



Animals, Health and Resilience

Our responsibility for the land and the diverse role of the animals

Deepen Biodynamics
4th – 25th September 2023

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Welcome

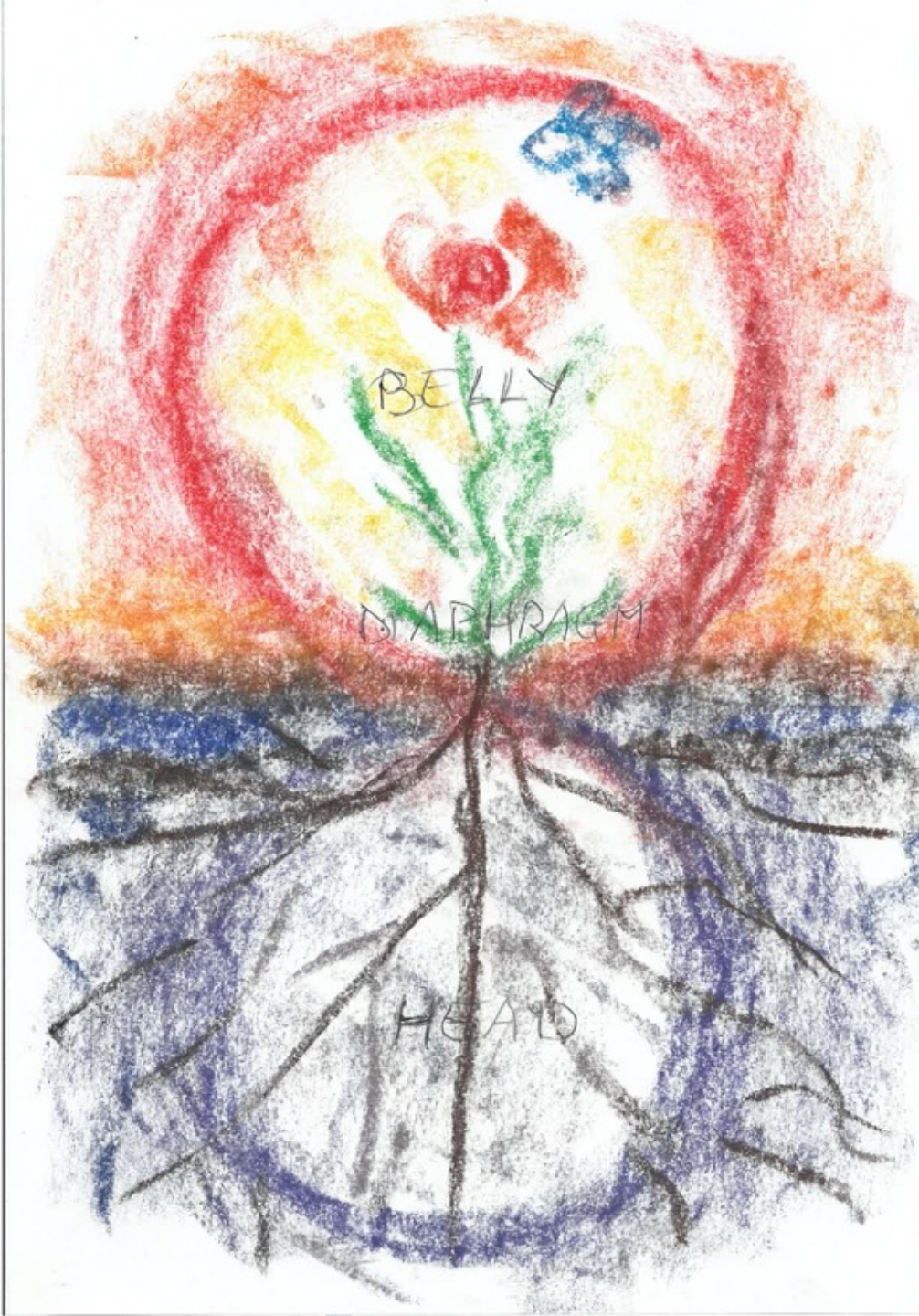


Soil life

Jean-Michel Florin



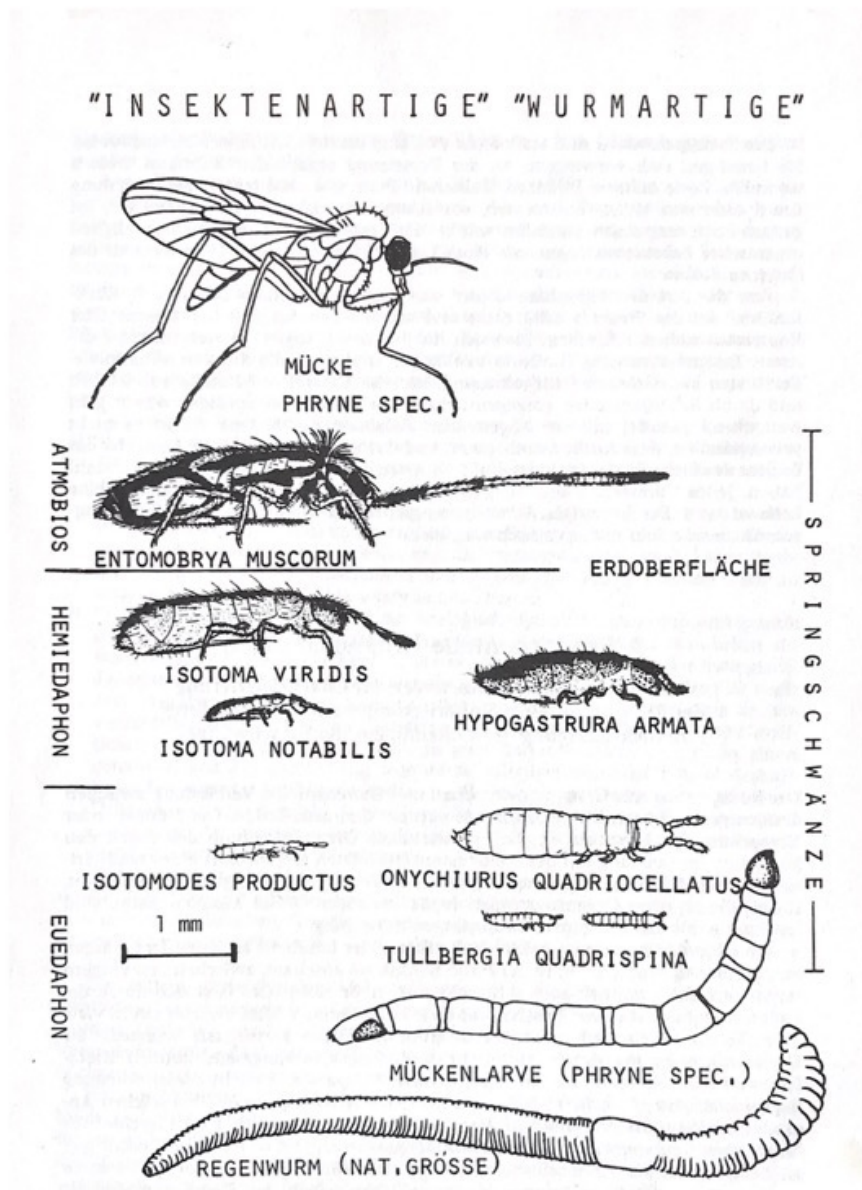
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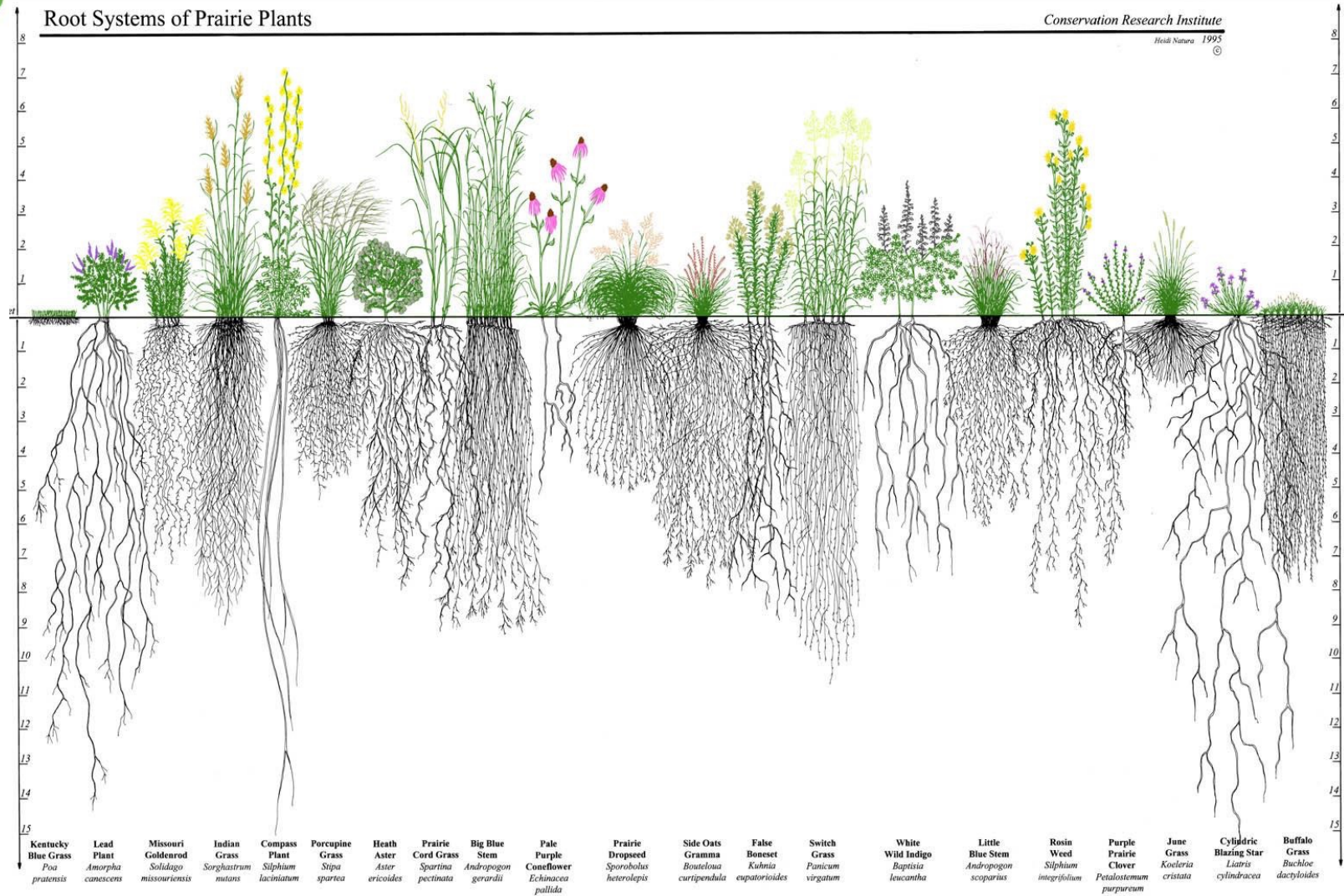
The farm organism



**The substance
processes in
the farm
organism**

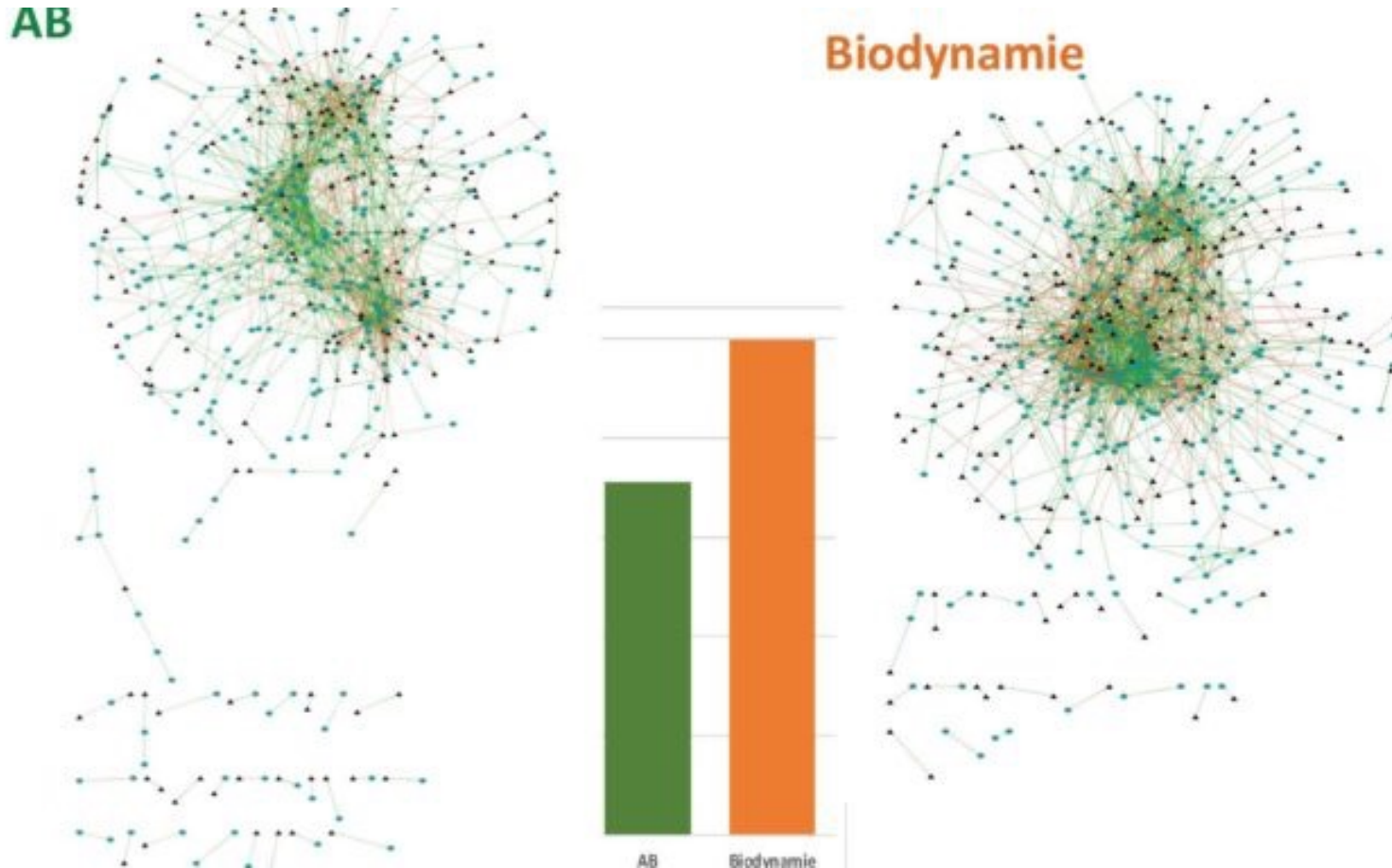


Spatial differentiation of microfauna in the soil and compost



*Interactions between different families of soil micro-organisms
The more numerous the links, the more functional and stable the
community of micro-organisms (Ecovitisol INRAE, 2021). 30 time more
interactions with biodynamics compared to organic.*

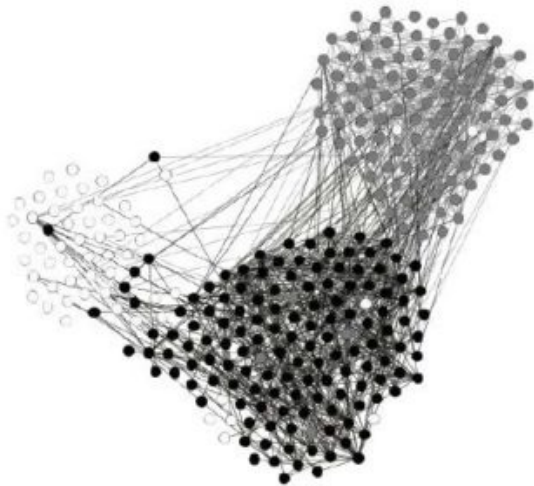
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Network Properties of Local Fungal Communities Reveal the Anthropogenic Disturbance Consequences of Farming Practices in Vineyard Soils.

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CONVENTIONAL



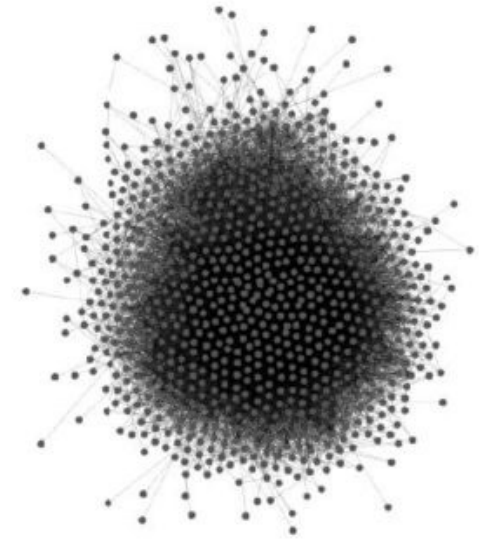
Sample Us149

ORGANIC



Sample Us79

BIODYNAMIC



Sample Us60

NICHE SPECIALIZATION (Modularity)

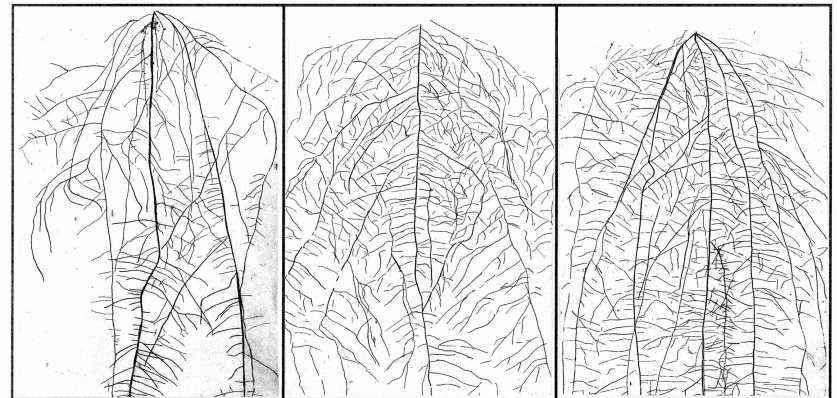
SMALL-WORLD PROPERTIES (Clustering coefficient)

As discussed here, the fungal communities favoured by biodynamic management may resemble a community structure close to that of cooperative wild environments, as opposed to the highly specialised environment found in conventionally farmed vineyards. As a recent consensus paper points out, the specialisation of soil fungal and bacterial communities on a global scale and their sensitivity to environmental change may compromise the future provision of agro-ecological services.

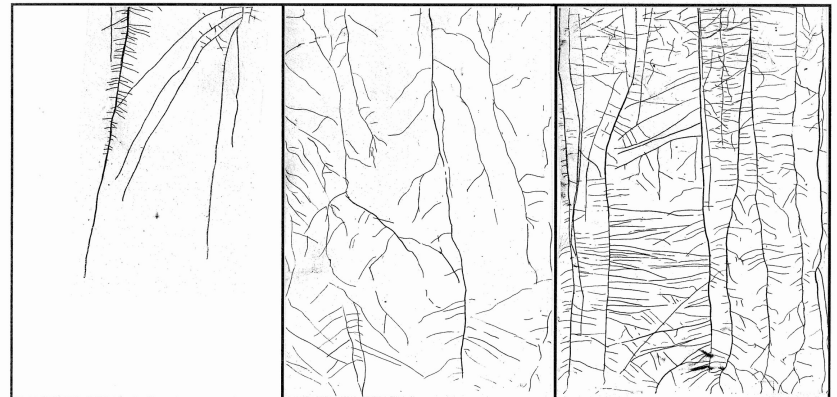


Influence of liquid manure treated with biodynamic preparations on bean root growth

- From left to right:
- Untreated slurry
- Aerated slurry with added bentonite
- Aerated slurry with added bentonite and bd preparations



40-80 cm Tiefe



DOC Trial (after 30 years): stability soil aggregates, percolation and erosion





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Break