



ON-FARM MONITORING OF NATURAL ENEMIES AND POLLINATORS

Forthcoming changes to land management policies, evolving legislation on restrictions in pesticide usage, and the reality of increasingly warmer winters are collectively hampering farmers' efforts to manage damaging crop pests like aphids and beetles.

One answer is to develop sustainable ways to minimise economic damage from pests by boosting populations of 'natural enemies' by supplying them with appropriate habitat and alternative food sources. Natural enemies include large predators such as ground beetles, spiders and ladybird larvae, smaller parasitic species such as wasps, and pest-attacking pathogens and nematodes that are naturally occurring in our soils.



Typical seasonal pest pressures		
Autumn	Cereals	Aphids, slugs, frit fly
	Oilseed rape	Adult cabbage stem flea beetle, slugs, aphids
Spring/summer	Cereals	Aphids, orange blossom midge
	Oilseed rape	Pollen beetle, CSFB larvae, seed weevil, pod midge
	Pulses	Pea and bean weevil, bruchid beetle
Commonly found natural enemies		
All year round	Money spiders, ground and rove beetles, springtails, midges	
Spring/summer	Lacewings, hoverfly and ladybird larvae, moths, bees, wasps	

Monitoring methods

As part of the Strategic Cereal Farm programme, AHDB is working with NIAB, ADAS and SRUC to determine the impact of perennial flower strips on abundance and distribution of natural enemies, using practical methods which can be easily made and placed out on

farm. Have a go at some of these methods yourselves – we would be really interested to see your results.



Pitfall traps

A pitfall trap is used for ground active insect species like beetles and spiders.



Water traps

Yellow water traps are used to catch hungry pest species while clear traps are used to catch both pests and beneficials.



Sticky traps

Yellow sticky traps can be placed in the field and checked twice a week or more often if there is heavy rain. Setting up and positioning of these traps depends on the insect target.



NIAB TAG Membership

This is just one example of the research information, digital tools and advice delivered alongside NIAB TAG's extensive and exclusive member-funded field trials programme, supplying impartial cost-effective crop production strategies specifically for our members.