

## Abstract

Biparental care in Hymenoptera is a little studied behaviour. This kind of parental care was discovered and the ethological aspect described in the bee *Ceratina nigrolabiata* from the Czech Republic and is well understood on the ethological level. However, biparental care is not a common behaviour and the lack of genomic studies of this behaviour complicates the understanding of the origin of the biparental care and its underlying pathways on the genomic and physiological level. This master's thesis presents the genome analyses of a biparental bee *Ceratina nigrolabiata*. It consists of a brief summary of the known parental behaviour across insects, characteristics of the genus *Ceratina*, summary of the used genomic methods and presents a candidate genes for the transcriptomic study of the biparental behaviour of *Ceratina nigrolabiata*.

Key words: biparental care, genomics, Hymenoptera, Insecta, Ceratina, small carpenter bees