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## Uniqueness matters: patterns of $\alpha$ and $\beta$ -diversity highlight conservation priorities for plant communities in Italian agricultural landscapes

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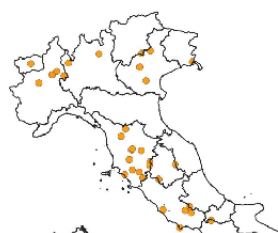
# Uniqueness matters: patterns of $\alpha$ and $\beta$ -diversity highlight conservation priorities for plant communities in Italian agricultural landscapes

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**Agricultural landscapes can host a diversified mosaic of different ecosystems and habitat types, each supporting specific plant communities.**

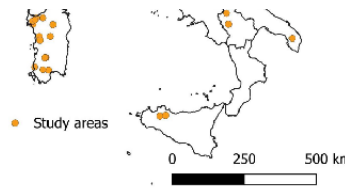
**Though it is acknowledged that habitat diversification is crucial for the maintenance of a high farmland biodiversity, there is still lack of quantitative information on the contribution of different plant**



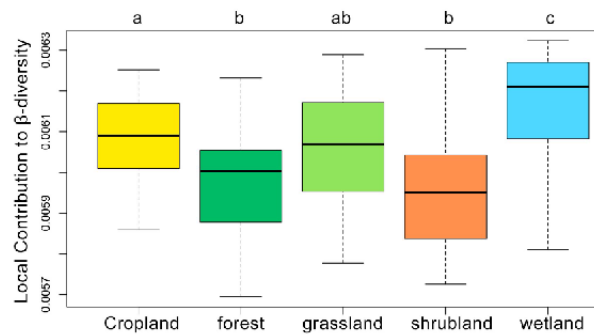
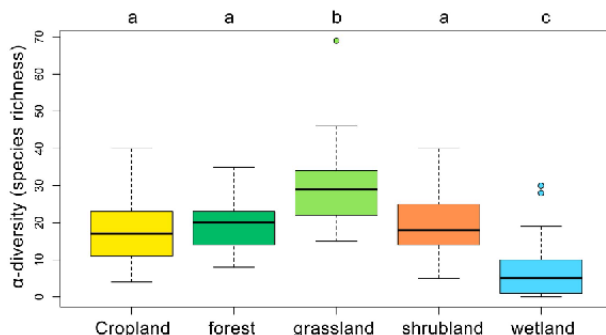
51 circular

Vegetation  
shrublands

**community types to biodiversity in agricultural landscapes.**  
 Here, we aimed at highlighting the conservation priorities for the plant communities of different ecosystems across Italian agricultural landscapes through an analysis of their contribution to biodiversity.



**We compare plant community composition**  
**Species An**



Species	SCBD
<i>Phragmites australis</i>	0.024371602
<i>Prunus spinosa</i>	0.021952752
<i>Rubus ulmifolius</i>	0.019882528
<i>Myriophyllum spicatum</i>	0.018280297
<i>Cornus sanguinea</i>	0.014677318
<i>Quercus cerris</i>	0.013944897
<i>Quercus pubescens</i>	0.013223803
<i>Lemna minor</i>	0.012652517
<i>Crataegus monogyna</i>	0.011065955
<i>Quercus ilex</i>	0.010151648
<i>Acer campestre</i>	0.00973291
<i>Cytisus villosus</i>	0.009526767
<i>Pistacia lentiscus</i>	0.009476622

**Wetland species, shrubs, and trees gave the highest contribution to  $\beta$ -diversity.**  
 All the ecosystem types differed from one another in plant community species composition based on PERMANOVA, and they hosted distinctive species based on INSPAN.



**Top indicator species**  
 Cropland: *Papaver rhoeas*  
 Shrubland: *Prunus spinosa*  
 Forest: *Acer campestre*  
 Grassland: *Dactylis glomerata*  
 Wetland: *Phragmites australis*



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