

Increasing detections of the invasive mosquito *Aedes albopictus* in Belgium.

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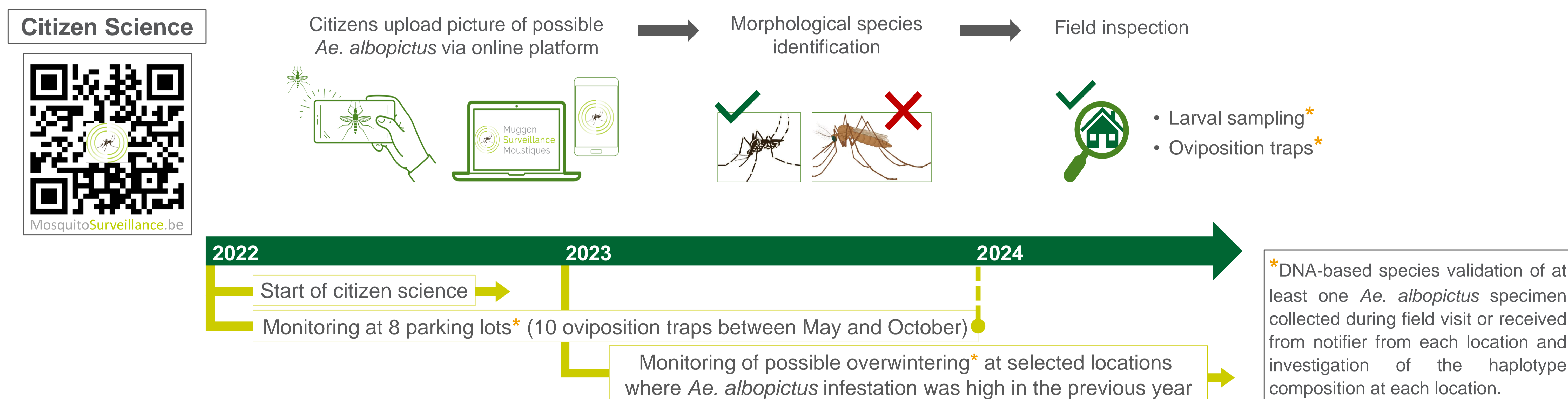
INTRODUCTION & OBJECTIVES

- Aedes albopictus* is expanding its range in Europe posing a health risk as the species is a competent vector of dengue, chikungunya and Zika virus, with autochthonous transmission reported in countries where the species is established.
- In Belgium, the introduction of *Ae. albopictus* has been monitored through active surveillance at points of entry (PoEs) from 2007 onwards. Since 2018, increased observations at highway parking lots¹ suggested a rise in introductions via road traffic.
- Hence, in 2022, a **passive surveillance based on citizen science** was implemented to complement the active surveillance at PoEs and expand the coverage of the monitoring countrywide.

CONCLUSION

- Prior to 2022, *Ae. albopictus* was in the early stage of its invasion process in Belgium, with confirmed occurrences limited to PoEs.
- Since 2022, the implementation of citizen surveillance has led to a steep increase in detections in residential areas, alongside numerous findings at parking lots. Additionally, overwintering was confirmed at five locations.
- The results indicate that the species is being increasingly imported into Belgium via ground vehicular traffic and has become locally established in recent years.

METHODS

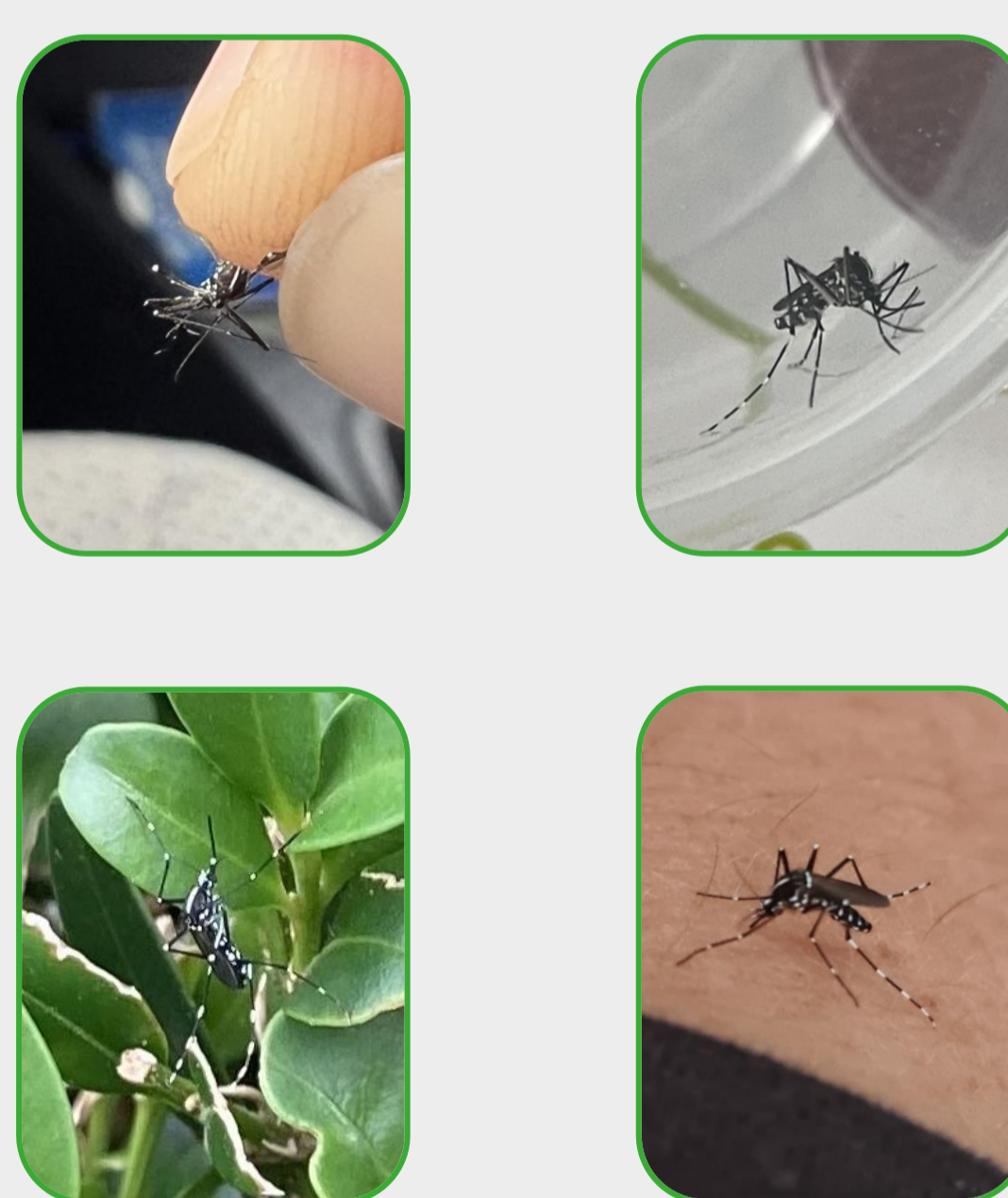


RESULTS

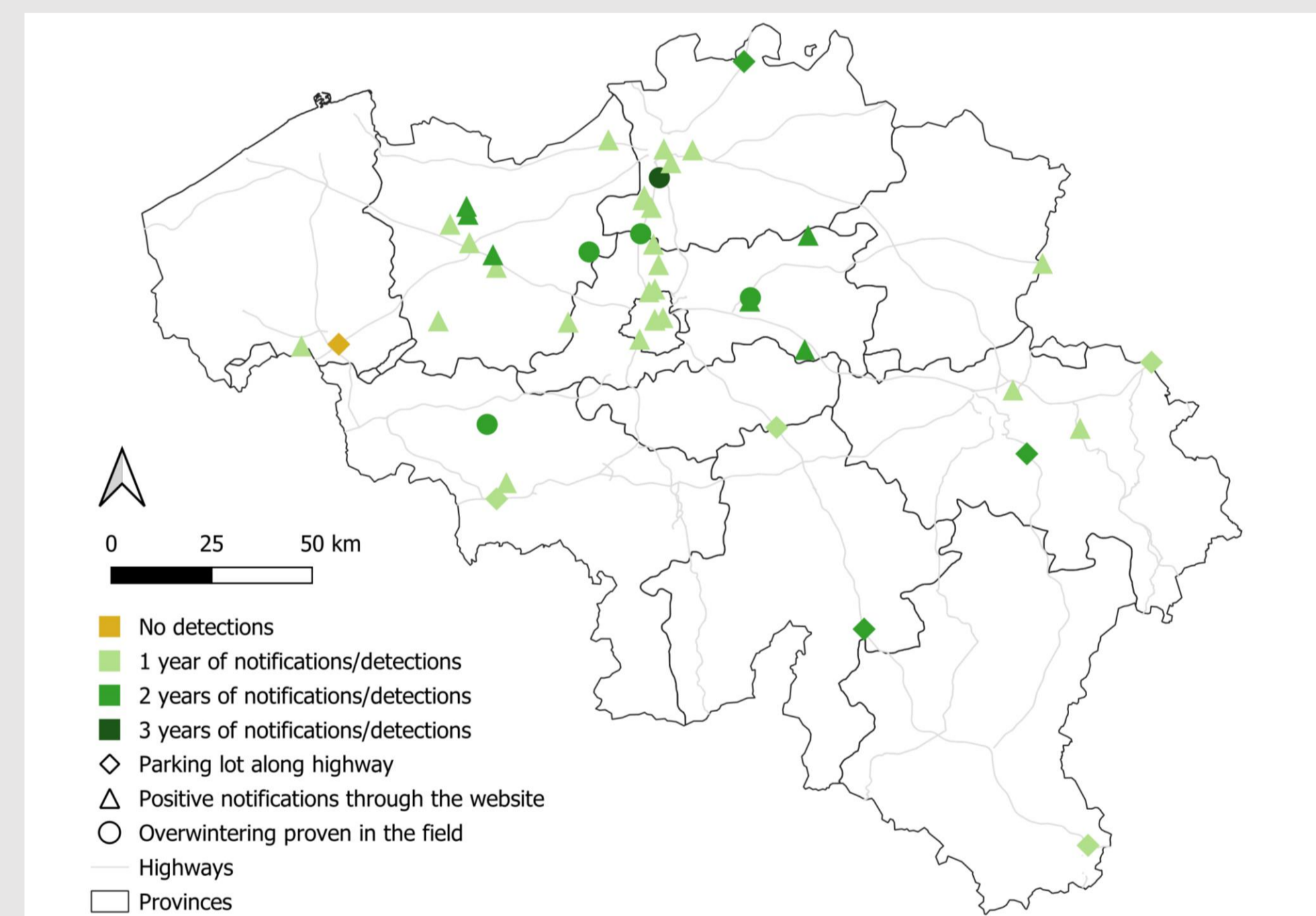
	2022	2023	2024
	304	796	1255
	135	532	912
	12	29	47
	9	18*	21**

* 15 new locations ** 12 new locations

Overview of the notifications received on the MosquitoSurveillance platform and via emails

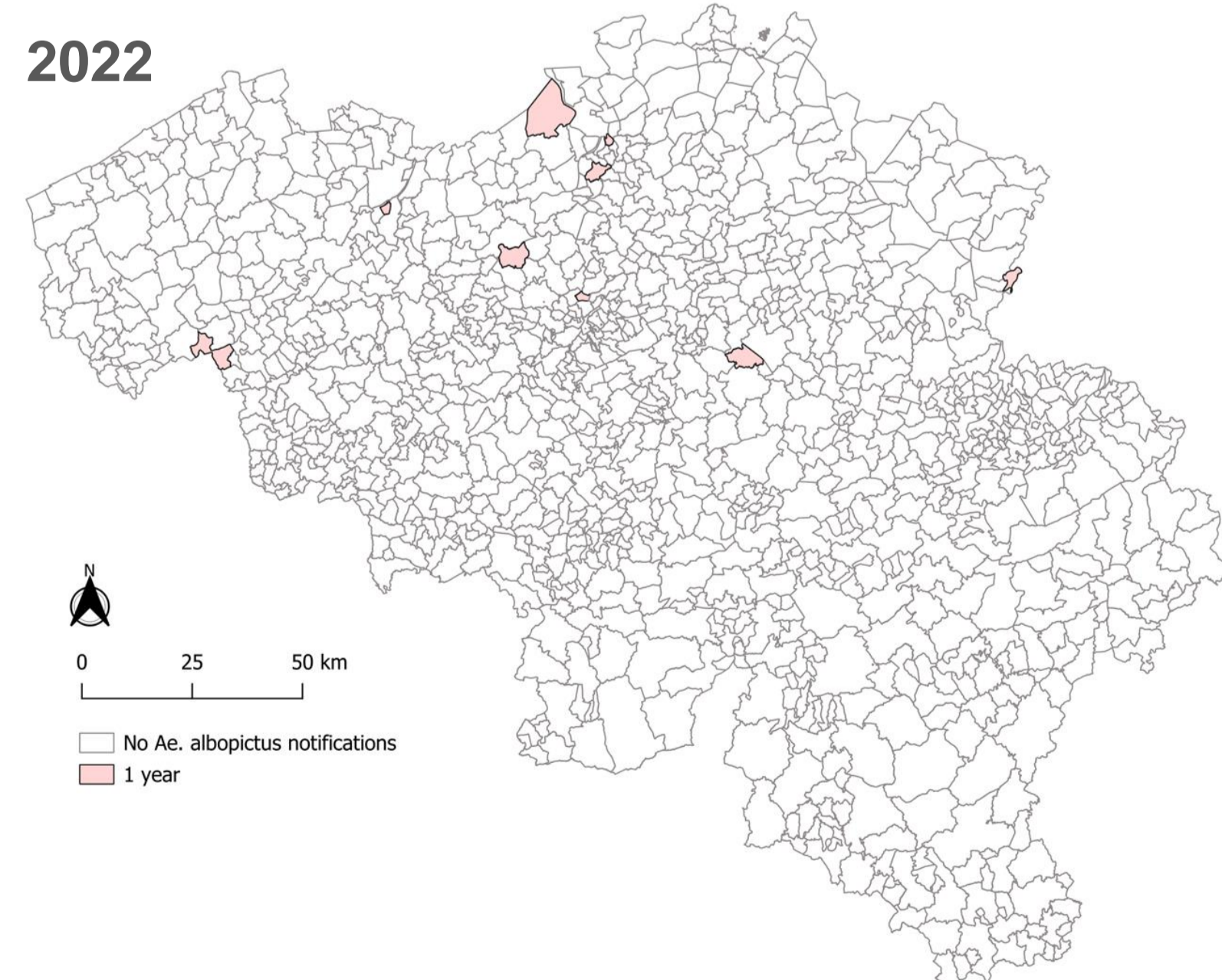


Ae. albopictus pictures submitted by citizens via the platform MosquitoSurveillance

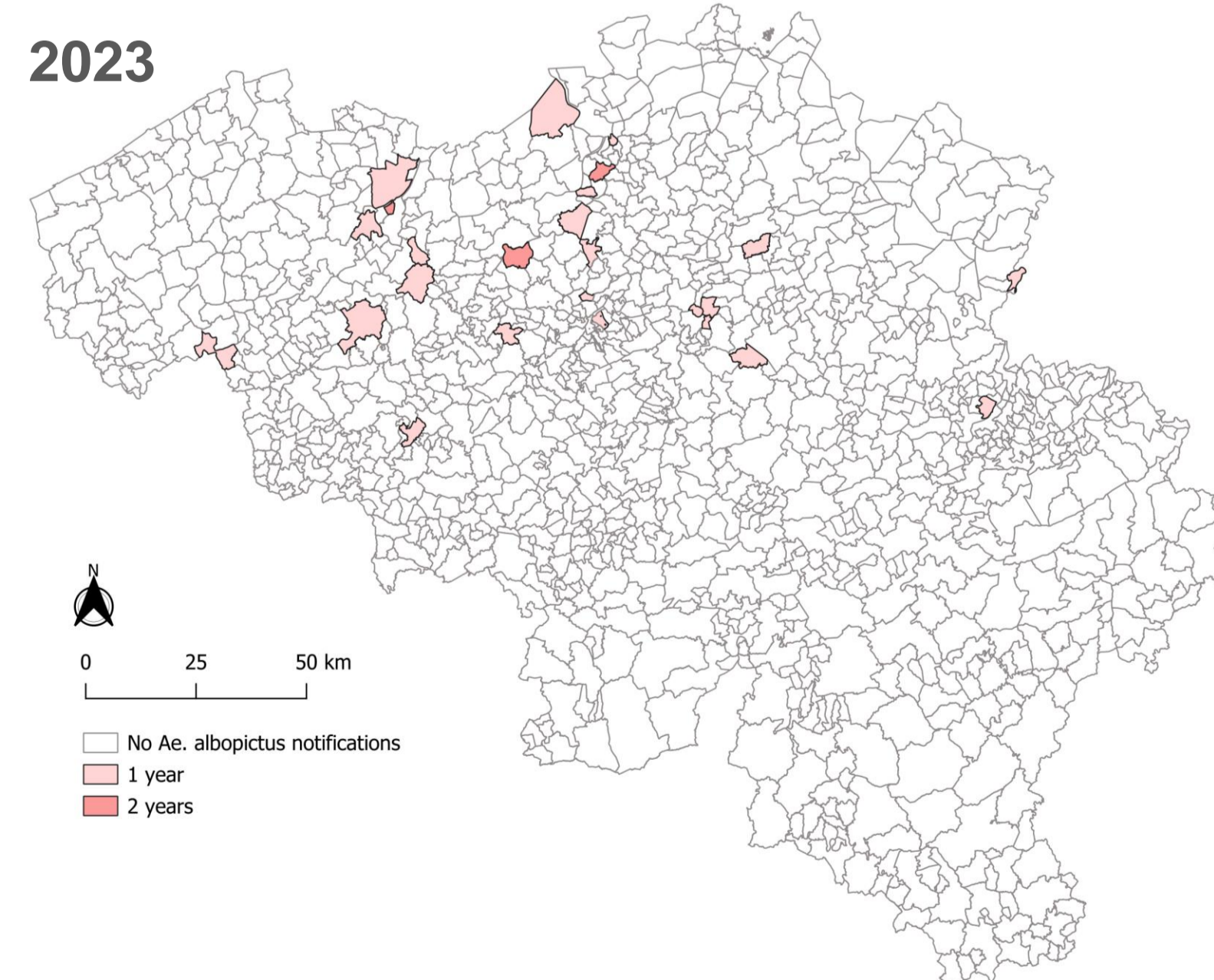


Overview of the detection of *Ae. albopictus* by active and passive monitoring activities, 2022-2024

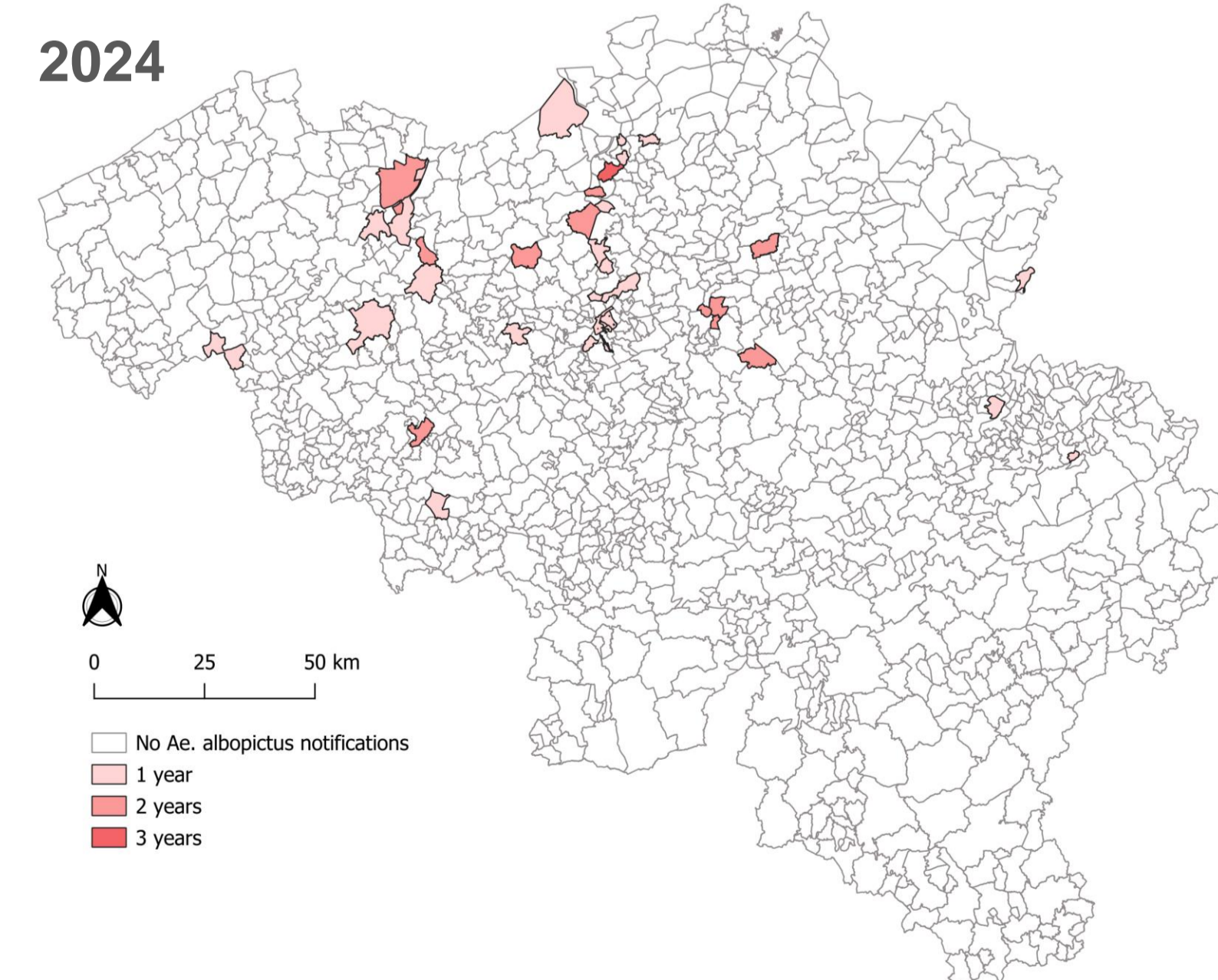
2022



2023



2024



Increase of *Ae. albopictus* notifications over the three years through citizen science, per postcode in Belgium

References : Deblauwe, I. *et al.* From a long-distance threat to the invasion front: a review of the invasive *Aedes* mosquito species in Belgium between 2007 and 2020. *Parasites Vectors* 15, 206 (2022).

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Conflicts of interest :

The authors declare that they have no conflict of interest