

Biodiversity of arthropods and especially insects is declining on a global scale because of landscape transformation, agricultural intensification and climate change. Such losses, especially in farmland, may have dramatic consequences for ecosystem services such as crop pollination.

Growing intercrops can enhance food supply and survival for common arthropod species in European farmland. For example, use of perennial flowering understories, such as clover, have been shown to provide a resource for bumblebees, with greater numbers penetrating deeper into the crop area than in monoculture. Such benefits are also gained when growing grain legumes with cereals.

Replacing crop monocultures with crop mixtures can increase arthropod biodiversity and deliver a wide range of ecosystem services. Increased arthropod biodiversity leads to more complex ecological networks that can buffer against climatic or other extremes, as well as leading to e.g., improved soil health and biocontrol of pests.

To maximise arthropod diversity, and the ecosystem services that they can provide, it is essential to include a range of flower structures and morphologies, as well as nesting habitat such as bare ground. This will ensure resource availability for a broad range of beneficial insects, such as other pollinators and parasitic wasps.

> Find out more, including references, at: plant-teams.org



