
Human-animal conflicts and social dimension

ProVeBirD – Protection of vegetables from bird damages

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Bird damage remains an important and unresolved issue in plant protection. While scientific evidence on the extent of damage caused by bird feeding and droppings is limited, numerous reports from vegetable producers highlight the severity of the problem, raising concerns about the economic viability of certain crops. Additionally, wild birds pose health risks by transmitting pathogens such as *Salmonella* through faeces to humans and animals, creating potential dangers for both producers and consumers beyond mere aesthetic concerns. Despite its relevance to vegetable farming, there is a lack of comprehensive insights into effective and economically viable protection measures against bird damage. The ProVeBirD project aims to identify potential losses in major and specialty crops while developing a practical guide for organic vegetable farming systems.

We conducted a survey of German farmers which revealed that bird feeding affected all types of vegetables, particularly leaf, root, tuber, and fruit vegetables. Crows (Corvidae) were identified as the most damaging bird family, followed by pigeons (Columbidae) and geese (Anatidae). Average damages per crop and farm site were estimated at approximately 20%. Nearly half of the participants reported their losses as significant or very significant, with almost two-thirds noting a negative trend, i.e. increasing damages over recent years. Most farmers were unaware of the effectiveness of countermeasures; however, many reported successes with hunting, protective nets, and acoustic methods such as propane cannons or distress calls, while traditional scarecrows were largely considered ineffective. These results build the basis for the next ongoing project phase in which we conduct field trials to test the effectiveness of several protective measures for vegetables against bird damage.

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