Female Sex Pheromone of *Cameraria ohridella* Desch. and Dim. (Lepidoptera: Gracillariidae): Structure Confirmation, Synthesis and Biological Activity of (8E,10Z)-8,10-tetradecadienal and Some Analogues

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Mass spectrometric investigations confirmed the structure of the female produced sex pheromone of the horse-chestnut leafminer *Cameraria ohridella* Desch. and Dim. to be (8E,10Z)-8,10-tetradecadienal. Pure samples, prepared in a straightforward synthesis, were highly attractive in field tests and proved to be suitable for monitoring of flight activities and population dynamics. In mixtures with the synthetic pheromone, analogues like 9-tridecynal and 7-dodecynyl formate were shown to reduce trap catches. In electroantennographic experiments, pheromone analogues were less active than the pheromone. 9-Tridecynal was the most EAG active analogue tested, followed by 7-dodecyn-1-yl formate and 7-undecyn-1-yl formate.