

Floral Volatile Organic Compounds and a List of Pollinators of *Fallopia baldschuanica* (Polygonaceae)

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Streszczenie

Fallopia baldschuanica (Polygonaceae) is an Asian plant growing wild in parts of Europe and North and Central America as an introduced taxon, in many countries it is considered a potentially invasive species. This article presents the list of 18 volatile organic compounds (VOCs) emitted by the flowers of *F. baldschuanica* and identified by headspace gas chromatography/mass spectrometry (HS-GC/MS) analyzes, and a list of flower-visiting and pollinating insects that have been observed in the city center of Wrocław (SW Poland). β -ocimene, heptanal, nonanal, α -pinene, 3-thujene, and limonene, were detected as the floral scent's most important aroma compounds. *F. baldschuanica* also produces the aphid alarm pheromones, i.e., β -farnesene and limonene, that repels aphids. Additionally, the pollinators of *F. baldschuanica* were indicated, based on two years of observations in five sites in the urban area. It was found, that the pollinators of this plant with the highest species stability are: Diptera from families Syrphidae (*Chrysotoxum bicinctum*, *Eristalis pertinax*, *Eupeodes corollae*, *Episyrphus balteatus*, *Eristalis tenax*, *Syrphus ribesii*, *Eristalis intricaria*), Muscidae (*Musca domestica*), Sarcophagidae (*Sarcophaga* spp.), Calliphoridae (*Lucilia sericata*, *Lucilia caesar*), Hymenoptera from families Vespidae (*Vespula vulgaris*), and Apidae (*Apis* sp., *Bombus* sp.). The key role of VOCs in adaptation to plant expansion is discussed.

Słowa kluczowe

Fallopia aubertii, Bukhara fleecflower, floral scent, HS-GC/MS, VOCs

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