

W5.1 ECOLOGICAL PEST CONTROL

Questions for distance learning – Observations in a garden

a. Observation of aphids and ladybirds

If aphids are found on flowers or useful plants in the garden, try to catch ladybugs in a matchbox (at least 10), and bring them to the aphids. Release them on plant infested with aphids and observe.

b. Observation of a bird feeder

What species of birds use the feeder? Can you identify them using a bird atlas, an internet search or the BirdNet app? What can you research about the different species of birds observed? Where do they live? Where do they nest? What do they eat?

c. Observation of ants and other insect species

Ants are predators and can eliminate many species of insects that are harmful to plants. Therefore, you will usually not find any other species of insects near the anthill. Try to verify this hypothesis in the field. Find an anthill and try to find other species of insects near it. Kneel / lie down on the grass and observe life in it or on nearby flowers, shrubs, plants. Did you observe any types of insects? Winged or wingless? Species name? (try to take a picture or draw them). At what distance from the anthill?

d. Observation of ants and aphids

Some ants have a habit of “breeding” aphids and spreading them on plants. Have you observed both aphids and ants on any plant? Why do ants do that? There is no need to kill ants because of this. We need to look for ways to prevent ants from carrying aphids on the plants we want to protect. How would you do that?

Try the following: find the “highway” of ants where they walk in large numbers and try to put various obstacles in their way. Observe their behaviour and find out which obstacle is insurmountable for them. Is it a moat for example? Or some plant that obviously doesn't smell like them? Or some sticky material? Resin? Duct tape?

Finally, try to suggest (and share your proposal in an online lesson) how to use these observations in plant protection i.e. how to prevent the movement of ants (with aphids) on these plants.

e. Potato bugs and poultry

If you have potatoes or other plants infested with potato bug (either their larvae or adult beetles) near you, collect them in a cup and go with them to your parents, grandparents, neighbours who keep poultry. Try to offer them to different types of poultry – chickens, turkeys, ducks. Which types of poultry will eat larvae or potato bugs and which will not? Can this finding be used to protect potatoes?