

Identification of Minor Sex Pheromone Components of the Poplar Clearwing Moth *Paranthrene tabaniformis* (Lepidoptera, Sesiidae)

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A chemical analysis of the crude sex pheromone gland extracts of virgin calling *Paranthrene tabaniformis* females, obtained from the European part of Kazakhstan, revealed the presence of five compounds: (3*E*,13*Z*)-octadeca-3,13-dien-1-ol (*E*3,*Z*13-18:OH), (3*Z*,13*Z*)-octadeca-3,13-dien-1-ol (*Z*3,*Z*13-18:OH), (2*E*,13*Z*)-octadeca-2,13-dien-1-ol (*E*2,*Z*13-18:OH), (13*Z*)-octadec-13-en-1-ol (*Z*13-18:OH), and octadecan-1-ol (18:OH) at the ratios 64.0:32.4:1.4:0.9:1.3, which are structurally related to sex pheromone components of clearwing moths. Our previous field tests showed synergistic effects of *Z*3,*Z*13-18:OH and *E*2,*Z*13-18:OH to attract *P. tabaniformis* males, when these compounds were tested in binary mixtures with the known sex pheromone *E*3,*Z*13-18:OH. The three dienic alcohols should all be considered as sex pheromone components of the *P. tabaniformis* species, while the role of *Z*13-18:OH and 18:OH remained unclear.

Key words: Attraction, Synergist, Octadecadienol