

ATTRACTION OF MALE EUROPEAN TARNISHED
PLANT BUG, *Lygus rugulipennis* TO COMPONENTS
OF THE FEMALE SEX PHEROMONE
IN THE FIELD

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Abstract—Previous work showed that females of the European tarnished plant bug, *Lygus rugulipennis* Poppius (Heteroptera: Miridae), produced three chemicals, hexyl butyrate, (*E*)-2-hexenyl butyrate, and (*E*)-4-oxo-2-hexenal, and that these were suspected to be components of the female sex pheromone. In field experiments, traps baited with blends of these chemicals dispensed from polyethylene vials and sachets failed to catch significant numbers of males. Here, we report more recent field experiments in which the chemicals were released from glass microcapillary tubes. A blend of hexyl butyrate and (*E*)-4-oxo-2-hexenal was significantly attractive to male *L. rugulipennis*. In addition, whereas the mixture of all three components attracted fewer *L. rugulipennis* males, this tertiary blend captured significantly greater numbers of males of the congeneric species *Lygus pratensis* than the binary mixture. The possible reasons for the success of the microcapillaries compared with other dispensers are discussed.

Key Words—*Lygus rugulipennis*, *Lygus pratensis*, Heteroptera, Miridae, tarnished plant bug, sex pheromone, hexyl butyrate, (*E*)-2-hexenyl butyrate, (*E*)-4-oxo-2-hexenal.

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