

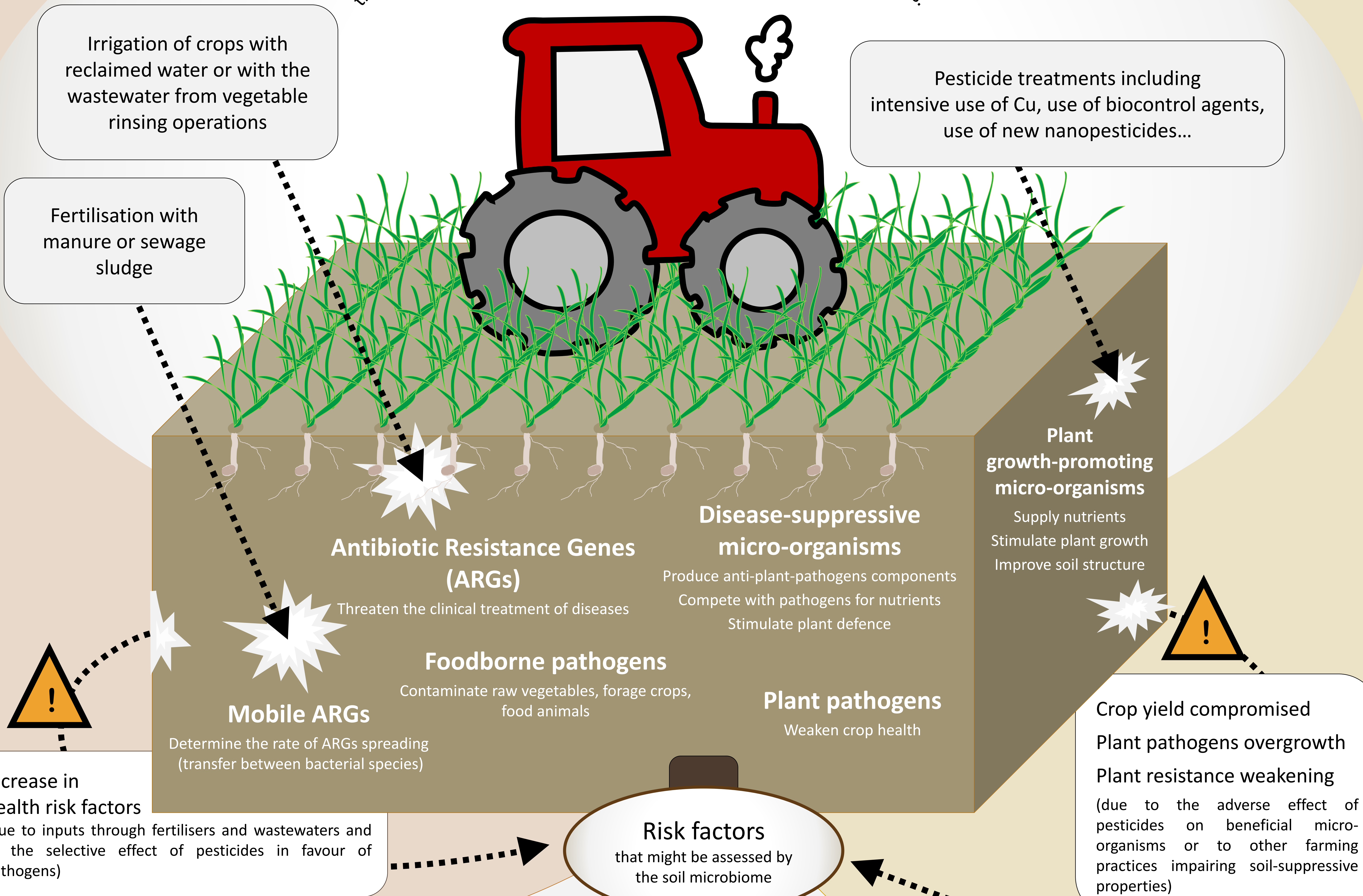
The soil microbiome as a potential toolbox for risk assessment in the food chain

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FOOD SAFETY

Hazard Analysis Focus on AGRICULTURAL PRODUCTION

Almost all farming practices impact the soil microflora. Some are potentially risky for human health and food needs due to the introduction of hazardous biological agents or biocidal chemicals.

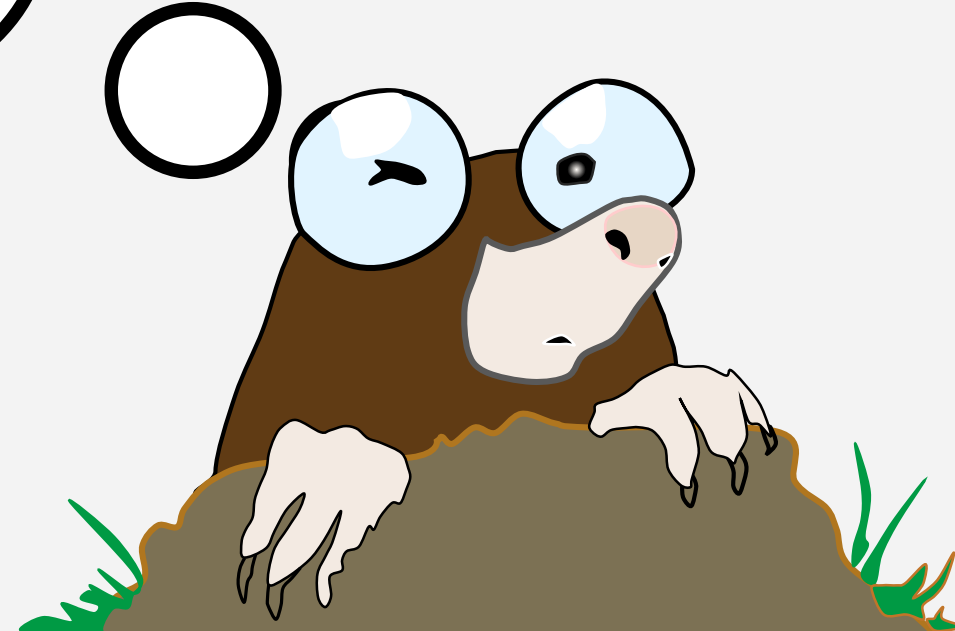


FOOD SECURITY

Abundance of pathogens?
Listeria? Salmonella? E. coli? Staphylococcus aureus? Providencia? (an emerging foodborne pathogen)

Which soil microbial metrics and criteria could help assess risk factors?

Quantification of antibiotic resistance marker genes? Which marker genes? nptII and aadA? Others?



N-fixation rate?
Auxin quantification?
Extent of mycorrhizae colonisation?
Abundance of the pyrrolnitrin (rpnD) gene?
of 2,4 diacetylphloroglucinol (phlD) gene?
of both rpnD and phlD genes?

Ideas welcome

