

# Composition of the Labial Gland Secretion of the Bumblebee Males

## *Bombus pomorum*

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Labial gland secretions of 22 males of the bumblebee *Bombus pomorum*, collected in the Czech Republic, were analysed separately for each individual. The secretions contained 70 compounds among which saturated and unsaturated hydrocarbons strongly dominated. The proportion of hydrocarbons in the secretion was unusually high (85–100%) compared to other bumblebee species studied so far (3–15%). Methyl and ethyl esters of fatty acids, known from many other bumblebee species, formed only minor components (less than 1% in sum) of the secretions of several *B. pomorum* individuals. No terpenic compounds, typical for males' marking secretion of many bumblebee species, were detected in *B. pomorum*. The absolute quantities of hydrocarbons present in the labial gland extracts were comparable with those usually present in other species. The composition of hydrocarbons found in the labial glands was different from the profile of the cuticular hydrocarbons. Despite our expectations in species exhibiting a regular patrolling and scent-marking behaviour, the labial gland extracts obtained from *B. pomorum* males were unusually low concentrated and their chemical composition was atypical with respect of the proportions of hydrocarbons when compared with other patrolling species. This is the first report on the analysis of the labial gland secretion of the *B. pomorum* males.