

The Draft Genome of Black Garden Ant *Lasius niger*: preadaptation to urbanization?

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Here we present the first draft genome of the black ant *Lasius niger* and its comparative analysis with previously published hymenopteran genomes, including *Acromyrmex echinator*, *Camponotus floridanus*, *Harpegnathos saltator*, *Solenopsis invicta* and others. The black garden ant is characterized by extreme tolerance to urbanization and remains one of the rare entomofauna cases, successful in urban environment. We have sequenced *Lasius niger* genome using Illumina HiSeq. Comparative ant genomics allowed us to detect specific characteristics of *L.niger* detoxication, stress and DRR gene sets probably explaining black garden ant talent in overcoming numerous urbanization-associated effects: habitat and community destruction, high level of chemical, thermal and light pollution.

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2. Smith CR, Smith CD. (2011) Draft genome of the red harvester ant *Pogonomyrmex barbatus*, *Proc Natl Acad Sci U S A*, **108**(14):5667-5672.