

Supplementary Material

Localities	Date	<i>A. spiniferus</i> puparia	N° adult emerged parasitoids			sex- ratio	Parasitization rate
			<i>Eretmocerus</i> sp. ♀	<i>Eretmocerus</i> sp. ♂			
Campania: Piana di Monte Verna (CE)	Jul 19	112	0	0		na	0.00%
	Oct 14	19	12	0		1	63.16%
Apulia: Bari (BA)	Jul 14	172	3	4		0.43	4.07%
Marche: Grottammare (AP)	Aug 9	304	37	38		0.49	24.67%
	Sep 20	697	123	63		0.66	26.69%

Table S1. Infestation and parasitization data in the localities of occasional collections along with sex ratio of the emerged *Eretmocerus* sp. gr. *serius*. na: not available data

Sampling Date	A. spiniferus puparia	Nº adult emerged parasitoids		sex-ratio	Parasitization rate
		Eretmocerus sp. ♀	Eretmocerus sp. ♂		
May 31	102	25	1	0.96	25.49%
Jun 5	175	88	2	0.98	51.43%
Jun 10	84	5	0	1	5.95%
Jun 18	41	0	0	na	0%
Jun 25	39	0	0	na	0%
Jul 2	112	0	0	na	0%
Jul 9	190	2	3	0.40	2.63%
Jul 16	244	4	2	0.67	2.46%
Jul 23	120	6	0	1	5%
Jul 29	98	8	3	0.73	11.22%
Aug 5	75	13	6	0.68	25.33%
Aug 25	88	3	0	1	3.41%
Sep 1	77	1	1	0.50	2.60%
Sep 8	66	4	0	1	6.06%
Sep 15	49	2	1	0.67	6.12%
Sep 25	49	4	2	0.67	12.24%
Oct 6	53	8	2	0.80	18.87%
Oct 15	45	8	1	0.89	20%
Oct 22	63	5	6	0.45	17.46%
Oct 29	41	5	5	0.50	24.39%

Table S2. Infestation and parasitization data in Casagiove (CE) along with sex ratio of the emerged *Eretmocerus* sp. gr. *serius*. na: not available data.

Sampling Date	A. spiniferus puparia	Nº adult emerged parasitoids		sex-ratio	Parasitization rate
		Eretmocerus sp. ♀	Eretmocerus sp. ♂		
May 29	8	3	0	1	37.50%
Jun 5	14	10	0	1	71.43%
Jun 12	0	-	-	na	na
Jun 19	0	-	-	na	na
Jun 26	3	0	0	na	0%
Jul 1	5	0	0	na	0%
Jul 7	28	0	0	na	0%
Jul 17	43	0	0	na	0%
Jul 24	33	3	1	0.75	12.12%
Jul 31	19	1	0	1	5.26%
Aug 21	5	0	0	na	0%
Aug 28	10	0	0	na	0%
Sep 9	12	0	0	na	0%
Sep 16	10	0	0	na	0%
Sep 25	6	0	0	na	0%
Oct 2	0	-	-	na	na
Oct 9	0	-	-	na	na
Oct 18	0	-	-	na	na
Oct 25	0	-	-	na	na
Nov 2	2	0	0	na	0%

Table S3. Infestation and parasitization data in Portici (NA) along with sex ratio of the emerged *Eretmocerus* sp. gr. *serius*.
na: not available data