

Urtica dioica L. (Urticaceae) have been shown to protect the body from the harmful effects by acting against free radicals (Kan *et al.*, 2009). *Nigella sativa* L. (Ranunculaceae) plant has antioxidant (Worthen *et al.*, 1998) and anti-tumor (Burits and Bucar, 2000) properties. In a study conducted by Uysal *et al.* (2015), the methanol extract of *Echium amoenum* (Fisch. and Mey) (Boraginaceae) decreased the genotoxic effects of EMS.

Consequently, profenofos insecticide has shown toxic effects on both female and male of *D. melanogaster*. The extracts of rosehip plant have reduced the toxic effects of profenofos. In a result of this study, it is thought that *Rosa canina* has healing effects and could be used in alternative medicine.

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Autumnal fauna of drosophilids at Font Gropa site (Barcelona, Spain).

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On 16th October 2018 we trapped flies at the Font Gropa site (Tibidabo mountain), on the city limits of Barcelona (Araúz *et al.*, 2009). The vegetation is typically Mediterranean, dominated by pines (*Pinus pinea*)

and *ilex* (*Quercus ilex*). The flora of the undergrowth is composed, among other plants, by *Arbutus*, *Ruscus*, *Erica*, *Hedera*, *Rubus*, and *Smilax*. Ten fermented banana baits were left along a trail separated each other approximately by 10 meters. Flies were netted from 4 to 6:30 p.m., in intervals of 15-30 minutes. The climatic variables, recorded from the Observatori Fabra, which is located only 2 km from the trapping place, were: Maximum temperature: 22.4°C, Minimum temperature: 14.8°C. That afternoon there was a fine intermittent drizzle. Flies were classified next day in the laboratory and results are presented in Table 1.

Table 1. Classification of the flies according to species and sex (Font Gropa site, Barcelona).

Species	Number	Percentage
<i>D. subobscura</i> (♂)	192	23.67
<i>D. subobscura</i> (♀)	229	28.24
<i>D. simulans</i> (♂)	130	16.03
<i>D. melanogaster</i> (♂)	4	0.49
<i>D. melanolsimulans</i> (♀)	207	25.52
<i>D. suzukii</i> (♂)	4	0.49
<i>D. suzukii</i> (♀)	13	1.60
<i>D. immigrans</i> (♀)	2	0.25
<i>D. phalerata</i> (♂)	11	1.36
<i>D. phalerata</i> (♀)	16	1.97
<i>D. hydei</i> (♂)	1	0.12
<i>D. hydei</i> (♀)	1	0.12
<i>D. kuntzei</i> (♂)	1	0.12
Total	811	100

As expected, the most abundant species was *D. subobscura*, because it presents a peak of expansion in autumn (Krimbas, 1993; Argemí *et al.*, 1999). *D. simulans* was at a fairly high frequency, due to its autumnal expansion period in Mediterranean populations (Argemí *et al.*, 1999, 2003). The invasive species *D. suzukii* was also found, and it seems that it has established a rather stable way in this place, because it has been reported in different collections (Canals *et al.*, 2013; Pineda *et al.*, 2014; Esteve and Mestres, 2015; Rosselló *et al.*, 2016; Madrenas *et al.*, 2017; Lagares and Mestres, 2018). The remaining species are also regularly observed at Font Gropa site. With this composition of drosophilids, the values of H' (Shannon diversity index) and J (Shannon uniformity index) were 0.929 and 0.477, respectively. They are similar to those estimated in 2013 (Pineda *et al.*, 2014) and 2014 (Esteve and Mestres, 2015).

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Egg density effect on individual reaction norm of genotype in *Drosophila pseudoobscura* population from Strawberry Canyon, California.¹

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Numerous genetic studies on the effect of different external environmental conditions for the development of a phenotype from a genotype (*reaction norm*) in *Drosophila* are a well-known phenomenon. Analogous genetic studies are also accessible at the molecular level. Both types of studies, however, are pertinent to the gene expression and have led to understanding the regulation of development for a phenotypic trait. The present study is designed to *compare* the *same genotype* at two egg densities under three different external environments. This was done for parental strains and their hybrids (Gupta, 1978).