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

in collaborazione con il Segretariato Generale della Presidenza della Repubblica

LifeWatch ITALIA

Novel services for plant sciences in the LifeWatch Infrastructure

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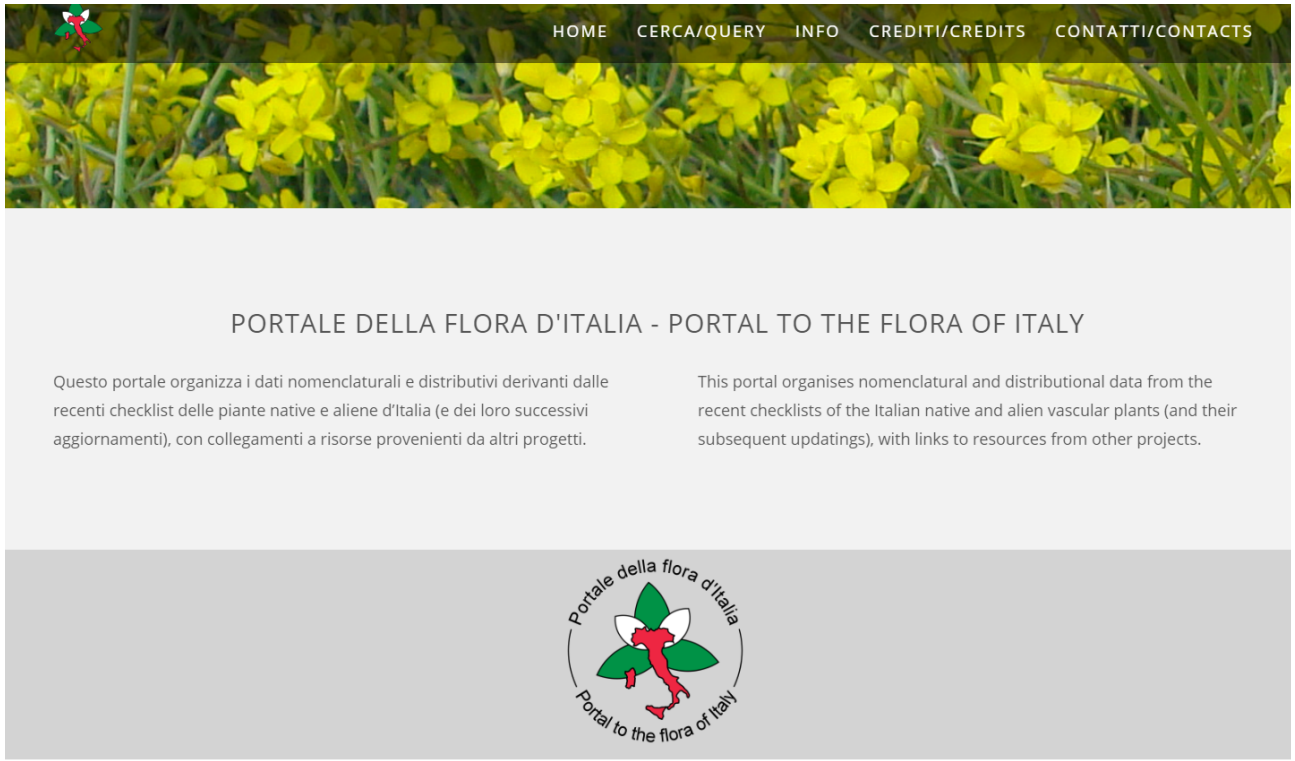
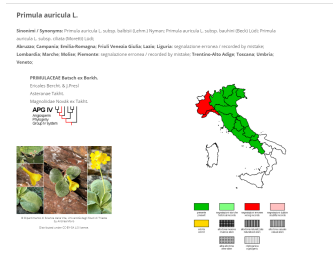
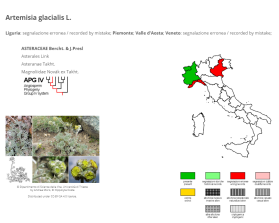
Taxonomic standardization







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.

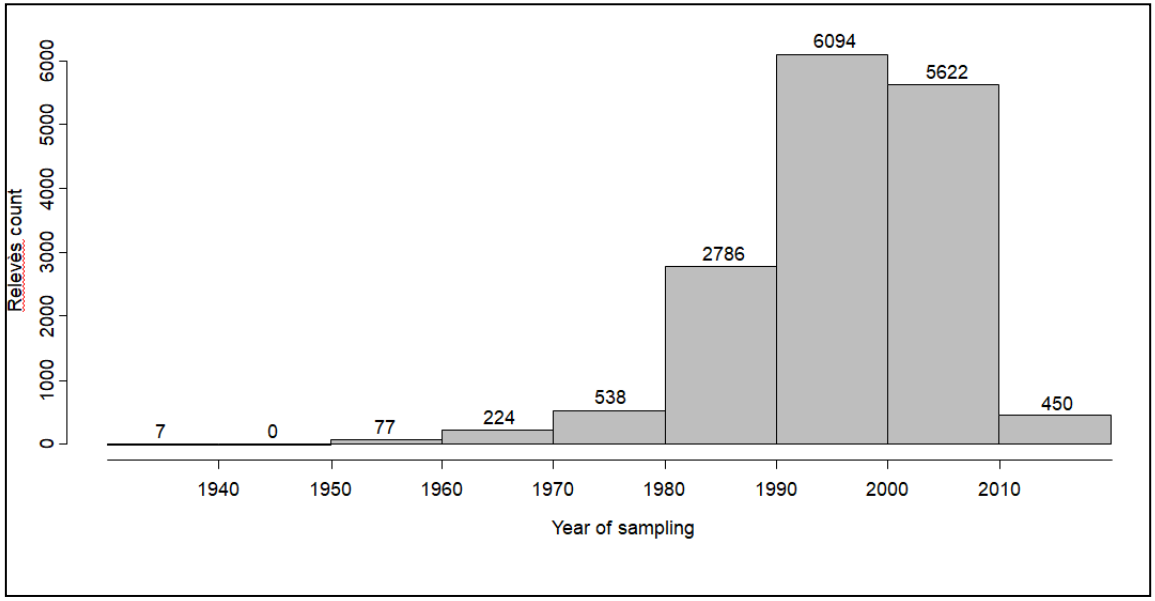


Table 1. Main information about published and unpublished vegetation plots of VPD-Sapienza.

	Published	Unpublished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

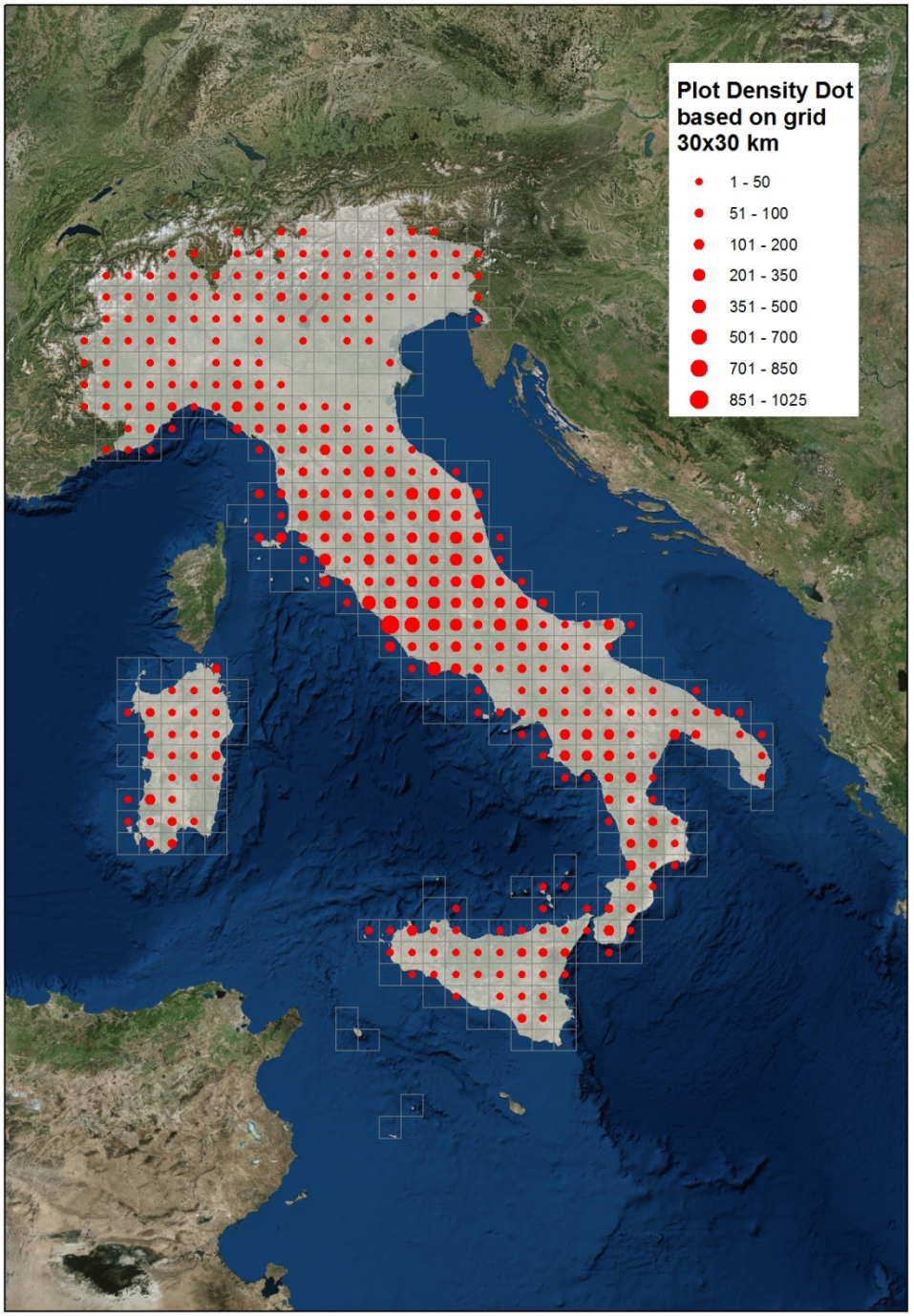
Table 3. Percentages of missing metadata not provided by the original authors in the sampled plots.

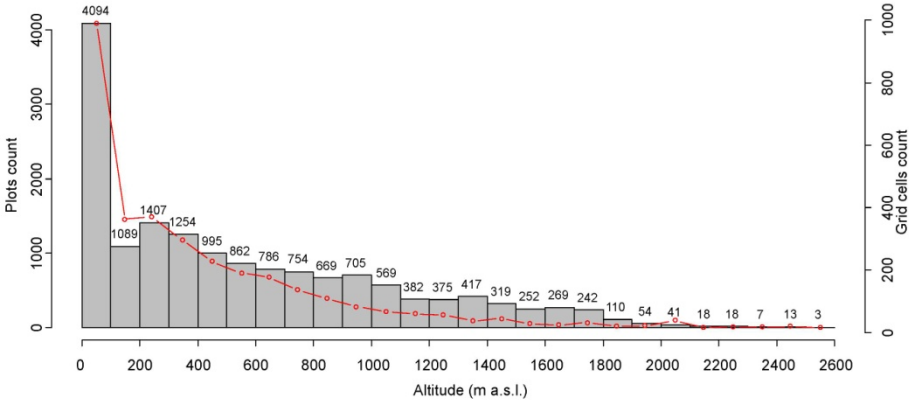
Header data	Missing data (%)
Year of sampling	16.4
Plot size	10.6
Altitude	25.6
Aspect	30.2
Slope	31.7
Total cover layer	31.2
Tree cover layer	81.1
Shrub cover layer	79.9
Herbaceous cover layer	84.5

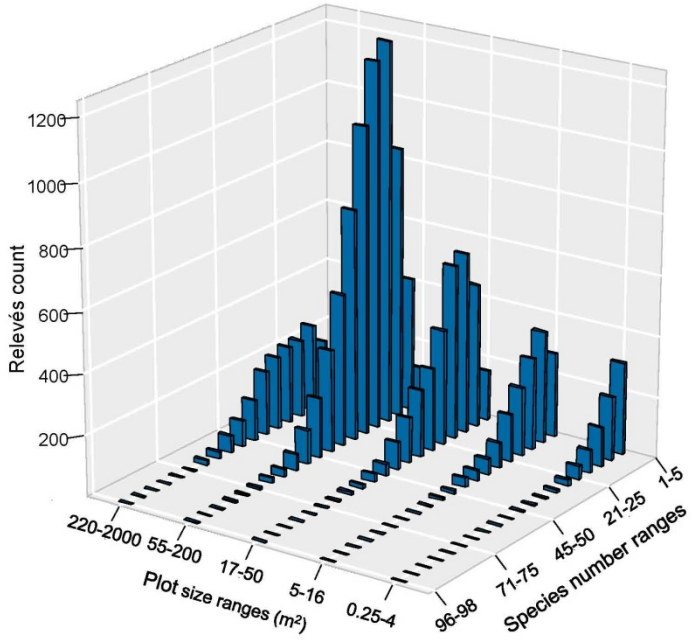
Agrillo et al. (2017). Nationwide Vegetation Plot Database–Sapienza University of Rome: state of the art, basic figures and future perspectives. *Phytocoenologia*, 221-229

Vegetation characterization

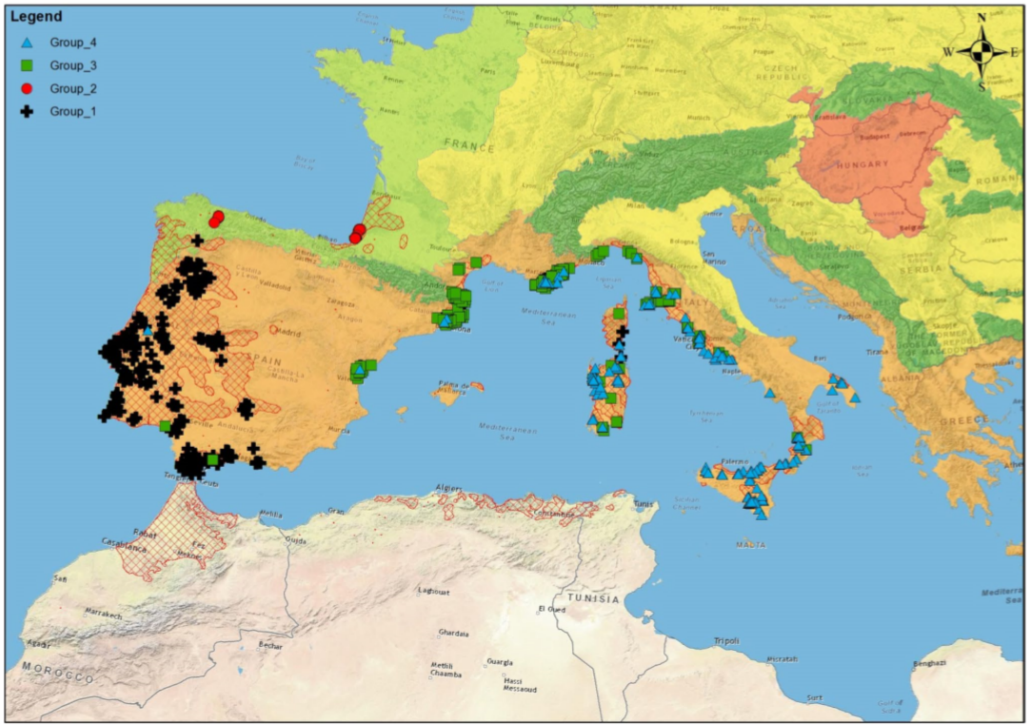
In attuazione della Strategia Nazionale per la Biodiversità 2011-2020, il Ministero dell'Ambiente e della Tutela del Territorio e del Mare intende divulgare e rendere fruibile il "Prodromo della vegetazione italiana" coniugando, in tal modo, le conoscenze della ricerca scientifica con le esigenze applicative 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.

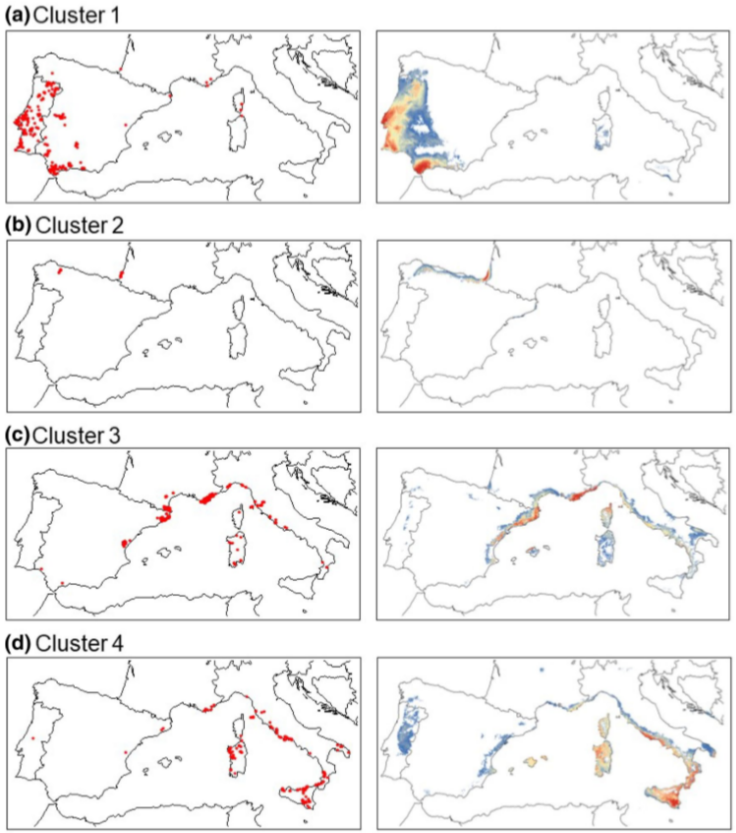

Plot Density Dot based on grid 30x30 km
1 - 50
51 - 100
101 - 200
201 - 350
351 - 500
501 - 700
701 - 850
851 - 1025


Plots count
Grid cells count
Altitude (m a.s.l.)
4094
1089
1407
1254
995
862
786
754
669
705
569
382
375
417
319
252
269
242
110
54
41
18
18
7
13
3


Relevés count
Plot size ranges (m²)
220-2000
55-200
17-50
5-16
0.25-4
Species number ranges
96-98
71-75
45-50
21-25
1-5

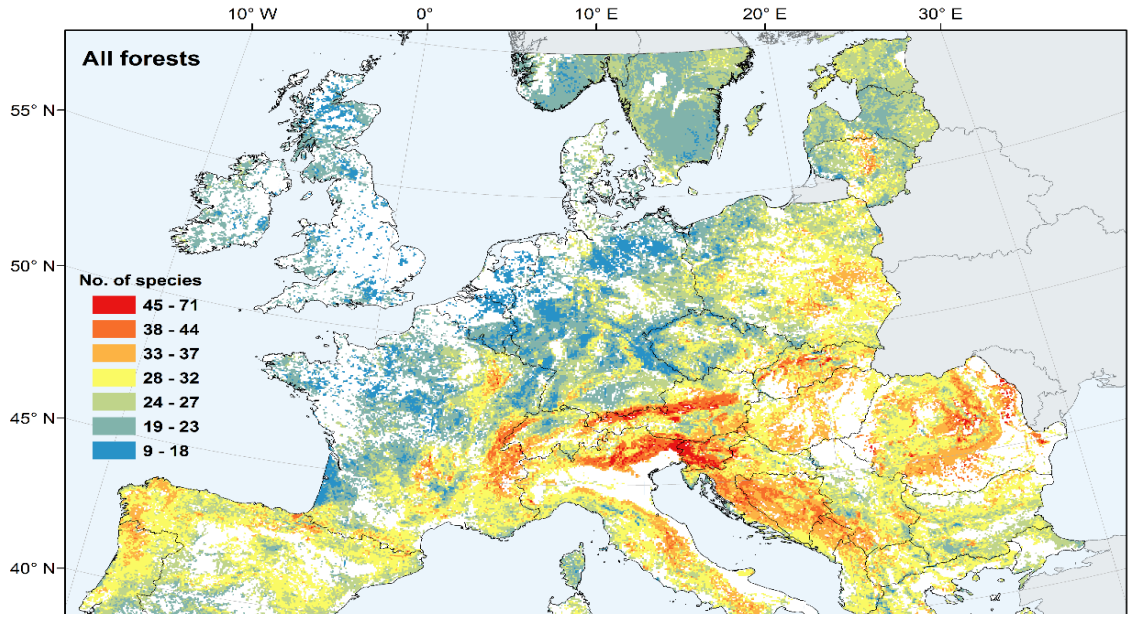
Improving habitat classification





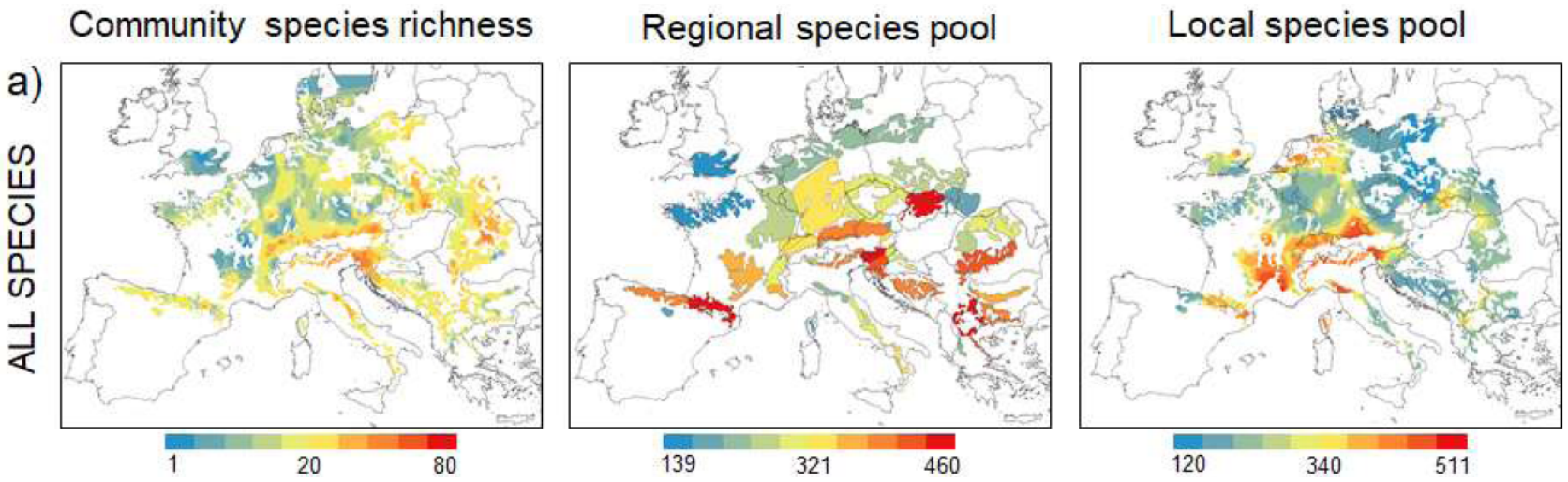
Agrillo et al. (2018). The use of large databases to characterize habitat types: the case of Quercus suber woodlands in Europe. Rendiconti Lincei, 29:283–293

Computing power

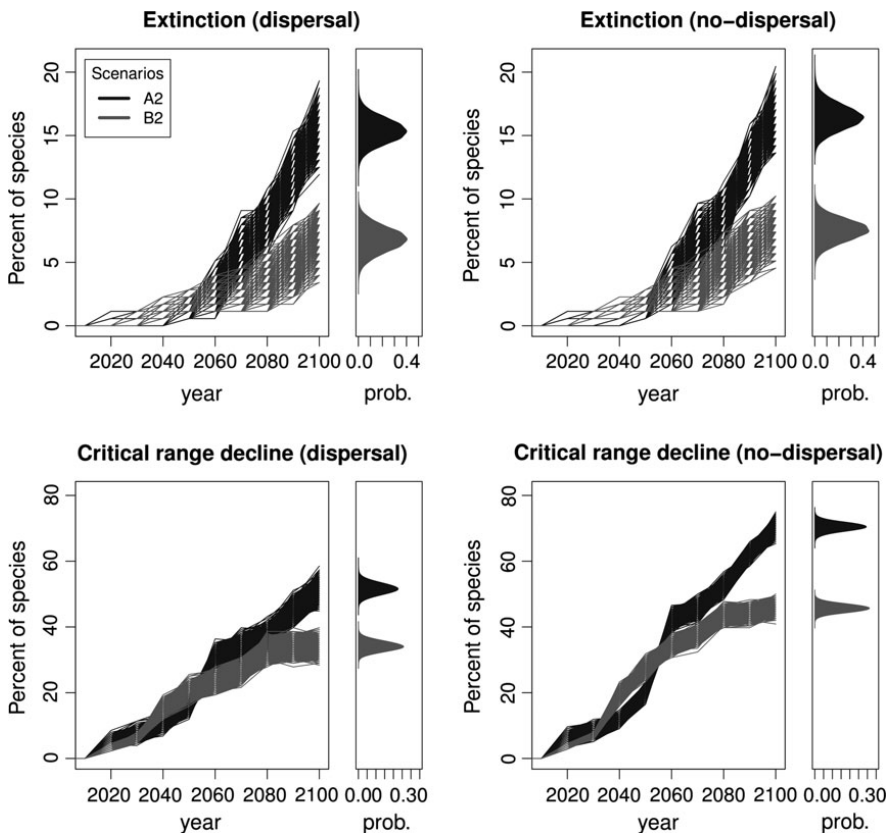


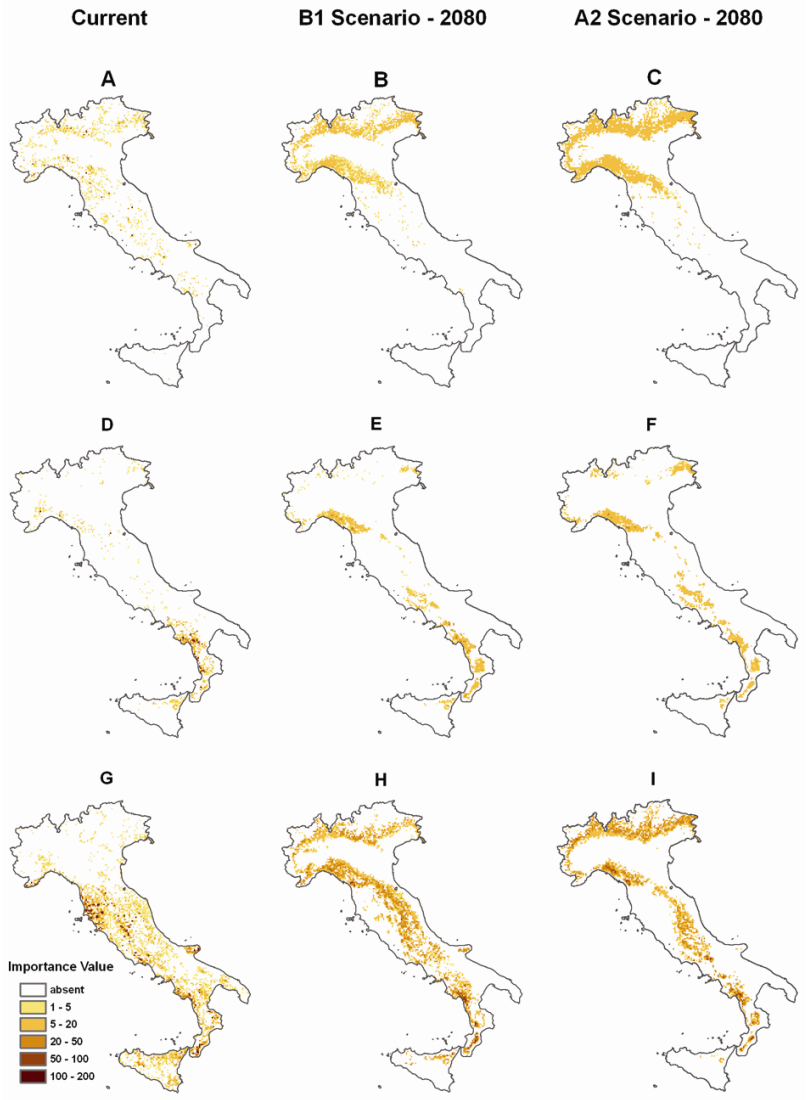
Jimenéz-Alfarp et al. 2017. History and environment shape species pools and community diversity in European beech forests. Nature, Ecology & Evolution.

Jiménez-Alfaro



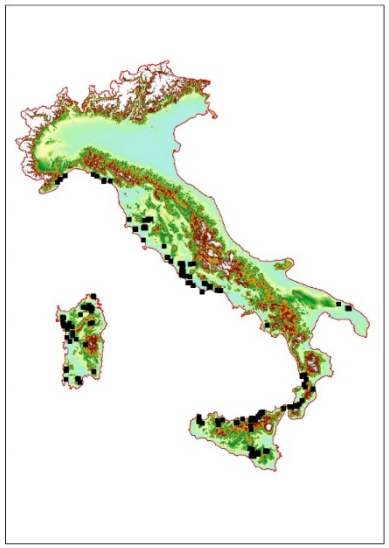
Computing power

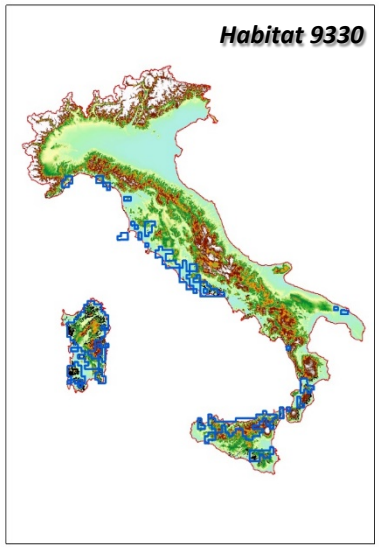


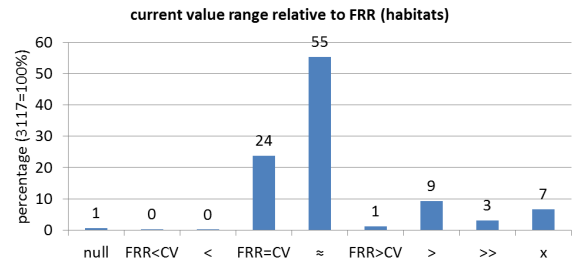


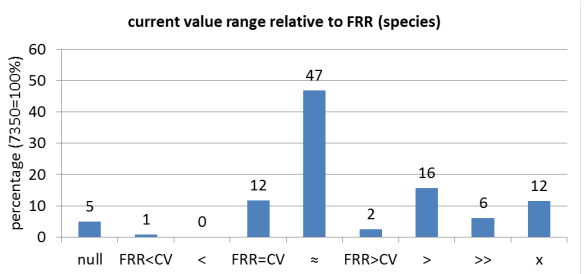
Vitale et al. 2017. The importance of interspecific competition in the actual and future distributions of plant species assessed by a 2-D grid agent modelling. Ecological Modelling

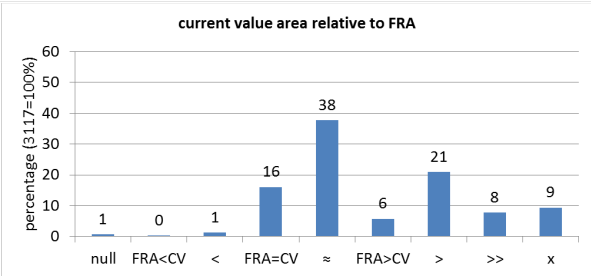
Reporting
Conservation status, monitoring and identification of Values of Favorable Reference
Natura2000 Habitats and Species

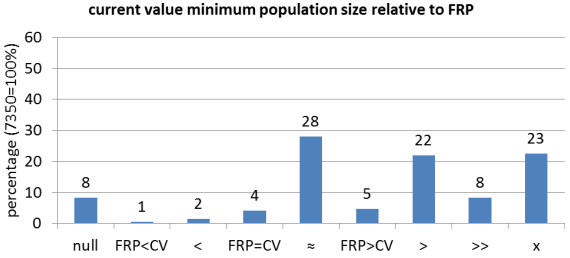












The Vegetation Plot Database - Sapienza University of Rome