

Apple: wildflowers for crop pollinators

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Major UK pollinators of apple are likely to include:

Bees	<i>Bombus lapidarius</i>	Red-tailed bumblebee
	<i>Bombus terrestris</i> and <i>lucorum</i>	Buff-tailed and white-tailed bumblebee
	<i>Andrena dorsata</i>	Short-fringed mining bee
	<i>Andrena nigroaenea</i>	Buffish mining bee
	<i>Andrena haemorrhoa</i>	Early mining bee
	<i>Osmia bicornis</i>	Red mason bee
Hoverflies	<i>Epistrophe eligans</i>	Early epistrophe
	<i>Eristalis pertinax</i> and related species	Drone flies



However, some wild plants are potential hosts of:

- a = melon-cotton aphid;
- b = Botrytis;
- c = European tarnished plant bug;
- f = cabbage stem flea beetle;
- g = common green capsid;
- o = ornate (violet) aphid;
- p = potato aphid;
- s = strawberry blossom weevil;
- t = tobacco thrips;
- v = Verticillium wilt



Consult seed companies for the species which best suit your growing conditions.



A selection of wildflowers that attract and support apple pollinators includes:

Perennials	Alsike Clover	<i>Trifolium hybridum</i>	a,c,g
	Bird's-foot Trefoil	<i>Lotus corniculatus</i>	
	Black Knapweed	<i>Centaurea nigra</i>	c,b
	Brown Knapweed	<i>Centaurea jacea</i>	
	Creeping Buttercup	<i>Ranunculus repens</i>	c
	Dandelions	<i>Taraxacum officinale</i> agg.	a,b,c,s,t
	Field Scabious	<i>Knautia arvensis</i>	
	Hemlock Water Dropwort	<i>Oenanthe crocata</i>	
	Oxeye Daisy	<i>Leucanthemum vulgare</i>	a,b,c
	Welsh Poppy	<i>Papaver cambricum</i>	o
	White Clover	<i>Trifolium repens</i>	b,c,g
	Yarrow	<i>Achillea millefolium</i>	b,c,o
Annuals	Bee Phacelia	<i>Phacelia tanacetifolia</i>	
	Borage	<i>Borago officinale</i>	
	Field Poppy	<i>Papaver rhoeas</i>	o
	Grey Field-speedwell	<i>Veronica polita</i>	
Variable	Groundsels	<i>Senecio</i> spp.	b,c,v
	Hawksbeards	<i>Crepis</i> spp.	c
	Hogweed	<i>Heracleum sphondylium</i>	c

How these tables were compiled:

1. A literature search and assembly of published and unpublished data sets of insects recorded visiting this crop in the UK.
2. The insects were ranked by number of crop visits/visitors in each data set and aggregate weighted ranks were created that take into account the same insects dominating multiple data sets.
3. For each of these insects, data on their wildflower visit activity in the UK and wider north-western Europe was assembled using existing literature.
4. These data sets were ranked by frequency of interaction and aggregate ranks produced.
5. Plants were removed from the ranks if they were woody/trees, bulbs, not native or naturalised non-native.
6. A further literature search assembled a list of wildflower-pest and wildflower-disease associations for pests and pathogens of key UK crops, to highlight any plants that may carry pest/disease risk (however slight).

The BEESPOKE project (Benefitting Ecosystems through Evaluation of food Supplies for Pollination to Open up Knowledge for End users) aims to increase levels of pollinators and crop pollination at local and landscape scales by providing land managers and policy makers with new expertise, tools and financial knowledge to create more sustainable and resilient agroecosystems.

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