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Running title: Sex pheromone of the lilac pyralid

**Chemical analysis of the female sex pheromone in *Palpita nigropunctalis* (Lepidoptera: Crambidae)**

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**Abstract** The lilac pyralid, *Palpita nigropunctalis* Bremer (Lepidoptera: Crambidae), is a common pest of Oleaceae plants. A crude extract of the female sex pheromone glands was examined by gas chromatography-electroantennogram detection (GC-EAD) and GC coupled to a mass spectrometer (GC-MS). The GC-EAD analysis revealed three EAG-active components (**I–III**) in a ratio of 1:0.2:0.01 (**I: II: III**). GC-MS analysis successfully recorded the mass spectra of **I** and **II**. For **I**, ions at  $m/z$  238 ( $M^+$ ) and 220 ( $[M-18]^+$ ) indicated the structure of a monoenyl aldehyde with a 16-carbon chain. For **II**,  $M^+$  was not detected, but ions at  $m/z$  222 ( $[M-60]^+$ ) and 61

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