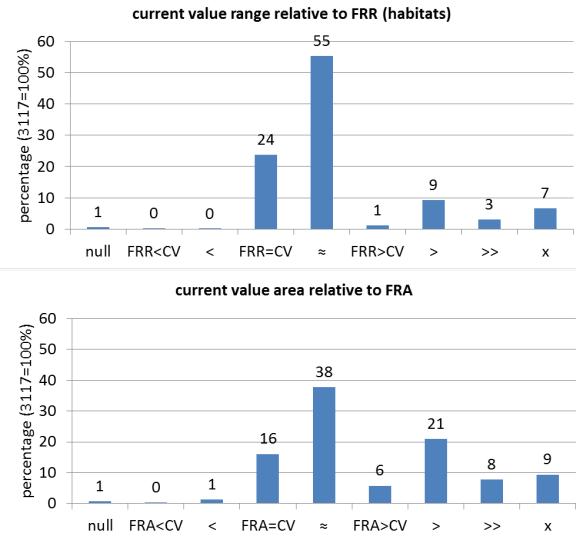
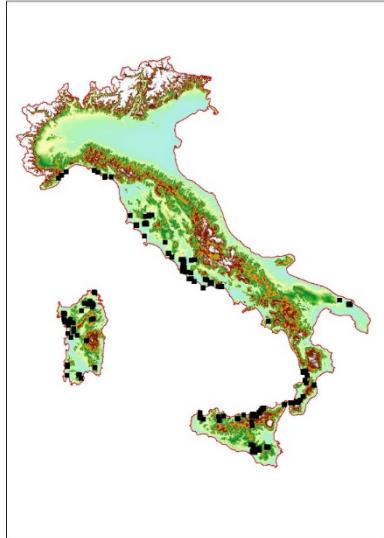


Vitale et al. 2017. The importance of interspecific competition in the actual and future distributions of plant species assessed by a 2-D grid agent modelling. Ecological Modelling

Reporting

Conservation status, monitoring and identification of Values of Favorable Reference

Natura2000 Habitats and Species



The Vegetation Plot Database - Sapienza University of Rome

GRAZIE PER L'ATTENZIONE!



001001001101011010000010100100010
10001001 Global Index of Vegetation-Plot Databases
0100100010010010011010110100000101000100

