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Abstract Book

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Spatial modelling *Aedes caspius* (Pallas 1771) and *Aedes vexans* (Meigen 1830) distribution in the Po Plain (Northern Italy)

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Abstract

In this work, we analyse the abundance data collected in the frame of West Nile Virus (WNV) surveillance in northern Italy (Po Plain) by 292 CO2-baited traps to evaluate the distribution and density of two non-target mosquito: *Aedes caspius* (Pallas 1771) and *Aedes vexans* (Meigen 1830). We applied two different approaches of spatial analysis (geostatistical and machine learning) which gave congruous results. Both species are more abundant in the middle of Po plain, near Po River, but distribution was different. *Ae. caspius* was more abundant in the east and west areas, *Ae. vexans* in the middle area of Po plain. This work demonstrated the importance to maintain and improve entomological surveillance of WNV, with an adequate sampling effort.