

Figure 1. Conceptual framework of biodiversity used in the review



Figure 2. Geographic distribution of the studies included in the 27 meta-analyses reviewed

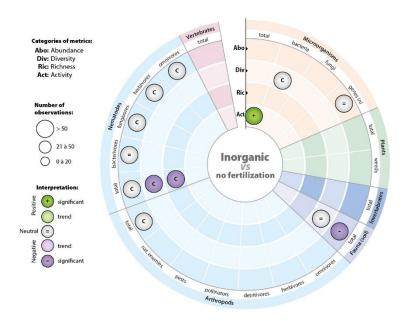


Figure 3. Effects of inorganic fertilization compared to those of no fertilization on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Dai et al. (2018), de Graaff et al. (2019), Hu et al. (2020), Liu et al. (2016), Ouyang et al (2018), Puissant et al. (2022).

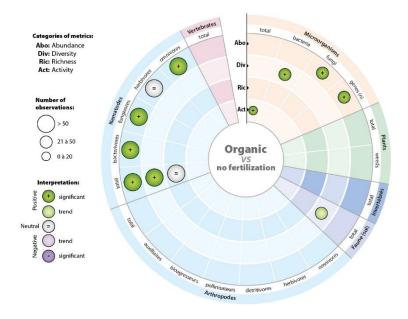


Figure 4. Effects of organic fertilization compared to those of no fertilization on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from de Graaff et al. (2019), Hu et al. (2020), Liu et al. (2016), Morugan-Coronado et al. (2022), Ouyang et al. (2018) and Puissant et al. (2022).

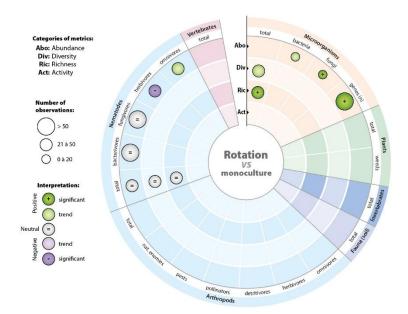


Figure 5. Effects of crop rotation compared to those of monoculture on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Hao et al. (2022), Morugan-Coronado et al. (2022), Puissant et al. (2022), Venter et al. (2015). Rotation is defined as a multi-year sequence of different annual crops grown in the same field.

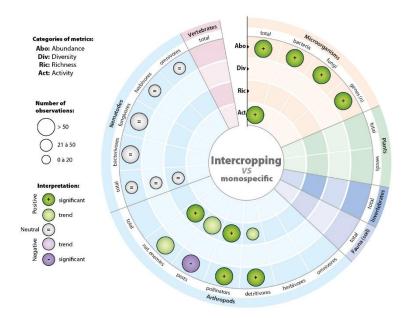


Figure 6. Effects of intercropping compared to those of monospecific crops on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Chen et al. (2019), Hao et al. (2022), Morugan-Coronado et al. (2022), Puissant et al. (2022) and Sanchez et al. (2022). Intercropping is defined as growing two or more crops in the same field at the same time.

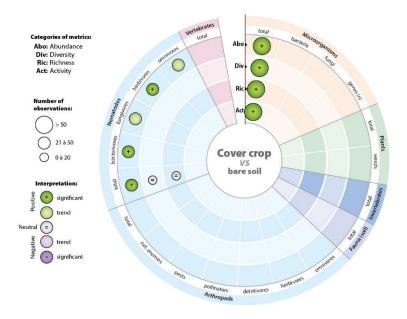


Figure 7. Effects of cover crops compared to those of bare soil on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Kim et al. (2020) and Puissant et al. (2022).

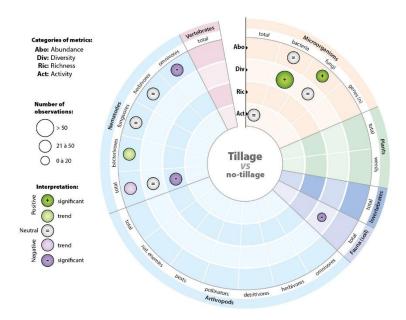


Figure 8. Effects of tillage compared to those of no-tillage on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Briones et Schmidt (2017), de Graaff et al. (2019), Moos et al. (2017), Li et al. (2020), Morugan-Coronado et al. (2022) and Puissant et al. (2022). Tillage involves a variety of factors (e.g., depth, frequency).

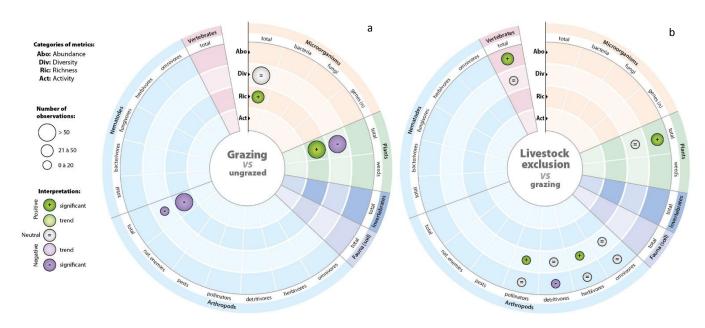


Figure 9. Effects of grazing compared to those of (a) ungrazed grassland or (b) excluding livestock on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Filazzola et al. (2020) and Wang & Tang (2019).

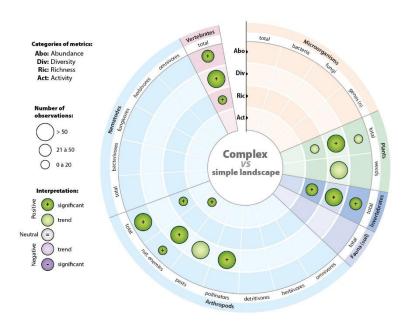


Figure 10. Effects of simple landscapes compared to those of complex landscapes on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Chaplin-Kramer et al. (2011), Estrada-Carmona et al. (2022), Gonthier et al. (2014), Lichtenberg et al. (2017) and Prevedello et al. (2017). A complex landscape is generally defined as one in which more than 25% of the surface area is occupied by interconnected semi-natural habitats.

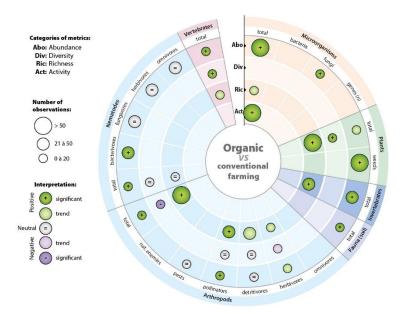


Figure 11. Effects of organic farming compared to those of conventional farming on taxonomic and/or functional groups according to four categories of biodiversity metrics. Data come from Bengtsson et al., (2005); Lichtenberg et al. (2017), Lori et al. (2017), Puissant et al. (2022) and Tuck et al. (2014). Organic farming is defined as the absence of synthetic plant-protection products (excluding biocontrol agents), use of organic fertilization only and more complex crop rotations than those of conventional farming.