

## SUPPLEMENTARY MATERIAL

### **Comparison of different trapping devices for the capture of *Bactrocera oleae* (Rossi) and other non-target insects in the Mediterranean basin**

Andrea Sciarretta,<sup>1</sup> Tania Travaglini,<sup>1</sup> Linda Kfoury,<sup>2</sup> Ines Ksentini,<sup>3</sup> Meelad Yousef-Yousef,<sup>4</sup> Marios-Ioannis Sotiras,<sup>5</sup> Ahmad El Bitar,<sup>6</sup> Mohieddine Ksantini,<sup>3</sup> Enrique Quesada-Moraga,<sup>4</sup> Dionysios Perdikis<sup>5</sup>

<sup>1</sup>Department of Agricultural, Environmental and Food Sciences, University of Molise, Campobasso, Italy; <sup>2</sup>Faculty of Agricultural Sciences, Lebanese University, Beirut, Lebanon; <sup>3</sup>Laboratory of the genetic resources of the olive tree: Characterization, Valorization, and phytosanitary protection, Olive Tree Institute, University of Sfax, Tunisia; <sup>4</sup>Department of Agronomy, María de Maeztu Unit of Excellence DAUCO, Campus de Rabanales, University of Córdoba, Spain; <sup>5</sup>Faculty of Crop Science, Agricultural University of Athens, Greece; <sup>6</sup>Department of Plant Biotechnology, Lebanese Agricultural Research Institute, Tal Amara, Zahle, Lebanon

**Correspondence:** Andrea Sciarretta, Department of Agricultural, Environmental and Food Sciences, University of Molise, Campobasso, Italy.

E-mail: [sciarretta@unimol.it](mailto:sciarretta@unimol.it)

**Key words:** olive fruit fly; yellow sticky trap; McPhail; Jackson trap; beneficial insects; olive grove; pest monitoring.

**Acknowledgments:** the authors wish to thank all members of their teams who were involved in field data collection related to the publication and the owners of the farms who hosted the experiments. The authors are grateful to Zinette Moussa (Lebanese Agricultural Research Institute, Lebanon), who provided help in verifying part of the hymenopteran parasitoid material collected in Italy.

**Conflict of interest:** the authors declare no potential conflict of interest.

**Funding:** this work was financed by the EU under the Project “Commercialization of an Automated Monitoring and Control System against the Olive and Med Fruit Flies of the Mediterranean Region, FruitFlyNet-ii, STR\_B\_A.2.1\_0043”, as part of the ENI CBC MED Mediterranean Sea Basin Programme 2014-2020.

**Availability of data and material:** data and materials are available by the authors.

**Table S1. Statistical results of ANOVA on the effect of attractant device on the captures of *B. oleae* males and females, Apoidea, Chrysopidae, Coccinellidae, Syrphidae, hymenopteran parasitoids and Apoidea in each country.**

Captures	Greece			Italy			Lebanon			Spain			Tunisia		
	F	df	P	F	df	P	F	df	P	F	df	P	F	df	P
<i>B. oleae</i> males	6.546	5	<0.001	24.417	5	<0.001	99.331	5	<0.001	26.639	5	<0.001	-	-	-
<i>B. oleae</i> females	13.537	5	<0.001	25.268	5	<0.001	43.323	5	<0.001	31.88	5	<0.001	-	-	-
Chrysopidae	4.414	5	=0.001	25.023	5	<0.001	4.856	5	<0.001	6.250	5	=0.001	-	-	-
Coccinellidae	-	-	-	-	-	-	1.962	5	=0.086	-	-	-	-	-	-
Syrphidae	26.667	5	<0.001	-	-	-	-	-	-	-	-	-	9.236	5	<0.001
Hymenopteran parasitoids	-	-	-	12.050	4	<0.001	63.512	5	<0.001	4.882	5	<0.001	23.195	5	<0.001
Apoidea	-	-	-	-	-	-	7,406	5	<0.001	-	-	-	-	-	-

**Table S2. Mean percentage of *B. oleae* females ( $\pm$ standard error) in the total catches for each tested device and country.**

Device	Greece	Italy	Lebanon	Spain
YP	66.33 $\pm$ 11.34	35.62 $\pm$ 3.52	32.88 $\pm$ 3.88	58.78 $\pm$ 2.68
GP	58.33 $\pm$ 28.87	45.10 $\pm$ 5.27	0	54.60 $\pm$ 1.18
WJYP	88.33 $\pm$ 16.67	100	27.78 $\pm$ 14.70	50.90 $\pm$ 7.03
YJWP	0	73.18 $\pm$ 14.48	0	55.37 $\pm$ 2.69
YJYP	0	62.22 $\pm$ 13.88	33 $\pm$ 18.41	55.60 $\pm$ 2.96
MP	-	53.66 $\pm$ 4.43	41.67 $\pm$ 8.04	46.94 $\pm$ 3.93

YP, yellow panel; GP, green panel; WJYP, white Jackson with yellow panel; YJWP, yellow Jackson with white panel; YJYP, yellow Jackson with yellow panel; MP, McPhail.