



**Promoting EcoSystem Services in Grapes** 



# Promoting biodiversity and related ecosystem services in vineyards

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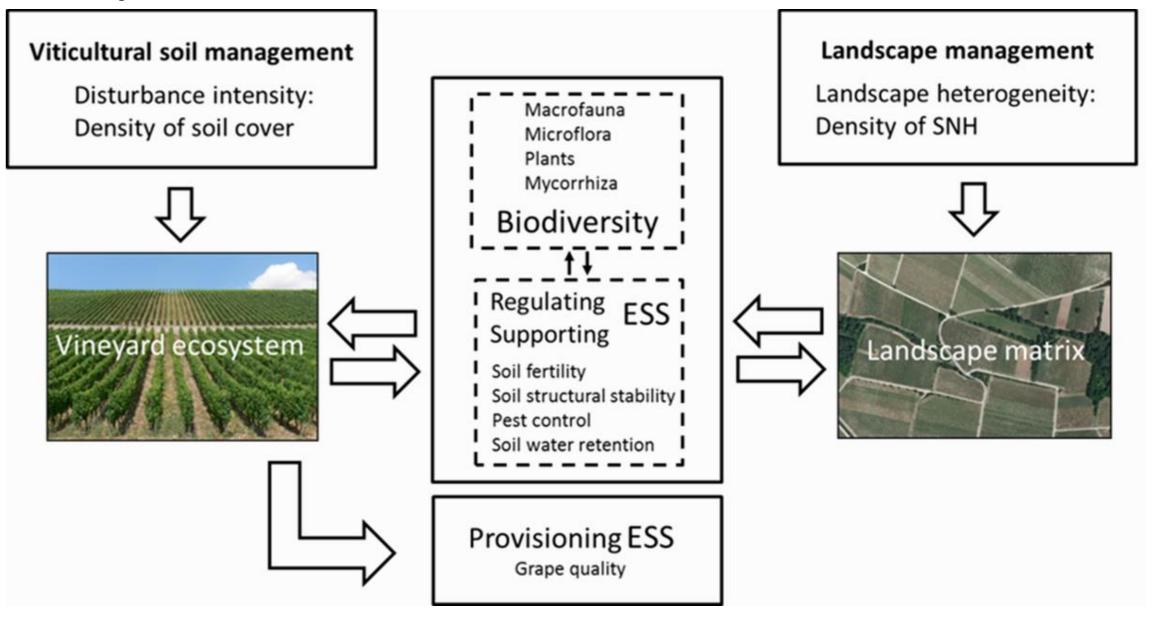
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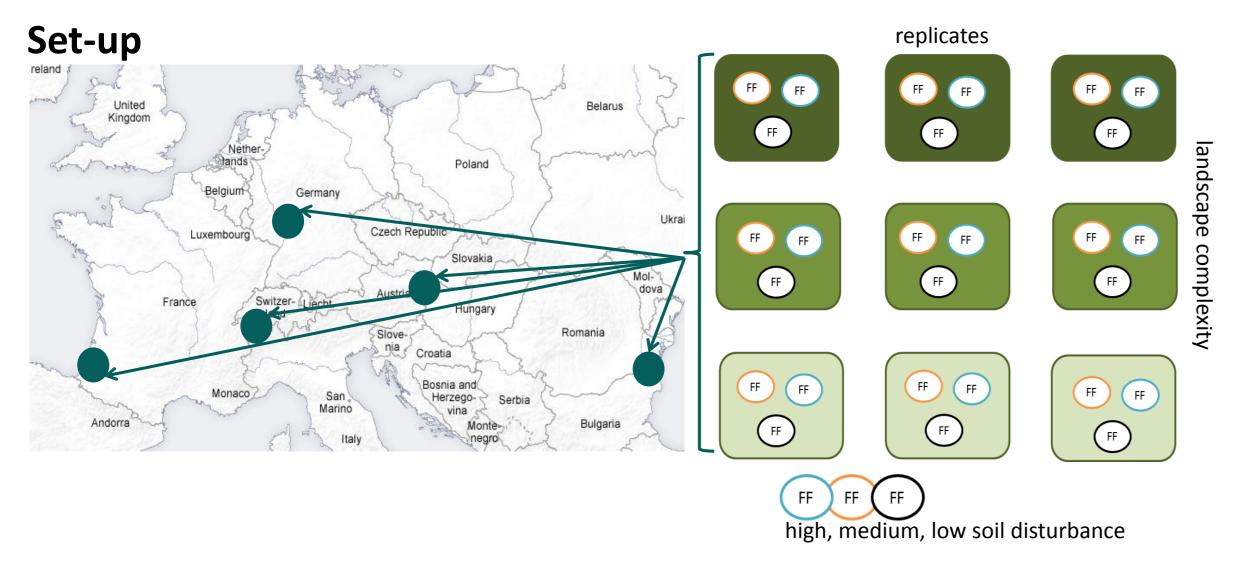
### Abstract

The current shift in production systems, from traditional to intensive, industrialized systems, has led to increased pressures on biodiversity resulting in land conversion, habitat

### Concept



fragmentation and loss of species worldwide. Therefore, maintaining diversity in agro-ecosystems and promoting biodiversity–linked ecosystem services is crucial for the environment as well as for our well-being.



# Soil management



green manure green bare soil: chemical/mechanical removal of vegetation green manure: sown crops incorporated in the soil green: no removal of vegetation, irregularly mown

# **PromESSinG project goals**

- To evaluate the soil management options for promoting biodiversity-linked ecosystem services (ESS) in Central European vineyards
- To explore the relevant scales (vineyard to landscape) for management
- To analyze biodiversity linked ESS responses to soil management intensities

### Landscape complexity



# Methods

Various methods to assess the diversity of edaphic organisms (bacteria and fungi, meso and macro fauna, plants), contributors to ecosystem services like recycling of nutrients, regulation of soil structure, soil maintenance or control of pests.



plant survey

arthropod sampling

soil sampling

Location of study sites (Romania)

9 study sites in Constanta County (Dobrogea region)4 grape varieties (Cabernet, Riesling, Sauvignon, Tamaioasa)3 soil treatments (9 x bare; 9 x green manure; 9 x green)



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