



Biodiversity and pesticides - a bad mix

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Pesticides – designed to kill



Weeds



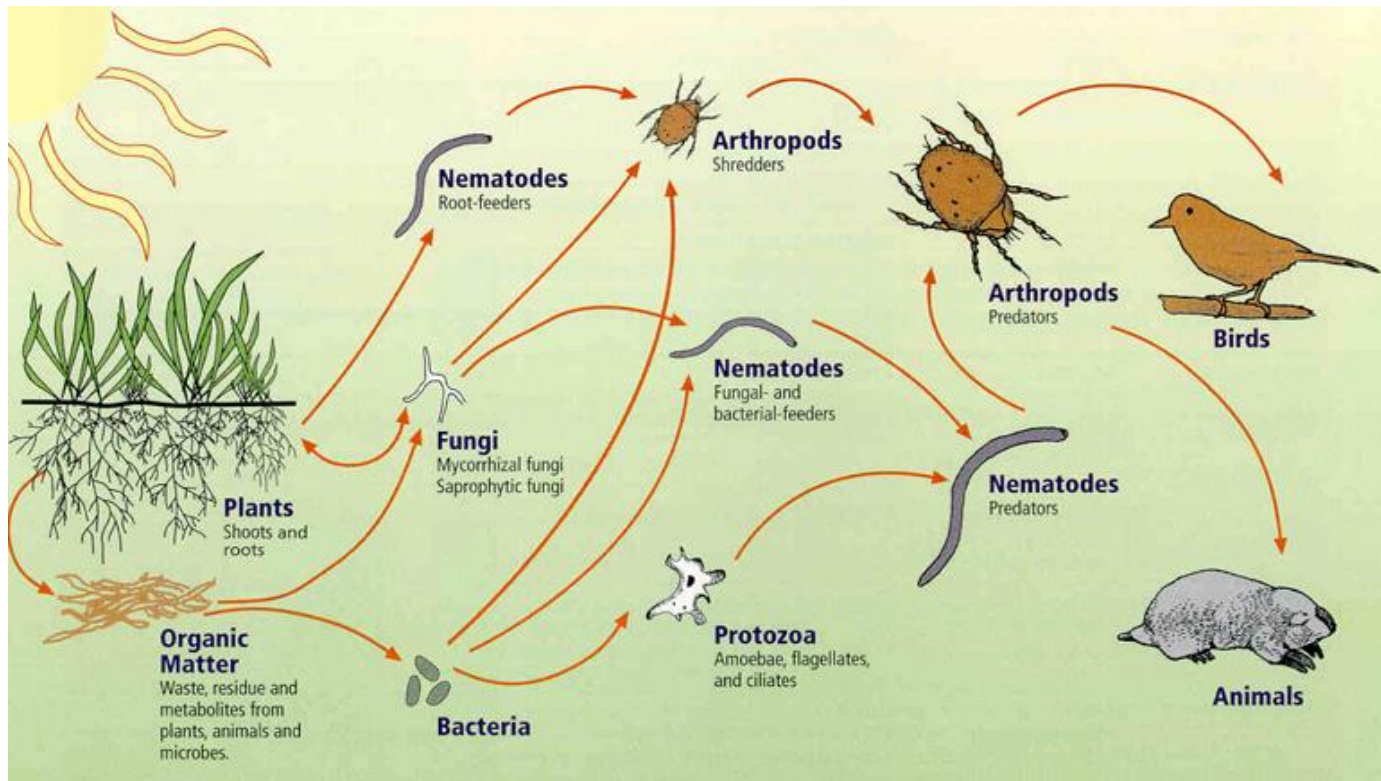
Insects



Fungi/Pathogens

Pesticides – unwanted effects (1)

- Effects on target and non-target organisms in the field result in cascading food web effects



<https://www.soilfoodweb.com.au/>

Pesticides – unwanted effects (2)

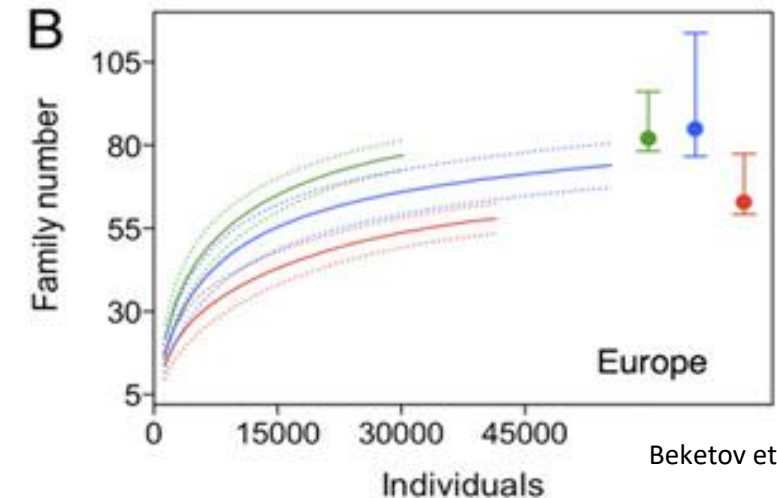
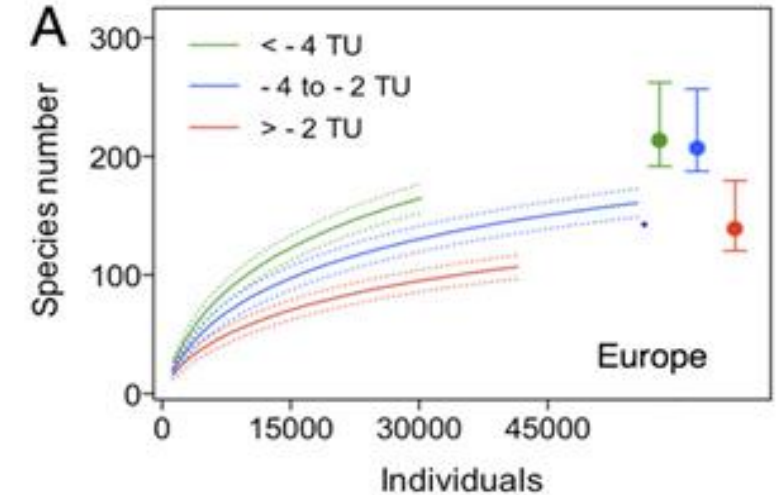


Reach many habitats outside the field

- Other fields, organic fields
- Semi-natural habitats
- Natural habitats

Sub-lethal effects

- Reduced and delayed flowering, with consequences for flower-visiting insect
- Reduced fertility and reproduction of terrestrial and aquatic organisms
- Behavioural changes on e.g. bee homing



Beketov et al. 2013



Sensitive areas – where do we find them?

Protected habitats

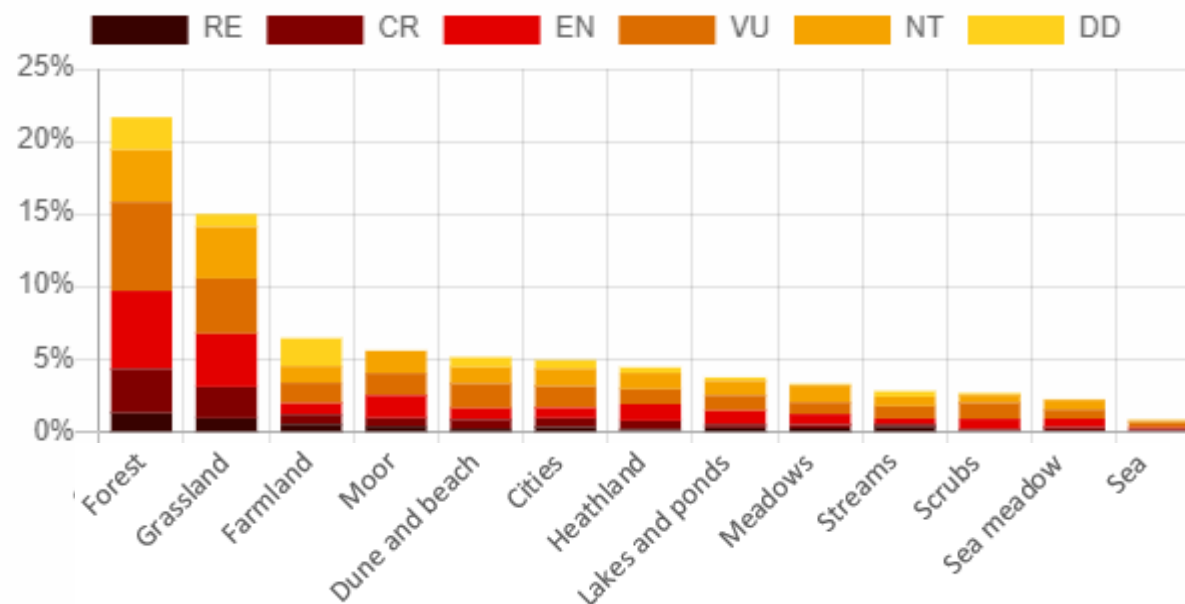
Habitats with high numbers of threatened species

- Small semi-natural habitats intermingled into agricultural land

Biodiversity in fields

- Loss of important ecosystem services (pollination, biological pest control, erosion control, water storage capacity, soil health)
- Loss of sustainability

Percentage of red list species in different habitats in Denmark



Protectives measures

- Ban use of pesticides in protected habitats and other biodiversity rich habitats
- Reduce usage elsewhere
- Research in e.g. nature-based solutions, diversified crop production, integrated pest management (IPM)
- Incentives that facilitates reduced pesticide usage



Thank you for
your attention

