

Supplementary online material of the Journal of the European Mosquito Control Association

DOI: <https://doi.org/10.52004/2054930X-20241016>

The mosquitoes of the Balearic Islands: an inventory and a snapshot field survey

M.Á. Miranda and F. Schaffner

Table S1. Municipalities and numbers of samples for our snapshot field study in the Balearic Islands, per isle, October–November 2019.

Isle Municipality	Number of samples
<i>Mallorca</i>	94
Alcúdia	11
Algaida	1
Bunyola	7
Campos	1
Deià	3
Escorca	9
Esporles	13
Fornalutx	1
Inca	1
Llubí	1
Llucmajor	13
Manacor	3
Palma	7
Pollença	5
Puigpunyent	2
Sa Pobla	1
Santanyí	2
Selva	1
Sóller	5
Valldemossa	7

Isle Municipality	Number of samples
<i>Menorca</i>	26
Alaior	6
Ciutadella	5
Es Castell	2
Ferrerries	3
Maó	6
Mercadal	4
<i>Eivissa</i>	21
Eivissa Vila	3
Sant Antoni de Portmany	4
Sant Joan de Labritja	1
Sant Josep de sa Talaia	7
Santa Eulària del Riu	6
<i>Formentera</i>	7
Formentera	7

Table S2. Mosquito taxa reported to occur on the Balearic Islands in the literature with references to first report, distribution data, and species checklists. X: listed species; (X): species considered extinct; EI = Eivissa; FO = Formentera; MA = Mallorca; ME = Menorca.

Mosquito taxa	Isles with reported occurrences	Reference for first observation	Other references with occurrence data	Torres Cañamares, 1979	Eritjà <i>et al.</i> , 2002	Ebejer, 2003	Bueno -Marí <i>et al.</i> , 2012	Robert <i>et al.</i> , 2019
<i>Aedes (Acartomyia) mariaae</i>	MA, ME	Margalef, 1949 (MA)	Bueno Marí and Jiménez-Peydró, 2011 (MA); Bengoa <i>et al.</i> , 2020 (ME); Delgado-Serra <i>et al.</i> , 2020 (MA); Bengoa <i>et al.</i> , 2022 (MA)	X	-	-	X	X
<i>Ae. (Aedimorphus) vexans</i>	ME	Gill Collado, 1930 (ME)	Delgado-Serra <i>et al.</i> , 2020 (MA)	-	X	-	X	X
<i>Ae. (Fredwardsius) vittatus</i>	MA	Torres Cañamares, 1951 (MA)	-	X	X	-	X	X
<i>Ae. (Ochlerotatus) caspius</i>	EI, MA, ME	Margalef, 1951 (EI)	Melero Alcívar <i>et al.</i> , 2006a (EI); Melero Alcívar <i>et al.</i> , 2006b (MA); Bengoa <i>et al.</i> , 2020 (ME); Delgado-Serra <i>et al.</i> , 2020 (MA)	X	-	-	X	X
<i>Ae. (Och.) detritus s.l.</i>	EI, MA, ME	Margalef, 1951 (EI)	Torres Cañamares, 1979 (ME); Ebejer, 2003 (MA); Delgado-Serra <i>et al.</i> , 2020 (MA)	X	-	X	-	(X)
<i>Ae. (Och.) pulcritarsis</i>	EI	Melero Alcívar <i>et al.</i> , 2006a (EI)	-	-	-		X	X
<i>Ae. (Rusticoidus) rusticus</i>	MA?	Ebejer, 2003 (MA)	-	-	-	X?	-	-
<i>Ae. (Stegomyia) aegypti</i>	MA, ME	Arias, 1911 (MA, ME)	Gil Collado, 1930 (ME)	X	(X)		(X)	(X)
<i>Ae. (Ste.) albopictus</i>	EI, MA, ME	Miquel <i>et al.</i> , 2013 (MA)	Bengoa <i>et al.</i> , 2016 (ME); Barceló <i>et al.</i> , 2015 (EI); Bengoa <i>et al.</i> , 2020 (ME); Delgado-Serra <i>et al.</i> , 2020 (MA)	-	-	-	-	X
<i>Anopheles (Anopheles) algeriensis</i>	MA	Pittaluga, 1903 (MA?)	Ebejer, 2003 (MA) ² ; Delgado-Serra <i>et al.</i> , 2020 (MA)	-	-	X	X	X
<i>An. (Ano.) atroparvus</i>	MA?, ME	Torres Cañamares, 1979 (MA?, ME)	-	X	X	-	-	-

<i>An. (Ano.) claviger s.s.</i>	MA	Pittaluga, 1903 (MA)	-	-	X	-	-	(X)
<i>An. (Ano.) maculipennis s.l.</i>	ME	Torres Cañamares, 1979 (MA?, ME)	Bengoa <i>et al.</i> , 2020 (ME)	-	-	-	X	X
<i>An. (Ano.) petragani</i>	MA	Torres Cañamares, 1979 (MA)	-	X	-	-	X	X
<i>Coquillettidia (Coquillettidia) richiardi</i>	MA	Delgado-Serra <i>et al.</i> , 2020 (MA)	-	-	-	-	-	-
<i>Culex (Culex) laticinctus</i>	EI, MA, ME	Margalef, 1951 (EI); Torres Cañamares, 1951 (MA)	Melero Alcibar <i>et al.</i> , 2006a (EI); Melero Alcibar <i>et al.</i> , 2006b (MA); Bengoa <i>et al.</i> , 2020 (ME)	X	-	-	X	X
<i>Cx. (Cux.) pipiens¹</i>	EI, FO, MA, ME	Gil Collado, 1930 (whole Spain)	Melero Alcibar <i>et al.</i> , 2006a (EI); Melero Alcibar <i>et al.</i> , 2006b (MA, FO); Ebejer, 2003 (MA); Bengoa <i>et al.</i> , 2020 (ME); Delgado-Serra <i>et al.</i> , 2020 (MA)		X	X	X	X
<i>Cx. (Cux.) theileri</i>	MA	Delgado-Serra <i>et al.</i> , 2020 (MA)	-	-	-	-	-	-
<i>Cx. (Maillotia) hortensis</i>	ME	Torres Cañamares, 1979 (ME)	-	X	X	-	X	X
<i>Culiseta (Allotheobaldia) longiareolata</i>	EI, FO, MA, ME	Margalef, 1951 (EI); Torres Cañamares, 1951 (MA)	Melero Alcibar <i>et al.</i> , 2006a (EI); Melero Alcibar <i>et al.</i> , 2006b (FO); Bengoa <i>et al.</i> , 2020 (ME); Delgado-Serra <i>et al.</i> , 2020 (MA)	X	X	-	X	X
<i>Cs. (Culiseta) annulata</i>	MA, ME	Arias, 1911 (ME)	Gill Collado, 1930 (ME); Delgado-Serra <i>et al.</i> , 2020 (MA)	X	X	-	X	X
<i>Cs. (Cus.) subochrea</i>	MA	Delgado-Serra <i>et al.</i> , 2020 (MA)	-	-	-	-	-	-
<i>Uranotaenia (Pseudoficalbia) unguiculata</i>	MA	Delgado-Serra <i>et al.</i> , 2020 (MA)	-	-	-	-	-	-
Number of taxa: 23				11	8+(1)	4	13+(1)	14+(3)

¹ Both forms *molestus* and *pipiens*. ² Finding confirmed in 2004 (Ebejer M., Pers. Comm.). The article of Torres Cañamares (1979) is a species checklist which does not provide original observations; however, it provides five species' first reports for the Balearic Islands without specifying the references for these, therefore we have not been able to find these original first field observation.

Aedes mariaae was also found on Illa de s'Alga (AI), an islet of Formentera. Cited by Alemany *et al.* (2022) from molecular detection on lizard digestive content.