

## A study of insects visiting the flowers of *Euphorbia epithymoides* (Cushion Spurge) at Carpenters Farm, Berrow

Martin Skirrow

Cushion Spurge *Euphorbia epithymoides* is mostly familiar as a striking yellow-flowering ornamental plant sold in nurseries, often under the name *Euphorbia* "Polychroma". This name probably covers a range of cultivars, but the species has now been officially named *Euphorbia epithymoides*. The plants in this study already existed at Carpenters Farm (SO778339) when acquired by the present owners in 2002 (01, 02). Their provenance is unknown.

About mid-May this year (2024) I noticed that the plants were being visited by an unusually large number and variety of insects. Interestingly, there was an almost complete absence of larger bee species such as Honeybees *Apis mellifera* and bumblebees, which by contrast were exceedingly plentiful on a nearby plot of *Allium*.

I visited the *Euphorbia* plants regularly throughout their flowering period to record the insects present. Most of the insects were feeding on the flowers, but a few were probably present as predators.



01. One of the *Euphorbia epithymoides* plants studied. Martin Skirrow.



02. Flowers of *Euphorbia epithymoides*. Martin Skirrow.

### Methods

The study ran for six weeks from mid-May to the end of June when the flowering was virtually over. The plants were visited for about 20 minutes every two or three days. I sat and observed activities and was able to catch most insects directly in glass tubes owing to their preoccupation with feeding. Other more agile insects were netted.

Some could be identified macroscopically and released, but many required preservation and detailed microscopy.

### Species list

Where more than one specimen was recorded, the numbers encountered are shown in parenthesis: (±) seen only on a few collecting sessions; (+) seen on almost every session, often plentiful. This was a crude assessment as discussed below. (V) indicates verification by an expert on iRecord.

#### Hemiptera

Miridae, Plant Bugs

Meadow Plant Bug *Leptopterna dolabrata* (Linnaeus) (1 female)

#### Coleoptera

Cantharidae, Soldier Beetles

*Cantharis rustica* (Fallén) (±)

Malachiidae, Soft-winged Flower Beetles

*Anthocomus fasciatus* (Linnaeus) (1)

Nitidulidae, Pollen Beetles

Common Pollen Beetle *Meligethes aeneus* (Fabricius) (+)

Coccinellidae, Ladybirds

14-spot Ladybird *Propylea quatuordecimpunctata* (Linnaeus) (1)

Oedemeridae, False Blister Beetles

*Ischnomera cyanea* (Fabricius) (±)

*Oedemera lurida* (Marsham) (1 female)

Cerambycidae, Longhorn Beetles

Wasp beetle *Chytus arietis* (Linnaeus) (±)

Chrysomelidae, Leaf Beetles

Bean Seed Beetle *Bruchus rufimanus* (Boheman) (±)

Scraphiidae, False Flower Beetles

*Anaspis* sp. (±)

Curculionidae, Weevils

Cabbage Stem Weevil *Ceutorhynchus pallidactylus* (Marsham) (1)

#### Diptera

Mycetophilidae, Fungus Gnats

*Orfelia* sp. Probable (1)

Sciaridae, Black Fungus Gnats

1 sp. (1)

Stratiomyidae, Soldier Flies

*Chloromyia formosa* (Scopoli) Broad Centurion (+) (V)

Hybotidae, Dance Flies

*Platypalpus* sp. (1)

Empididae, Dance Flies

*Empis caudatula* Loew (1 female)

Dolichopodidae, Long-legged Flies

*Chrysotus blepharopheles* (Kowarz) (+)

*Dolichopus festivus* (Haliday) (±)

Phoridae, Hump-backed Flies

*Phora* sp; probably *atterima* (1)

Syrphidae, Hoverflies

Black-tailed Hoverfly *Epistrophe eligans* (Harris) (1) (V)

*Eristalis arbustorum* (Linnaeus) (±)

*Eumerus funeralis* (Meigen) (1) (V)

*Meliscaeva auricollis* (Meigen) (1 male) (V)

*Myathropa florea* (Linnaeus) False Drone Fly (1 female) (V)

*Orthonevra nobilis* (Fallén) (1 male) (V)

*Pipizella viduata* (Linnaeus) (±) (V)

Long-horned Orthonevra *Riponnensia splendens* (Meigen) (1 male) (V)

*Syrpita pipiens* (Linnaeus) (+)

Lauxaniidae, Lauxaniid Flies

*Minettia fasciata* agg. (1)

Sepsidae, Black Scavenger Flies

*Sepsis orthocnemis* (Frey) (±)

*Sepsis punctum* (Fabricius) (±)

Agromyzidae, Leaf-miner Flies

*Ophomyia* sp. Probable (±)

Chloropidae, Grass Flies

*Thermatomyia* sp. (1)

Anthomyiidae (species determined by dissection of males)

Big-spot Anthomyia *Anthomyia procellaris* (Rondani) (±)

*Lasiomma seminitidum* (Zetterstedt) (±)  
 Muscidae, Houseflies and allies  
*Myospila mediatubunda* (Fabricius) (±)  
*Musca autumnalis* (De Geer) Face Fly (+)  
 Large False-greenbottle *Neomyia viridescens* (Robineau-Desvoidy) (+)  
*Polietes meridionalis* (Peris & Llorente) (1 male) See Discussion below.  
*Thricops nigrifrons* (Robineau-Desvoidy), probable (1 male)  
 Calliphoridae, Blowflies  
 Common Greenbottle *Lucilia caesar* (Linnaeus) (+)  
 Dark-palped Melinda *Melinda viridicyanea* (Robineau-Desvoidy) (±)  
 Bird Blowfly *Protocalliphora azurea* (Fallén) (1 male)  
 Rhinophoridae, Woodlouse Flies  
 Black Woodlouse Fly *Stevenia atramentaria* (Meigen) (1 female)  
 Sarcophagidae, Flesh Flies  
 Lesser Red-tailed Flesh Fly *Sarcophaga haemorrhoea* (Meigen) (1 male)

#### Hymenoptera

Ichneumonidae, Ichneumon Wasps  
*Alomya debellator* (Fabricius) (1 male)  
*Ichneumon suspiciosus* group (1)  
 A small unidentified ichneumon barely 3 mm long  
 Gasteruptionidae, Carrot Wasps  
*Gasteruption jaculator* (Linnaeus) (1 male) (03).  
 Formicidae, Ants  
 Small Black Ant *Lasius niger* (Linnaeus) (±)  
 Crabronidae, Sand and Digger Wasps  
*Passaloecus* sp. (almost certainly *gracilis*) (1 male)  
 Mourning Black Wasp *Pemphredon lugubris* (Fabricius) (1 male)  
*Trioxylon* sp. (2 males)  
 Chrysididae, Cuckoo Wasps  
*Chrysis ignita* (Linnaeus) a ruby-tailed wasp (±)  
 Colletidae, Plasterer Bees  
 Hairy Yellow-face Bee *Hylaeus hyalinatus* (Smith) (±)  
 Little Yellow-face Bee *Hylaeus pictipes* (Nylander) (2 males) Nat. notable A.

#### Discussion

Three species deserve special comment. The muscid fly *Polietes meridionalis* was officially recorded as a new species for Britain as recently as 2013 (Pont & Falk 2013), although scattered records were known previously. It seems to be spreading, possibly as a result of climate change. The colletid bee *Hylaeus pictipes* (2 males found together) is classed as Nat. notable A. At barely 4 mm long, it is the smallest of this group. A male of this species was previously found at this site in 2012 and identified by Geoff Trevis. *Gasteruption jaculator* is a cleptoparasitic wasp mainly restricted to England. I have not seen it at Carpenters Farm before. It has earned itself a photograph on account of its bizarre appearance (03).



03. *Gasteruption jaculator* male, from Carpenters Farm. Jean Young.

The estimation of the numbers of each species visiting the spurge in the study is clearly crude. Many species caught and identified were not necessarily recognisable in the field subsequently, so they could not be properly assessed. Other more characterful species could be

reasonably well recognised, yet these quantifications must be taken with circumspection. One rather surprising exception was the tiny 3mm-long Dolichopodid fly *Chrysotus blepharopheles*, which despite its small size I found recognisable owing to its characteristic blue-green iridescence like many other dolichopodids. All such small flies caught for microscopy were of this species.

#### Acknowledgements

I wish to thank Brett Westwood for identifying the *Euphorbia* and providing information about its sale as a garden plant, and Jean Young for photographing the *Gasteruption jaculator* (03) when my camera failed.

#### Reference

Pont, A.C. & Falk, F. 2013. *Polietes meridionalis* Perin & Llorente (Diptera, Muscidae) new to Britain. *Dipterists Digest* **20**(1):45-51.

#### Images

01. One of the *Euphorbia epithymoides* plants studied. Martin Skirrow.
02. Flowers of *Euphorbia epithymoides*. Martin Skirrow.
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