

Nectaring preferences of some butterflies (Lepidoptera) in a French garden

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While on holiday in France we stayed for the nights of 13 and 14 July 2003 at the Hostellerie du Val Suzon in the Departement of Côte d'Or. This hotel is situated at the edge of a small village (Val Suzon), with unimproved pasture (lightly grazed by horses at the time) and some thickets and trees adjoining its garden of perhaps 2000m². In the most open (sunny) part of the garden a well-grown stand of lavender, *Lavandula spicata* (Lamiaceae), comprising several adjacent bushes in a line, ca 3 × 1 m in extent, was profusely covered in its familiar purplish-mauve flower spikes; about 8 m to the east of this was a clump of *Coreopsis verticillata* (Asteraceae), ca 1 × 1 m, bearing about 150 open yellow flowers about 3–4 cm across, in an equally sunny position. These two stands were the only plants in the garden to attract a significant number of butterflies and as we watched their high activities we became aware of a remarkably complete taxonomic division of the butterflies visiting the two plant species. Because this seemed worth recording, we conducted two rough counts (we emphasise the word rough – it was extremely difficult to be sure that the most abundant species, in particular, were counted accurately, though we did try to ensure that no taxa were overlooked), at 18.30 h local time on 14.vii.2003 and again at 10.15 h on 15.vii.2003. On both occasions the plants were in full sun. The results are presented in Table 1.

In addition to the butterflies, a fairly large (but uncounted) number of *Bombus* spp. (Hymenoptera: Apidae) visited *Lavandula* but the *Coreopsis* appeared to be wholly unattractive to them. The noctuid moth *Autographa gamma* (Linnaeus) was similarly seen only at *Lavandula*, which it was visiting in considerable numbers on the first sampling occasion.

The data presented in Table 1 look almost unreal for the cleanness of the split, especially in relation to the Lycaenidae that are, in our experience, often rather strongly attracted to *Lavandula*. Both plants were, as far as could be judged, equally in the line of flight to possible breeding sites. A small 'water-feature' in the garden was more or less adjacent to the *Coreopsis*, but we could not see any of the possible foodplants of the Lycaenidae growing there, nor did we see any 'puddling' take place. Perhaps the results simply show that everything is attracted to *Lavandula*, but that the generally unattractive *Coreopsis verticillata* (a North American plant) has an overbearing attraction for these European Lycaenidae and also for *Pyronia tithonus*. It would be interesting to know why and, indeed, whether it is equally attractive to Lycaenidae but not to other groups in its native North America.

Table 1. Butterfly species visiting *Lavandula spicata* (purple flowers) and *Coreopsis verticillata* (yellow flowers) in a garden in Côte d'Or, France. Counts are best estimates, but unlikely to be exactly accurate. Nomenclature and classification follows Lafranchis (2000).

	<i>Lavandula</i>		<i>Coreopsis</i>	
	18.30 h 14.vii.03	10.15 h 15.vii.03	16.30 h 14.vii.03	10.15 h 15.vii.03
HESPERIDAE				
<i>Thymelicus sylvestris</i> (Poda)/ <i>lineolus</i> (Ochsenheimer) ¹	3	4		
<i>Ochlodes venatus</i> (Bremer & Grey)	2	6		
PAPILIONIDAE				
<i>Iphioides podalirius</i> (Linnaeus)	1	2		
PIERIDAE				
<i>Pieris brassicae</i> (Linnaeus)	4	6 ³		
<i>Pieris rapae</i> (Linnaeus)	7	20 ³		
<i>Pieris napi</i> (Linnaeus)	4	9 ³		
<i>Gonepteryx rhamni</i> (Linnaeus)		1		
LYCAENIDAE				
<i>Satyrus ilicis</i> (Esper) ²			5	2
<i>Lycaena tityrus</i> (Poda)			2	
<i>Polyommatus icarus</i> (Rottemburg)			4	2
<i>Lysandra coridon</i> (Poda)			1	
<i>Aricia agestis</i> (Denis & Schiffmüller)			1	
NYMPHALIDAE: SATYRINAE				
<i>Pyronia tithonus</i> (Linnaeus)			2	5
<i>Maniola jurtina</i> (Linnaeus)	1	1		
NYMPHALIDAE: HELICONINAE				
<i>Argynnis paphia</i> (Linnaeus)	3	9		
<i>Argynnis aglaja</i> (Linnaeus)		2		
<i>Issoria lathonia</i> (Linnaeus)	4	8		
<i>Brenthis daphne</i> (Denis & Schiffmüller)	2	1		
<i>Clossiana dia</i> (Linnaeus)	3			

¹ Both appeared to be present.

² Some were very worn: it is possible that related species were also present.

³ The total of 35 is accurate to within about 3, but the apportioning to species (especially between *P. rapae* and *P. napi*) is less certain.

Acknowledgements

We are indebted to Peter Summers, Beryl MacNaughton and Robert Mill for their unanimous but independent identifications of *Coreopsis verticillata* from the photographs we took.

Reference

Lafranchis, T. 2000. *Les Papillons de jour de France, Belgique et Luxembourg et leurs Chenilles*. 448 pp. Mèze (France).