A FIRST INSIGHT INTO THE OCCURENCE OF COCKROACHES IN THE URBAN CITY OF THESSALONIKI (GREECE) - IDENTIFYING HOT SPOTS

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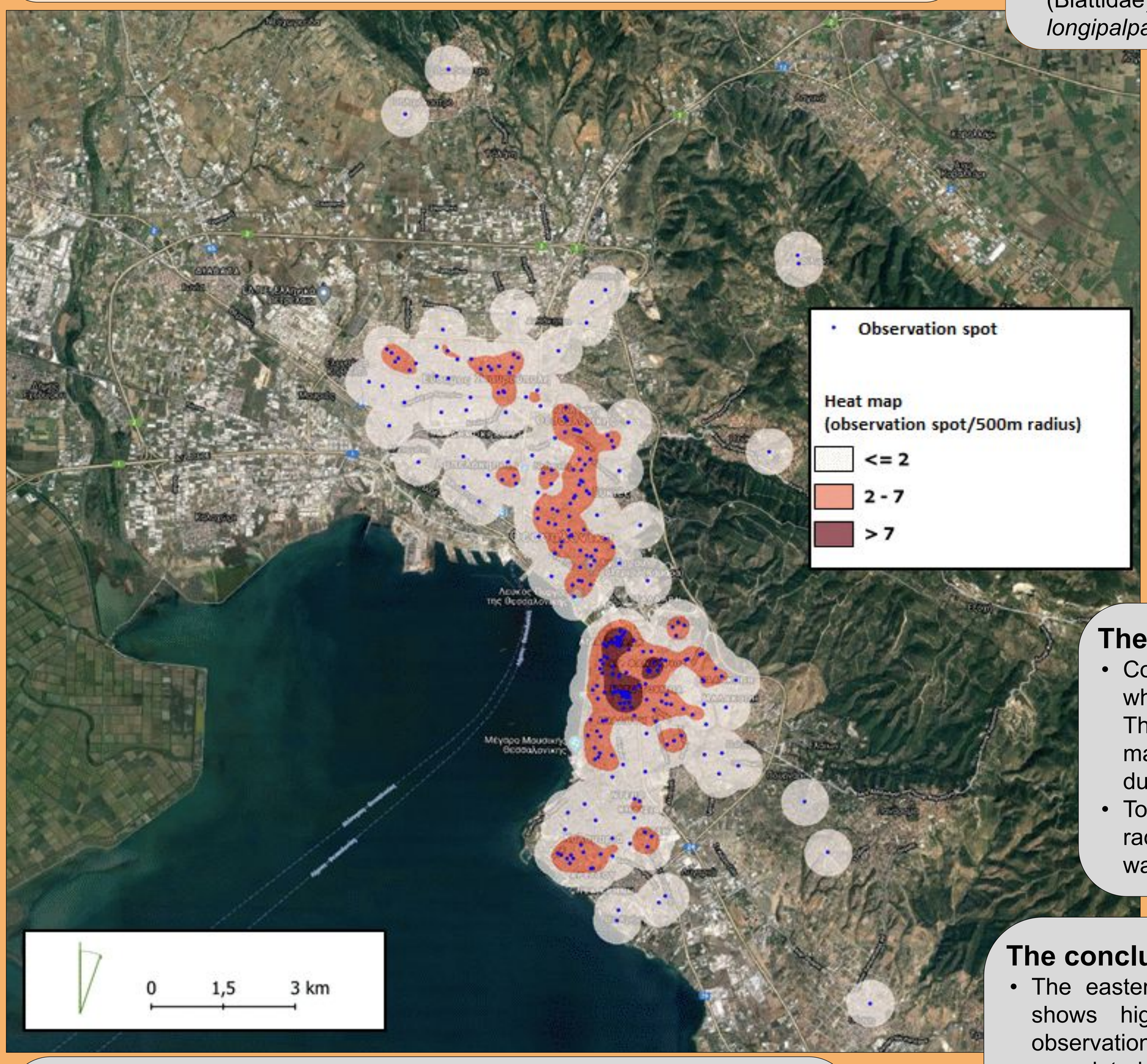
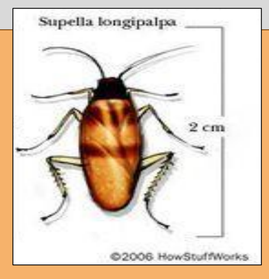
The concept

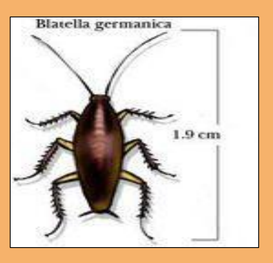
- Spatial mapping of locations where disinfestations against cockroaches took place in the city of Thessaloniki (Greece) for two consecutive years (2019 & 2020).
- Identification of hot spots in the urban area of Thessaloniki.



The species

- Blattodea are very abundant in the urban landscape.
- The most abundant species in Greece are *Blatta orientalis* and *Periplaneta americana* (Blattidae), *Blattella germanica* and *Supella longipalpa* (Blattelidae).





The impact

- ideal vectors of pathogens.
- Carriers of indoor allergens that can lead to IgE sensitization, the development of allergic rhinitis and asthma.

The method

- Collection and record of 283 locations where two pest control companies of Thessaloniki performed chemical management against cockroaches during 2019 & 2020.
- To draw heat-density map, we used a radius of 500 m at each location that was then ranked into three classes.

The conclusions

- The eastern part of the city of Thessaloniki shows higher abundance of cockroaches' observation spots something that can be associated with the occurrence of great health facilities.
- Additionally, the dense-inhabited center of Thessaloniki exhibits also numerous infestation points, something that can well be further burdened by the occurrence of old houses and blocks.

The future work to be done

- Deployment of traps in various places of Thessaloniki, in order not only to identify the hotspot, but most importantly to accurately map the distribution and occurrence of each species.
- Screening the trapped individuals for the pathogens they vector.
- Supplement the dataset with additional records from other pest control companies, so that the spatial and temporal pattern could be further explored.

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