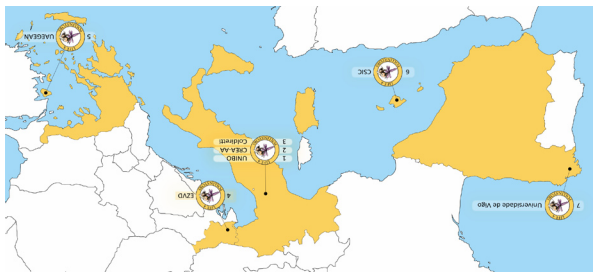


The project will contribute to a range of EU policy and legislation matters, including amongst others the biodiversity strategy, the pollinators initiative and biodiversity protection under the common agricultural policy.

LIFE 4 POLLINATORS

The aim of the project is to improve pollinator conservation by creating a virtuous circle leading to a progressive change in practices across the Mediterranean region.

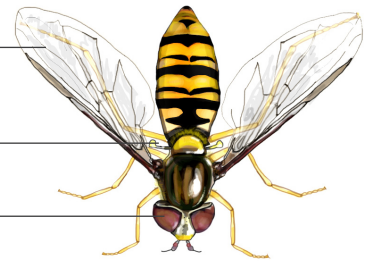
In Mediterranean countries (Spain, Italy, France and Greece) there is inadequate awareness about the role of wild pollinators and the importance of conserving their diversity. This knowledge gap is one of the main obstacles to proper planning of successful programmes to address the main drivers behind pollinator decline and ensure sustainable management and restoration of the remaining high-value pollinator habitats.

FLIES

Fly pollinators can be found all year round on flowers. In cold climates they are often the dominant pollinators. Their larvae develop as consumers of organic material, and they can be free-living predators or parasitoids and kleptoparasites, mostly of other insects.

Although many fly groups visit flowers, here we present the most efficient pollinator groups, viz. hoverflies, bee flies and nemestrinid flies.

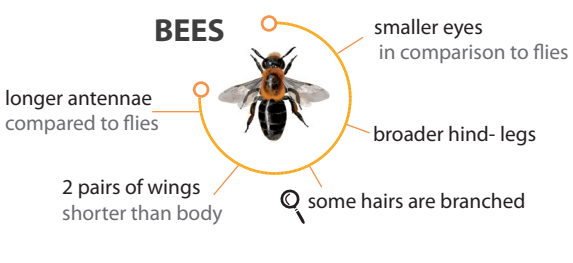
FLY ANATOMY SIMPLIFIED

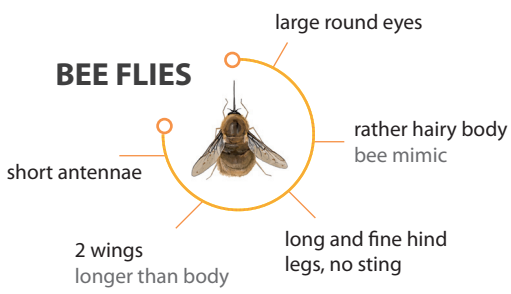


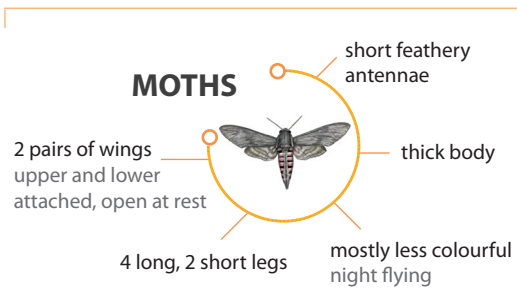
IDENTIFY FLIES IN THE FIELD

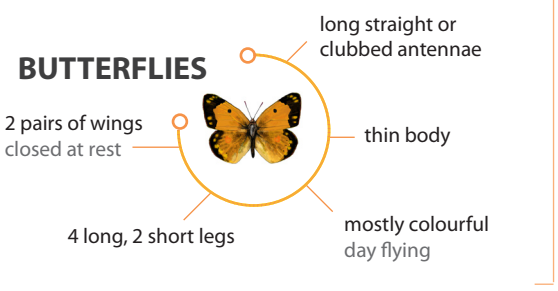
- Fly pollinators are encountered on open flowers, mainly white and yellow coloured ones, like those of the aster and carrot family.
- Together with mosquitoes, crane flies, gnats, black flies, and midges they make up the order Diptera. They have only one pair of transparent wings and two halteres (club-like appendages behind the wings), mouthparts modified for lapping or sucking, and large compound eyes. Their exoskeleton is softer and relative more flexible compared to other pollinating insects.

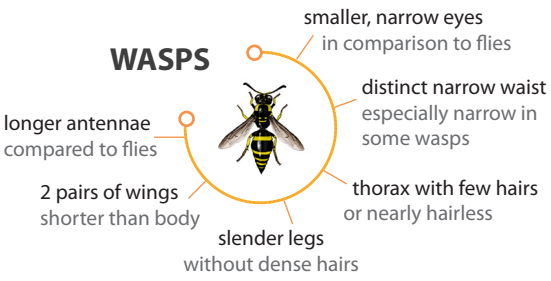
POLLINATING INSECTS

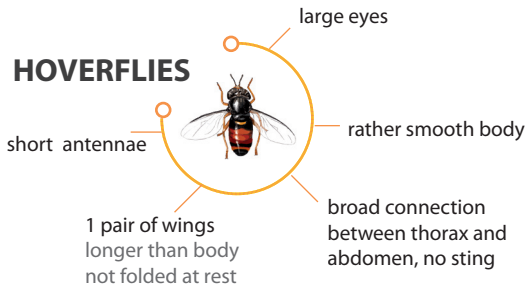












HYMENOPTERA

DIPTERA (FLIES)

For more information on each group, please visit: www.life4pollinators.eu/flies

BEE FLIES

Bombyella atra

BODY
all black with many white spots on the abdomen

hairy bee fly

WINGS
wings darkened at the base

April–May

DIMENSIONS: 9–10 mm

Bombylius medius

BODY
all uniform brown to yellow

hairy bee fly

very long tongue

WINGS
characteristic wings with many dark spots

April–May

DIMENSIONS: 11–14 mm

Geron sp.

BODY
hump-backed, short-haired and slender

small hairy grey or brown bee fly

long tongue

May–Oct.

DIMENSIONS: 4–6 mm

Toxophora fasciculata

BODY
hump-backed, short-haired and slender

orange and black-spotted bee fly

long antennae and tongue

May–Oct.

DIMENSIONS: 9–11 mm

HOVERFLIES OR FLOWER FLIES

Chrysotoxum intermedium

BODY
abdomen globular in shape

yellow and black hoverfly, wasp mimic

relatively long antennae for a hoverfly

all year

DIMENSIONS: 12–13 mm

Epistrophe eligans

black hoverfly with little orange, no clear mimicry

BODY
the thorax is dark, except the rear upper part is yellow to orange

BODY
two yellowish basal segments of the abdomen usually with characteristic marking (inverted dark T-shaped mark) and other segments black

March–July

DIMENSIONS: 9–11 mm

Episyrphus balteatus

BODY
each segment of the abdomen with 2 dark bands separated by 2 orange bands

yellow and blackish hoverfly, wasp mimic

among the most common migratory hoverfly species

all year

DIMENSIONS: 9–11 mm

Eristalinus taeniops

BODY
the compound eyes have vertical dark stripes

orange and black hoverfly, bee mimic

WINGS
outer upper corner of wing with strongly curved vein

all year

DIMENSIONS: 9–11 mm

Eristalis tenax

BODY
compound eyes have 2 darker vertical bands of dense hairs

black hoverfly with little orange, bee mimic

among the most common migratory hoverfly species

WINGS
outer upper corner of wing with strongly curved vein

all year

DIMENSIONS: 12–15 mm

Eupeodes corollae

BODY
yellow lunulate markings on the abdomen

yellow and black hoverfly, wasp mimic

among the most common migratory hoverfly species

WINGS
venation as illustrated

all year

DIMENSIONS: 10–12 mm

Meliscaeva auricollis

BODY
yellow markings on abdomen triangular to elliptical

yellow and blackish hoverfly, wasp mimic

WINGS
elongated

all year

DIMENSIONS: 8–10 mm

Merodon albifrons

BODY
abdomen and legs partially orange

dark hoverfly with little orange, bee mimic

WINGS
venation with curved vein in upper outer corner

April–Oct.

DIMENSIONS: 10–12 mm

Myathropa florea

BODY
characteristic 'Batman' marking on top of the thorax

yellow and black hoverfly, wasp mimic

WINGS
wing venation like *Merodon albifrons*

all year

DIMENSIONS: 12–14 mm

Paragus bicolor

BODY
small species with round yellow face

red and black hoverfly

BODY
abdomen partially red and rear part of thorax with yellow marking

April–Oct.

DIMENSIONS: 5–7 mm

Sphaerophoria scripta

BODY
very slender elongate yellow-banded hoverflies with abdomen longer than the wings

yellow and black hoverfly, wasp mimic

among the most common migratory hoverfly

BODY
yellow face and yellow lines on the upper sides of the thorax

all year

DIMENSIONS: 8–10 mm

Syritta pipiens

BODY
slender hoverfly with enlarged hind thighs

dark hoverfly with little orange

largely orange antennae

BODY
the sides of thorax all greyish white

Mar–Oct.

DIMENSIONS: 7–9 mm

Syrphus ribesii

BODY
oval, yellow-banded abdomen

yellow and black hoverfly, wasp mimic

BODY
thorax dull greenish and legs almost completely yellow or orange

Mar–Oct.

DIMENSIONS: 10–12 mm

Volucella zonaria

BODY
one of the largest species, with upper part of the thorax red

yellow and red hoverfly, hornet mimic

HEAD
yellow face and characteristic plumose antennae

May–Oct.

DIMENSIONS: 16–18 mm

Xanthogramma citrofasciatum

BODY
thorax black with contrasting lemon-yellow markings, especially the broad yellow stripes running along the upper edge

yellow and black hoverfly, wasp mimic

BODY
yellow face and yellow interrupted bands on the abdomen

April–Oct.

DIMENSIONS: 11–13 mm

NEMESTRINID FLIES

Fallenia fasciata

BODY
abdomen with white hair bands

hairy nemestrinid fly, bee fly mimic

WINGS
characteristic wing venation

April–July

DIMENSIONS: 11–13 mm