Do insect pollinators transport plant pathogens in urban environments?

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The spread of plant pathogens may be facilitated also by insects. In this study, a population of urban pollinators
in the city of Milan was sampled and, using a metabarcoding approach based on long sequence reads, the presence of fungal plant pathogens in different insect populations was assessed.
Four locations were sampled in 2020 in the territory of the city of Milan collecting populations of *Apis mellifera*, *Bombus terrestris*, *Anthidium* sp., *Bombus pascuorum*, and *Megachile sculpturalis*. The ribosomal
operon, the Elongation factor 1-alpha and the RPB2 genes from each population and locality were amplified using a long-range *Taq* polymerase with fungal-kingdom specific primers. The PCR product libraries were sequenced using Minion Nanopore platform. Fungal identity was attributed by a specific bioinformatic pipeline. Our study preliminary suggests that some plant pathogens may be associated to urban pollinators indicating that these insects can act as transporters of pathogen spores. This result confirms recent literature findings, which suggest a possible role of pollinators as spreaders of plant diseases.