

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – GRANDS-JARDINS

Collections Unit, Centre for Biodiversity Genomics (CBG), University of Guelph

Results

A total of 2,061 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Grands-Jardins National Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and beetles (Coleoptera; Figure 1).

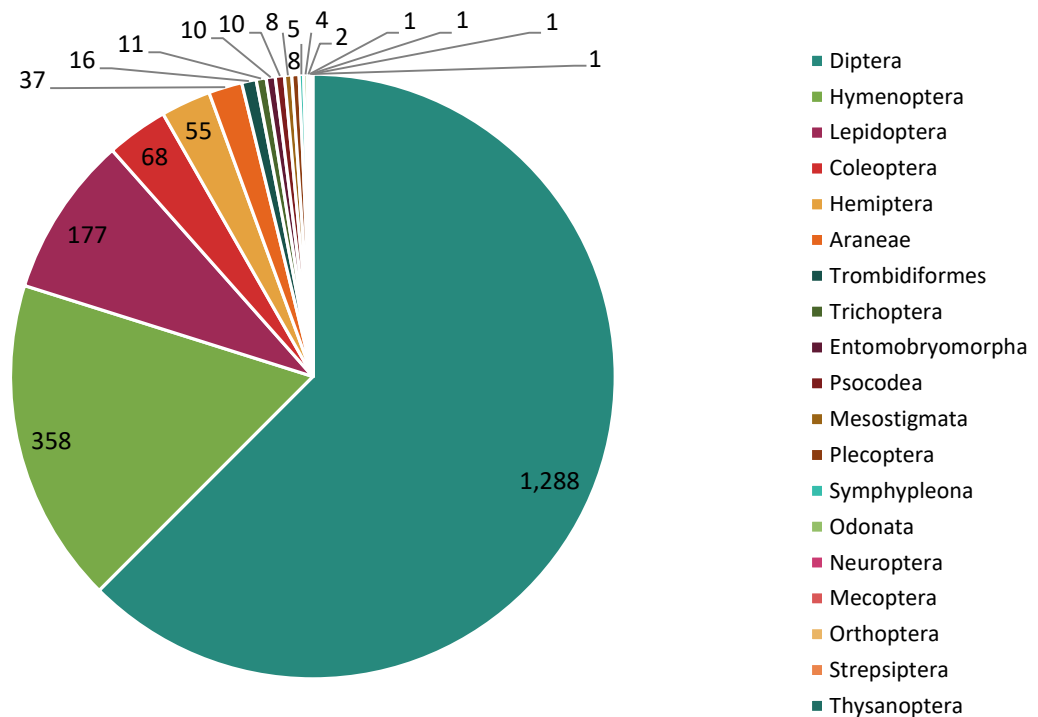


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Grands-Jardins National Park.

Species diversity and insect abundance varied throughout the collecting period; the period that captured the most BINs was not necessarily the largest sample collected (Figure 2). The peak of species diversity was obtained towards the end of July.

In total, 1,008 species were named, representing 49% of the BINs. All but one of the BINs were assigned at least to family and 74% of the BINs were assigned to a genus. Specimens collected from this site represent 197 different families and 702 genera. A complete species list is attached separately.

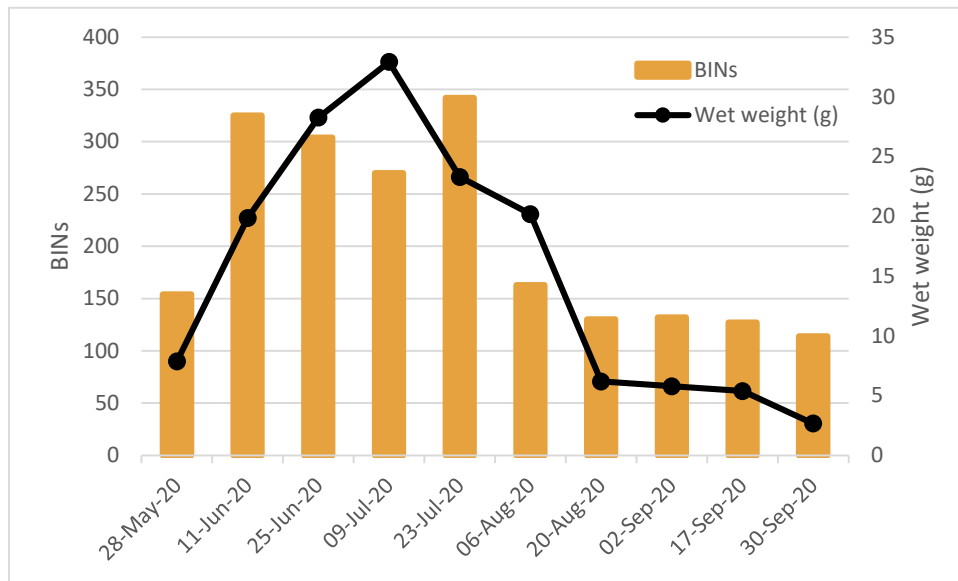


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2020 collecting period.

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