

PERMANENT MONITORING OF AEDES ALBOPICTUS IN EMILIA- ROMAGNA REGION, ITALY

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INTRODUCTION

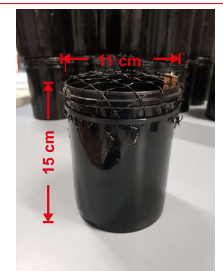
- **Standardized *Aedes albopictus* monitoring** by ovitraps during summer season is conducted since 2008
- **About 2680 ovitraps**, distributed in almost all Municipalities of regional plain area, have operated in the period 2008-2016
- **Since 2017 the number of ovitraps was reduced to 755**, located in the 10 main cities of the region
- **Ovitraps managed every 14 days through a specific protocol and data validated** by a quality control algorithm before being inserted into the database
- **Population density maps** are produced monthly (June, July, August, September) by ovitraps data interpolation (IDW - Inverse Distance Weighted), assisting the larval control activities



METHODS

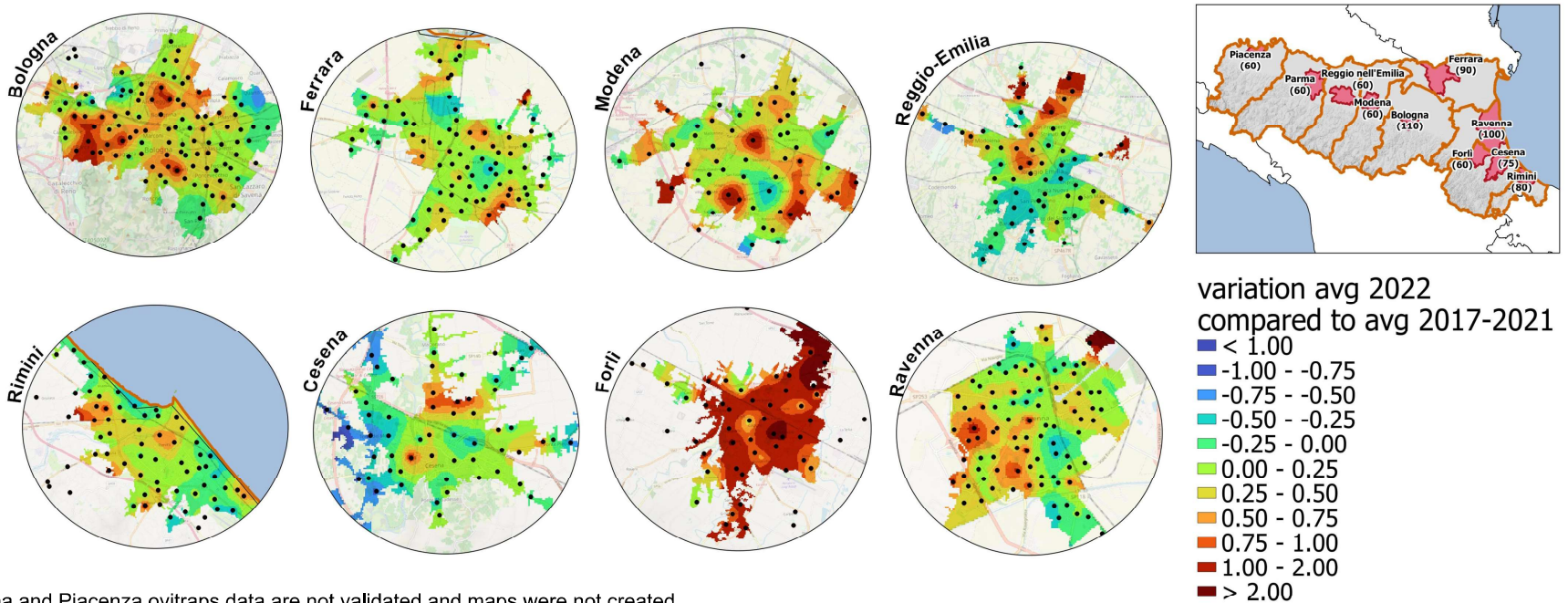
Validated data from 2017 to 2022, collected from www.zanzaratigreonline.it, were summarized in graphics, maps and tables:

- **MAPS** represent spatial variation (%) of mosquito population 2022 compared to last five years (from July to September)
- **HISTOGRAMS** report regional monthly mean eggs number of *Ae. albopictus* (755 ovitraps)
- **TABLE** summarizes mean population variations 2022 of each municipality compared to last five years (from end of May to the beginning of October)

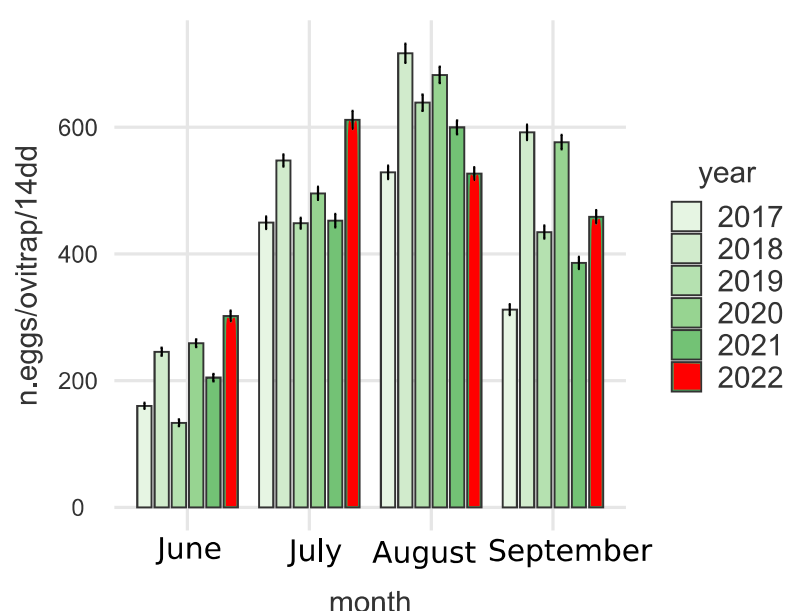


ovitrap model used in monitoring network

RESULTS AND CONCLUSIONS



Parma and Piacenza ovitraps data are not validated and maps were not created



Municipality	Area	Average eggs N. 2022	Average municipality eggs. N. 2017-2021	Variation from municipality avg 2017-2021	Variation from regional avg 2017-2021
Piacenza	Emilia	not validated	426	---	---
Parma	Emilia	not validated	509	---	---
Reggio-Emilia	Emilia	310	297	4%	-27%
Modena	Emilia	433	381	13%	2%
Bologna	Emilia	438	374	17%	3%
Ferrara	Emilia	523	479	9%	23% ↑
Ravenna	Romagna	503	434	16%	18% ↑
Cesena	Romagna	322	366	-12%	-24%
Forlì	Romagna	544	488	11%	28% ↑
Rimini	Romagna	507	514	-1%	19% ↑

- Mean regional density in **June** and **July** 2022 is **higher** than last five years
- **Forlì, Ferrara, Rimini and Ravenna** *Aedes* population 2022 is **higher** than other municipalities monitored, compared to regional mean of last five years



CHECK 2022
OVITRAPS
DATA

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